



®

Lampworking

Product Catalog

303.449.8737 • 800.525.0940

www.dlartglass.com

Table of Contents

Color Glass.....	2-16
Northstar Glassworks.....	2-7
Glass Alchemy, LTD	8-10
Trautman Art Glass	11-13
Momka's Glass	14-15
Origin Glass	16
Small Batch & Specialty Color	17-20
Parramore Glass	19
Hand of Man Studio	20
Vac Stack Tubing.....	21-30
Golden Gate Glassworks.....	21-29
Colorado Color Company.....	30
Dichroic Tubing & Sheet Glass	31-34
Coatings by Sandberg (CBS).....	31-32
Dichroic Alchemy.....	33-34
Opals, Millefiori and Fuming Metals.....	35-36
Clear Tubes & Rods.....	37-41
Simax Kavalier	37-40
Schott Artistic	41
Chinese Tubes & Rods	42
Ground Joints.....	43-44
Kilns, Torches & Burners.....	45-57
Aim	45
Paragon Kilns`	46-47
Skutt Glass Kilns.....	48
Jen-Ken Kilns.....	49
Evenheat Kilns	49
Carlisle.....	50-51
Bethlehem	52
The Little Torch.....	53
Nortel.....	54-55
National Torch.....	56
Bunsen Burners	57
Torch Accessories	58-59
Tools	60-69
Tools & Safety Equipment	60-61
Shaping, Cutting, and Holding	62-69
Bead Tools and Accessories	70-71
Index	72-76

Color Glass

D&L is committed to providing the newest products in a growing industry.

Northstar Glassworks



Rod, tubes and frit available in most colors. Item number chart found on pages 6 & 7

- Rods - Average length 18 in.; diameter of 5-9 mm.
- Tubes - Hand pulled tubing varies in size: Length 8-22 in.; diameter 15-38 mm, wall thickness 2-6 mm.
- Frit - Available in five grain sizes. Sold in 4 oz. containers, some 16 oz. available
- Find Northstar Odds and Seconds at www.dlartglass.com (quantities and availability vary).
- Northstar products are sold by the pound in increments of 1/4 pound.

Northstar Glassworks - Rod Color Chart

See pages 6 & 7 for rod, tube and frit item numbers



NS 01
Cobalt Blue



NS 03
Multi



NS 04
Dark Multi



NS 05
Orange-Striking



NS 07
Ruby-Striking



NS 07L
Lt Ruby-Striking



NS 08
Dark Ruby-Striking



NS 09
Yellow-Striking



NS 11
Jade



NS 13
Amber/Purple-Striking



NS 14
Irrid



NS 15
Turquesa



NS 19
Lt Cobalt Blue



NS 20
Dark Cobalt



NS 23
Pink



NS 24
Transparent Green



NS 25
Peach



NS 26
Double Amber/Purple



NS 27
Green Exotic



NS 28
Blue Exotic



NS 29
Red Exotic



NS 31
Lavender



NS 32
Violet



NS 33
Turbo Cobalt



NS 37
Rootbeer-Striking



NS 38
Intense Blue Green



NS 41
Butterscotch



NS 43
Rust



NS 44
Caramel



NS 45
Blue Moon



Northstar Glassworks - Rod Color Chart

See pages 6 & 7 for rod, tube and frit item numbers



NS 47
Aurora



NS 48
Lt Blue Amber/
Purple-Striking



NS 49
Dark Blue Amber/
Purple-Striking



NS 53
Forest Green



NS 54
Star White



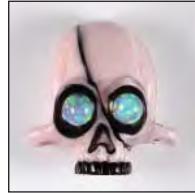
NS 55
Periwinkle



NS 57
Midnight



NS 58
Mint



NS 62
Bubblegum



NS 63
Canary



NS 64
Lava



NS 65
Cherry



NS 66
Sublime



NS 69
Green/Amber/
Purple



NS 70
Ice Blue



NS 72
Glacier Blue



NS 73
Millennium Moss



NS 75
Indigo Adventurine



NS 76
Onyx



NS 77
Deep Sea Blue



NS 78
Mystery Aventurine



NS 79
Blue Spruce



NS 80
Hyacinth



NS 81
Blue Caramel



NS 83
Skyline



NS 84
Goldenrod



NS 85
Poppy



NS 86
Garnet



NS 87
Dark Garnet



NS 88
Pomegranate



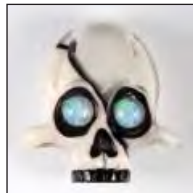
NS 89
Nile



NS 91
Ninja



NS 93
Plum Krazy



NS 94
Egyptian
White Sand



NS 95
Oregon Gray



NS 96
Lt. Oregon Gray



Color Glass

Northstar Glassworks - Rod Color Chart

See pages 6 & 7 for rod, tube and frit item numbers



NS 97
Evergreen



NS 98
Loch Ness



NS 100
Black Lightning



NS 101
Purple Urple



NS 102
Silver Bullet



NS 103
Berry Gumbolt



NS 104
Unobtainium



NS 105
Silver Creek



NS 106
Dark Amethyst



NS 109
Plum Kush



NS 111
Alaskan Thunder



NS 113
Turbo Amethyst



NS 114
Tan Silver Creek



NS 115
Silver Sea Weed



NS 119
Super Unobtainium



NS 120
Silver Unobtainium



NS 122
Blue Thunder



NS 123
Crystal Bliss



NS 124
Silver Amethyst



NS 125
Jet Black



NS 126
Opaque Aqua



NS 127
EXP Green #5



NS 129
Steel Wool



NS 131
English Ivy



NS 132
Lokis Lipstick



NS 133
Silver Aqua



NS 134
Brillo



NS 136
Purple Lilac



NS 140
Ursa



NS 141
Maple Syrup



NS 142
Mauvelous



NS 143
Absinthe



NS 137
Illuminati (UV)



NS 139
Lucy (UV)

Northstar Odds (NSO) and
Seconds (NS2)
@ www.dlartglass.com
(Based Upon Availability)



= Ultraviolet reactive glass



= Color shift under fluorescent light

Northstar Glassworks - WonderTube Color Chart

See pages 6 & 7 for rod, tube and frit item numbers



NS WT001
Serendipity



NS WT002
Electric Blue



NS WT004
Alien Tech



NS WT005
Baller Tech



NS WT006
Kandy Apple Red



NS WT007
Green Money



NS WTDD
Deppe's Darkness

Northstar Glassworks - WonderCane Color Chart

See pages 6 & 7 for rod, tube and frit item numbers



NS WC001
Serendipity



NS WC002
Electric Blue



NS WC004
Alien Tech

New colors always getting added!
Visit www.dlartglass.com
to see the latest!





Color Glass

Northstar Glassworks - Rod, Tube and Frit Item Number Chart

Northstar frit is sold in 4 oz. containers unless otherwise indicated.

Color / Rod #	Description	Tube	Frit/Item #				
			Fore Powder	Powder	Fine	Small	Large
NS 01	Cobalt Blue	-	-	NS P01	NS F01 F	NS F01 S	NS F01 L
NS 04	Dark Multi	-	-	-	NS F04 F	NS F04 S	NS F04 L
NS 06	Dark Orange	-	-	-	NS F06 F	NS F06 S	NS F06 L
NS 07	Ruby Striking	-	-	-	NS F07 F	NS F07 S	NS F07 L
NS 09	Yellow - Striking	NS T09	-	-	NS 09 F	NS 09 S	NS 09 L
NS 11	Jade	-	-	NS P11	NS F11 F	NS F11 S	NS F11 L
NS 13	Amber/Purple - Striking	NS T13	-	NS P13	NS F13 F	NS F13 S	NS F13 L
NS 14	Irrid	-	-	NS P14	NS F14 F	NS F14 S	NS F14 L
NS 24	Transparent Green	-	-	-	NS F24 F	NS F24 S	NS F24 L
NS 26	Double Amber/Purple	-	-	NS P26	NS F26 F	NS F26 S	NS F26 L
NS 27	Green Exotic	-	-	-	NS F27 F	NS F27 S	NS F27 L
NS 28	Blue Exotic	-	-	-	NS F28 F	NS F28 S	NS F28 L
NS 29	Red Exotic	-	-	-	NS F29 F	NS F29 S	NS F29 L
NS 32	Violet	NS T32	-	-	-	-	-
NS 33	Turbo Cobalt	-	NS FP33*	-	NS F33 F	NS F33 S	NS F33 L
NS 38	Intense Blue Green	-	-	NS P38	NS F38 F	NS F38 S	NS F38 L
NS 41	Butterscotch	-	-	-	NS F41 F	NS F41 S	NS F41 L
NS 43	Rust	-	-	NS P43	NS F43 F	NS F43 S	NS F43 L
NS 44	Caramel	NS T44	-	-	NS F44 F	NS F44 S	NS F44 L
NS 45	Blue Moon	NS T45	-	-	NS F45 F	NS F45 S	NS F45 L
NS 47	Aurora	-	-	-	NS F47F	NS F47 S	NS F47 L
NS 53	Forest Green	-	NS FP 53*	NS P53	NS F53 F	NS F53 S	NS F53 L
NS 54	Star White	NS T54	NS FP 54*	-	NS F54 F	NS F54 S	NS F54 L
NS 55	Periwinkle	-	NS FP 55*	-	NS F55 F	NS F55 S	NS F55 L
NS 57	Midnight	-	-	-	NS F57 F	NS F57 S	NS F57 L
NS 62	Bubblegum	-	-	-	NS F62 F	NS F62 S	NS F62 L
NS 63	Canary	-	-	-	NS F63 F	NS F63 S	NS F63 L
-	-	-	-	-	NS F63 FB*	NS F63 SB*	NS F63 LB*
NS 64	Lava	-	-	-	NS F64 F	NS F64 S	NS F64 L
-	-	-	-	-	NS F64 FB*	NS F64 SB*	NS F64 LB*
NS 65	Cherry	-	-	NS P65	NS F65 F	NS F65 S	NS F65 L
-	-	-	-	-	NS F65 FB*	NS F65 SB*	NS F65 LB*
NS 69	Green/Amber/Purple	-	-	-	NS F69 F	NS F69 S	NS F69 L
NS 76	Onyx	-	NS FP 76*	-	NS F76 F	NS F76 S	NS F76 L
NS 77	Deep Sea Blue	-	-	-	NS F77 F	NS F77 S	NS F77 L

* = 16 oz. containers



= Ultraviolet reactive glass



= Color shift under fluorescent light

Color Glass

Northstar Glassworks – Rod, Tube and Frit Item Number Chart

Northstar frit is sold in 4 oz containers unless otherwise indicated.

Color / Rod #	Description	Tube	Frit/Item #				
			Fore Powder	Powder	Fine	Small	Large
NS 78	Mystery Aventurine	NS T78	-	NS P78	NS F78 F	NS F78 S	NS F78 L
NS 79	Blue Spruce	-	NS FP 79*	-	NS F79 F	NS F79 S	NS F79 L
NS 80	Hyacinth	-	-	-	NS F80 F	NS F80 S	NS F80 L
NS 81	Blue Caramel	-	-	NS P81	NS F81 F	NS F81 S	NS F81 L
NS 83	Skyline	-	-	-	NS F83 F	NS F83 S	NS F83 L
NS 84	Goldenrod	-	NS FP 84*	-	NS F84 F	NS F84 S	NS F84 L
-	-	-	-	-	NS F84 FB*	NS F84 SB*	NS F84 LB*
NS 87	Dark Garnet	-	-	-	NS F87 F	NS F87 S	NS F87 L
NS 88	Pomegranate	NS T88	-	-	-	-	-
NS 93	Plum Krazy	-	-	-	NS F93 F	NS F93 S	NS F93 L
NS 94	Egyptian White Sand	-	-	-	NS F94 F	NS F94 S	NS F94 L
NS 95	Oregon Gray	-	-	-	NS F95 F	NS F95 S	NS F95 L
NS 97	Evergreen	-	-	-	NS F97 F	NS F97 S	NS F97 L
NS 98	Loch Ness	-	-	-	NS F98 F	NS F98 S	NS F98 L
NS 100	Black Lightning	-	-	-	NS F100 F	NS F100 S	NS F100 L
NS 101	Purple Urple	-	-	-	NS F101 F	NS F101 S	NS F101 L
NS 103	Berry Gumbolt	-	-	-	NS F103 F	NS F103 S	NS F103 L
NS 104	Unobtainium	-	-	-	NS F104 F	NS F104 S	NS F104 L
NS 105	Silver Creek	-	-	-	NS F105 F	NS F105 S	NS F105 L
NS 106	Dark Amethyst	NS T106	-	-	-	-	-
NS 109	Plum Kush	-	-	-	NS F109 F	NS F109 S	NS F109 L
NS 111	Alaskan Thunder	-	-	-	NS F111 F	NS F111 S	NS F111 L
NS 113	Turbo Amethyst	-	-	-	NS F113 F	NS F113 S	NS F113 L
NS 115	Silver Sea Weed	-	-	-	NS F115 F	NS F115 S	NS F115 L
NS 119	Super Unobtainium	-	-	-	NS F119 F	NS F119 S	NS F119 L
NS 120	Silver Unobtainium	NS T13	-	-	NS F120 F	NS F120 S	NS F120 L
NS 123	Crystal Bliss	-	-	-	NS F123 F	NS F123 S	NS F123 L
NS 125	Jet Black	NS T125	NS FP 125*	-	NS F125 F	NS F125 S	NS F125 L
NS 126	Opaque Aqua	-	-	-	NS F126 F	NS F126 S	NS F126 L
NS 127	EXP Green #5	-	-	-	NS F127 F	NS F127 S	NS F127 L
-	-	-	-	-	NS F127 FB*	-	-
NS 137	Illuminati (UV)		NS FP 137*	-	NS F137 F	NS F137 S	NS F137 L
-	-		-	-	NS F137 FB*	NS F137 SB*	-
NS 139	Lucy (UV)		NS T139	-	-	-	-
NS 141	Maple Syrup	NS T141	-	-	-	-	-

* = 16 oz. containers



= Ultraviolet reactive glass



= Color shift under Fluorescent light

GLASS - Color Chart





Rods and frit are available in most colors. Item number chart found on page 10.

• Rods - Length 20 in.; diameter 7 mm.

• Frit - Sold in 4 oz. containers, some 16 oz. available

• Glass Alchemy products are sold by the pound in increments of 1/4 pound.

Glass Alchemy, LTD - Rod Color Chart

See page 10 for rod and frit item numbers



GA 287
Amazon Bronze



GA 380
Singular Passion



GA 385
Silver Strike 5



GA 386
Purple Luster



GA 441
Mint



GA 443
Aqua Mist



GA 445
Turquoise Green



GA 446
Agua Azul



GA 489
Aquatic Carnival



GA 510
Cobalt Lite



GA 511
Cobalt 1



GA 514
Cobalt 4



GA 515
Cobalt 5



GA 516
Cobalt 6



GA 544
Really Teally



GA 546
Peacock



GA 548
Twilight



GA 587
Amazon Lagoon



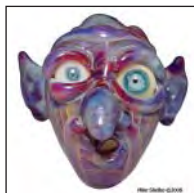
GA 592
Brilliant Blue



GA 773
Grape



GA 783
Double Passion



GA 786
Triple Passion



GA 788
Passion Extreme



GA 833
Beryl



GA 864
Sienna Brown



GA 974
Black (Violet) 5



GA 987
Amazon Night



GA 1933
Half Blood



GA 1939
Dragon's Blood



GA 2380
Tequila Sunrise



Glass Alchemy, LTD - Rod Color Chart

See page 10 for rod and frit item numbers

GLASS - Color Chart



GA 2383
Persimmon
Strike



GA 4494
Shamrock



GA 4497
Tree Hugger



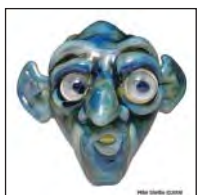
GA 4585
Starry Night



GA 4595
Paparazzi



GA 4598
JackPot



GA 4838
Dragon's Eye



GA 5192
BibidiBobidi Blue



GA 5194
Iris



GA 5195
Lapis



GA 5486
Peacock
Chameleon



GA 5595
Sapphire



GA 6585
Andromeda



GA 8475
Black Walnut



GA 8595
Tiger's Eye



GA 9749
Raven



GA 9958
Disco Sparkle



GA 9977
Eclipse



GA 9992
Portland Gray



GA 9995
Sno White



* Also Available in 4mm

Glass Alchemy, LTD - Rod and Frit Item Number Chart

Glass Alchemy frit is sold in 4 oz containers unless otherwise indicated.

Color / Rod #	Description	Frit			
		Fine (82 Grade)	Small (70 Grade)	Medium (38 Grade)	Large (25 Grade)
GA F000	Clear	-	GA F000 S	GA F000 M	-
GA 287	Amazon Bronze	GA F287 F	GA F287 S	GA F287 M	GA F287 L
GA 385	Silver Strike 5	GA F385 F	GA F385 S	GA F385 M	GA F385 L
GA 386	Purple Luster	GA F386 F	GA F386 S	GA F386 M	GA F386 L
GA 441	Mint Opal	GA F441 F	GA F441 S	GA F441 M	GA F441 L
GA 446	Agua Azul Opal	GA F446 F	GA F446 S	GA F446 M	GA F446 L
GA 489	Aquatic Carnival	GA F489 F	GA F489 S	GA F489 M	GA F489 L
GA 515	Cobalt 5	GA F515 F	GA F515 S	GA F515 M	GA F515 L
GA 544	Really Teally	GA F544 F	GA F544 S	GA F544 M	GA F544 L
GA 546	Peacock Opal	GA F546 F	GA F546 S	GA F546 M	GA F546 L
GA 548	Twilight Opal	GA F548 F	GA F548 S	GA F548 M	GA F548 L
GA 587	Amazon Lagoon	GA F587 F	GA F587 S	GA F587 M	GA F587 L
GA 786	Triple Passion	GA F786 F	GA F786 S	GA F786 M	GA F786 L
GA 974	Black (Violet)	GA F974 F	GA F974 S	GA F974 M	GA F974 L
GA 987	Amazon Night	GA F987 F	GA F987 S	GA F987 M	GA F987 L
GA 1939	Dragon's Blood	GA F1939 F	GA F1939 S	GA F1939 M	GA F1939 L
GA 2383	Persimmon Strike	GA F2383 F	GA F2383 S	GA F2383 M	GA F2383 L
GA 4494	Shamrock	GA F4494 F	GA F4494 S	GA F4494 M	GA F4494 L
GA 4595	Paparazzi	GA F4595 F	GA F4595 S	GA F4595 M	GA F4595 L
GA 4598	JackPot	GA F4598 F	GA F4598 S	GA F4598 M	GA F4598 L
GA 4838	Dragon's Eye	GA F4838 F	GA F4838 S	GA F4838 M	GA F4838 L
GA 5192	Bibidibobidi Blue	GA F5192 F	GA F5192 S	GA F5192 M	GA F5192 L
GA 5194	Iris	GA F5194 F	GA F5194 S	GA F5194 M	GA F5194 L
GA 5195	Lapis	GA F5195 F	GA F5195 S	GA F5195 M	GA F5195 L
GA 5486	Peacock Chameleon	GA F5486 F	GA F5486 S	GA F5486 M	GA F5486 L
GA 6585	Andromeda	GA F6585 F	GA F6585 S	GA F6585 M	GA F6585 L
GA 9749	Raven	GA F9749 F	GA F9749 S	GA F9749 M	GA F9749 L
GA 9992	Portland Gray	GA F9992 F	GA F9992 S	GA F9992 M	GA F9992 L
GA 9995	Sno White	GA F9995 F	GA F9995 S	GA F9995 M	GA F9995 L



Color Glass

D&L is committed to providing the newest products in a growing industry.

Trautman Art Glass



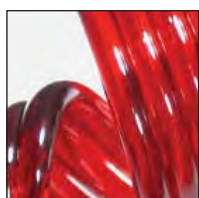
Rod, tubes and frit are available in most colors. Item number chart found on page 13.

- High quality colored borosilicate glass made by hand in small batches.
- Rods - Approximate length 20 in.
- Tubes - Average length range 8 - 16 in., diameter 22 - 38 mm.
- Frit - Sold in 2 oz. containers, some 16 oz. available

Trautman Art Glass products are sold by the pound in increments of 1/4 pound.

Trautman Art Glass - Rod Color Chart

See page 13 for rod, tubes and frit item numbers



TG 33 01
Red Elvis



TG 33 02
Dark Red Elvis
(Black)



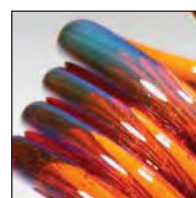
TG 33 03
Light Red Elvis



TG 33 04
Yellow Elvis



TG 33 05
Black Jack



TG 33 06
Apricot



TG 33 07
Turboco



TG 33 08
Caramelo



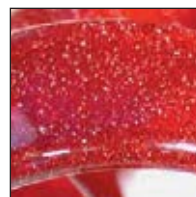
TG 33 08L
Caramelo Light



TG 33 09
Leprechaun



TG 33 13
Blue Blizzard



TG 33 15
Red Blizzard



TG 33 16
Canary



TG 33 17
Kiwi (Blizzard)



TG 33 17S
Slyme



TG 33 17S N3
Dense Slyme #3



TG 33 17S SAT
Satin Slyme



TG 33 17SUB
Sub Slyme



TG 33 18
Pink Cadillac



TG 33 19
Mango



TG 33 20
Mandarin



TG 33 21
Penumbra



TG 33 22
Super Canary



TG 33 25
Wisteria



TG 33 27
Purple Sable



TG 33 30
Heavy Blue
Leprechaun



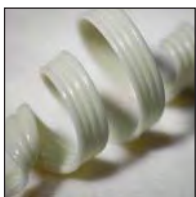
TG 33 31
Blue Stardust



TG 33 32
Heavy Blue
Stardust



TG 33 33
Whiteout



TG 33 34
Jawbone



GLASS - Color Chart

Color Glass

Trautman Art Glass - Rod Color Chart

See page 13 for rod, tubes and frit item numbers



TG 33 35
Dwarf White



TG 33 37
Knight Rider
Black



TG 33 38
Mai Tai Pink



TG 33 39
Double Mai Tai



TG 33 40
Mega Mai Tai



TG 33 41
Mighty Moss



TG 33 42
Sasha's Oil Slick



TG 33 43
Green Stardust



TG 33 44
After Kiln
Green X



TG 33 45
Green XLT



TG 33 47
Heavy Xenon
Green



TG 33 49
Sparky



TG 33 50
Champagne
Sparky



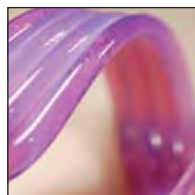
TG 33 51
Orange Elvis



TG 33 52
Honey Badger



TG 33 53
Darth Badger



TG 33 54
Pink Slyme



TG 33 55
Shooting Star



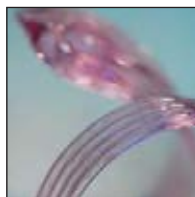
TG 33 56
IO Star



TG 33 57
Europa Star



TG 33 58
Fade to Black



TG 33 59
Pink Lollypop



TG 33 60
Purple Lollypop



TG 33 61
Sea Slyme



TG 33 62
Blue Slyme



TG 33 63
Dark Blue Slyme



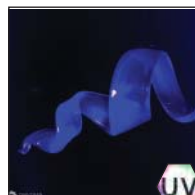
TG 33 64
Blu-V (UV)



TG 33 65
Pink Proton (UV)



TG 33 66
Syzygy (CFL)



TG 33 67
Atomic Stardust
(UV)



TG 33 TMTP
Mai Tai Pink

Trautman Odds (T60) and
Seconds (T62)
@ www.dlartglass.com
(Based Upon Availability)



= Ultraviolet reactive glass



= Color shift under fluorescent light

Color Glass

Trautman Art Glass – Rod, Tube and Frit Item Number Chart

Trautman frit is sold in 2 oz containers.

Color / Rod #	Description	Tube	Frit		
			Fine	Medium	Course
TG 33 01	Red Elvis	TG 33 T01	TG 33 F01F	TG 33 F01M	TG 33 F01C
TG 33 02	Dark Red Elvis (Black) Elvis	TG 33 T02	TG 33 F02F	TG 33 F02M	TG 33 F02C
TG 33 05	Black Jack	TG 33 T05	-	-	-
TG 33 06	Apricot	TG 33 T06	-	-	-
TG 33 07	TurboCo	TG 33 T07	TG 33 F07F	TG 33 F07M	TG 33 F07C
TG 33 17	Kiwi (Blizzard)	-	TG 33 F17F	TG 33 F17M	TG 33 F17C
TG 33 17S N3	Dense Slyme #3	TG 33 TD17S	-	-	-
TG 33 17S	Slyme	TG 33 T17S	-	-	-
TG 33 17SAT	Satin Slyme	TG 33 T17SAT	-	-	-
TG 33 17SUB	Sub Slyme	TG 33 T17SUB	-	-	-
TG 33 18	Pink Cadillac	TG 33 T18	TG 33 F18F	TG 33 F18M	TG 33 F18C
TG 33 F21	Penumbra	TG 33 T21	TG 33 F21F	TG 33 F21M	TG 33 F21C
TG 33 25	Wisteria	TG 33 T25	TG 33 F25F	TG 33 F25M	TG 33 F25C
TG 33 27	Purple Sable	-	TG 33 F27F	TG 33 F27M	TG 33 F27C
TG 33 31	Blue Stardust	TG 33 T31	-	-	-
TG 33 32	Heavy Blue Stardust	TG 33 T32	-	-	-
TG 33 33	White Out	TG 33 T33	TG 33 F33F	TG 33 F33M	TG 33 F33C
TG 33 39	Double Mai Tai	-	TG 33 F39F	TG 33 F39M	TG 33 F39C
TG 33 41	Mighty Moss	TG 33 T41	TG 33 F41F	TG 33 F41M	TG 33 F41C
TG 33 42	Sasha's Oil Slick	TG 33 T42	-	-	-
TG 33 43	Green Stardust	TG 33 T43	-	-	-
TG 33 45	Green XLT	TG 33 T45	-	-	-
TG 33 52	Honey Badger	TG 33 T52	-	-	-
TG 33 54	Pink Slyme	TG 33 T54	-	-	-
TG 33 58	Fade to Black	TG 33 T58	-	-	-
TG 33 59	Pink Lollypop	TG 33 T59	-	-	-
TG 33 60	Purple Lollypop	TG 33 T60	-	-	-
TG 33 61	Sea Slyme	TG 33 T61	-	-	-
TG 33 62	Blue Slyme 	TG 33 T62	-	-	-
TG 33 63	Dark Blue Slyme 	TG 33 T63	-	-	-
TG 33 64	Blu-V (UV) 	TG 33 T64	-	-	-
TG 33 T65	Pink Proton (UV) 	TG 33 T65	-	-	-
TG 33 66	Syzygy 	TG 33 T66	-	-	-
TG 33 T67	Atomic Stardust (UV) 	TG 33 T67	-	-	-



= Ultraviolet reactive glass



= Color shift under fluorescent light



Color Glass

D&L is committed to providing the newest products in a growing industry.

Momka's Glass



- Hand pulled rods result in slightly varied widths and lengths.
- Rods - Approximate length 20 in.; diameter varies 7-9 mil.
- Tubes - Length range 8 - 16 inches.
- Momka's Glass products are sold by the pound in increments of 1/4 pound.

Momka's Glass - Rod Color Chart

See tubes on page 15.



MB 012
Blue Lightning



MB 018
Blue Flambe



MB 021
Sunshine Yellow



MB 022
Exotic Citrus-Yellow



MB 023
Exotic Citrus-Grapefruit



MB 024
Lemon Yellow



MB 031
Sunset Orange



MB 042
Guacamole



MB 045
Martini Olive



MB 049
Green Dragon



MB 052
Silver Iris



MB 053
Violet Iris



MB 061
Black Rose



MB 063
Alaskan Night



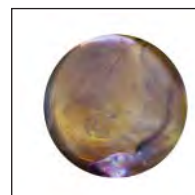
MB 071
Silver Beach



MB 072
Light Purple Haze



MB 074
Almond Nugget



MB 075
Magic Mirror



MB 076
Purple Thunder



MB 077
Stormy Weather



MB 078
Silver Flambe



MB 079
Yellow Pearl



MB 081
Whisper Pink



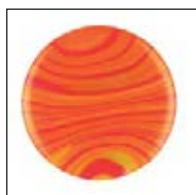
MB 092
Brown Glitter



MB 102
Carmen Red



MB 105
Scarlet Pink



MB 111
Autumn Leaves



MB 116
Infinity



MB 118
Gypsy Queen



MB 119
Blue Treasure

Momka's Glass - Rod Color Chart

See tubes below.



MB 131
Marlee



MB 132
Amethyst Ice



MB 138
Sparkly Thunder



MB 141
Silver Aqua



MB 151
Sunflower



MB 154
Antique Beauty



MB 155
Cherry Blossom



MB 156
Challenge Gerber
Orange



MB 161
Palitra Orange



MB 172
Encase Sunshine
Yellow



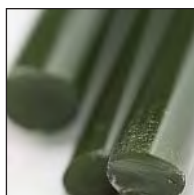
MB 181
Purple Spirit



MB 182
Melba Melange



MB 0410
Pistachio



MB 0411
Green Flambe



MB 0413
Shimmering Blue
Emerald



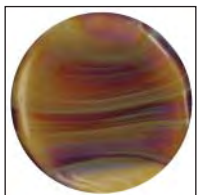
MB 0414
Brisk Light Green



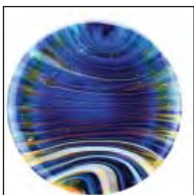
MB 0415
Wasabi



MB 710
Aurora Borealis



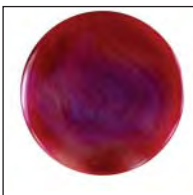
MB 711
Violet Medley



MB 1115
Aurora Trails



MB 1117
Marlee II

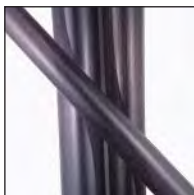


MB 1151
Violet Hue

Momka's Glass - Tube Color Chart



MB T185
Exotic Citrus
Grapefruit



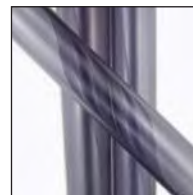
MB T187
Silver Iris



MB T189E
Guacamole -
Encased



MB T190
Magic Mirror



MB T191
Violet Iris



MB T192
Silver Tears



MB T193
Plum Harvest

GLASS - Color Chart



Color Glass

D&L is committed to providing the newest products in a growing industry.

Origin Glass

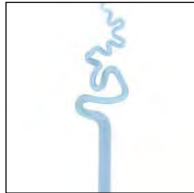


Due to their unique manufacturing process, Origin colors work fantastic in some applications but are problematic in others. Test your application before diving in!

- Stix sizes: Approx. 3-1/2 in. length, 1/4 in. height and width.
- Frit - Sold in 8 oz. containers.
- Origin Glass products are sold by the pound in increments of 1/4 pound.



Origin Glass - Stix Color Chart



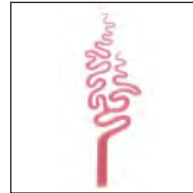
BS BAB
Baby Blue



BS BC
Bing Cherry



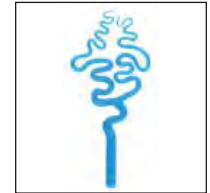
BS BRB
Bright Blue



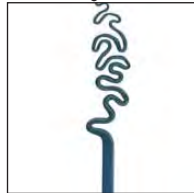
BS BSH
Blush



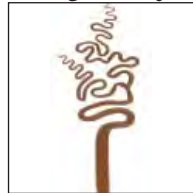
BS BW
Bright White



BS CB
Caribbean Blue



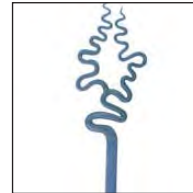
BS CML
Camelot Blue



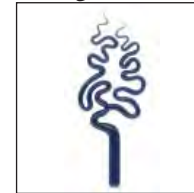
BS COL
Cola



BS CTN
Cotton Candy



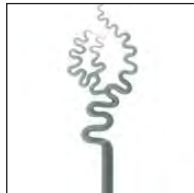
BS EBL
Electric Blue



BS EGG
Eggplant



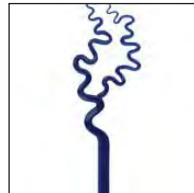
BS EGY
Elan Gray



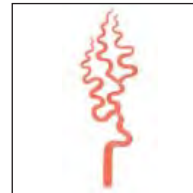
BS ELG
Elephant Grey



BS IVT
Ivory Tusk



BS LAZ
Lazuli



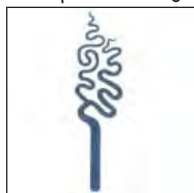
BS LBST
Lobster



BS LMG
Lime Green



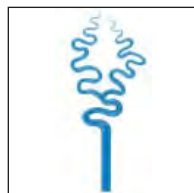
BS LZG
Lizard Green



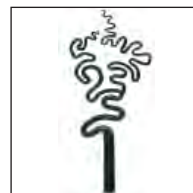
BS MB
Midnight Blue



BS MST
Mustard



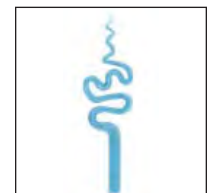
BS OZ
Ozone



BS PBLK
Pitch Black



BS PUP
Purple Passion



BS SB
Sky Blue



BS SP
Spring Purple



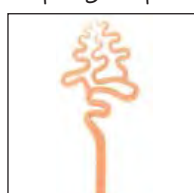
BS SSH
Sunshine



BS STGY
Stone Gray



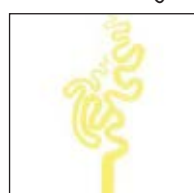
BS TAW
Tawny



BS TNG
Tangerine



BS UBSH
Uber Blush



BS YLW
Yellow

Color*	Description	Frit/Item #	
		Fine	Small
BS BSH	Blush	BSF BSH F	BSF BSH S
BS BW	Bright White	BSF BW F	BSF BW S
BS CB	Caribbean	BSF CB F	BSF CB S
BS EGG	Eggplant	BSF EGG F	BSF EGG S
BS LMG	Lime Green	BSF LMG F	BSF LMG S
BS LZG	Lizard Green	BSF LZG F	BSF LZG S
BSFP	Spring Purple	BSF SP F	BSF SP S
BS TNG	Tangerine	BSF TNG F	BSF TNG S

Frit sold in 8 oz. containers.

Small Batch & Specialty Color

D&L is committed to providing the newest products in a growing industry.

Parramore Glass

• Rods - Approximate length 16 in.; diameter 1/4 in.

Parramore Glass - Rod Color Chart



PG 02
Aqua



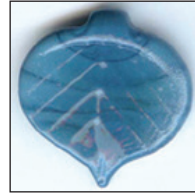
PG 03
White



PG 05
Siberia



PG 06
Mallard



PG 08
Denim



PG 09
Sage



PG 10
Cool Mint



PG 12
Peach



PG 13
Pumpkin



PG 16
Taupe



PG 17
Butter



PG 19
Lapis

GLASS - color chart

Small Batch & Specialty Color

D&L is committed to providing the newest products in a growing industry.

Hand of Man Studio

- Hand pulled tubes result in slightly varied widths and lengths.
- Hand of Man Studio products are sold by the pound in increments of 1/4 pound.

Hand of Man Studio - Tube Color Chart



HM KOB
Kerntec Over
Blue



HM KRT
KernTec



HM CSKY
Colorado Sky



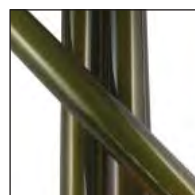
HM SMF
Smurf Blue



HM B2G
Blue to Green



HM EMC
Emerald City



HM LZT
Lizard Tech



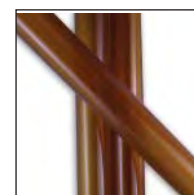
HM EXC
Experimental
Green with Clear



HM RHY
Raw Light Honey



HM RDHY
Dark Raw Honey



HM BLLG
Baller's Gold



HM GVT
Governmint



HM BBL
Blingin' Black



HM TRK
Trickster - CFL

New Small Batch colors
always getting added!
Visit www.dlartglass.com
to see the latest!



= Ultraviolet reactive glass



= Color shift under fluorescent light

Vac Stack Tubing

D&L is committed to providing the newest products in a growing industry.

Golden Gate Glassworks



- Hand pulled tubes result in slightly varied widths and lengths.
- Tubes - Length range 12 - 16 in. diameter: varies from 1/2 - 1-1/2 in.
- Golden Gate products are sold by the pound in increments of 1/4 pound.

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG T01
Fire Water



GG T02
Fire Earth



GG T03
Fire Air



GG T04
Earth Water



GG T05
Earth Air



GG T06
Water Air



GG T07B
Rasta with
Black Line



GG T09
Black Rasta



GG T11
Fire Black



GG T12B
Rainbow with
Black Line



GG T13
Kill Bill



GG T15
Black (Jet)



GG T18
Jailbird



GG T19
Fade to Water



GG T20
Fade to
Clear Fire



GG T21
White Water



GG T22
Fade to Clear Air



GG T23
Fade to
Clear Earth



GG T24
Jail House Rasta



GG T25
Jail House
Rainbow



GG T26
Fresh Water
Swamp



GG T27
Fresh Water Oil



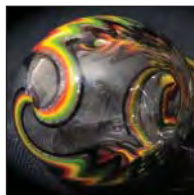
GG T29
Steel Rasta



GG T30
Fire Water Purple



GG T31
Fade to Four
Color



GG T32
Fade to Steel
Rasta



GG T33
Fade to Rasta



GG T34
Fade to Jailbird



GG T35
Fade to Rainbow



GG T37
Fade to Bling

GLASS - Color Chart



Vac Stack Tubing

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG T38
Fire Unobtanium



GG T40
Fade to Dead



GG T42
Steel Dead



GG T46
Water Unobtanium



GG T47
Fall Harvest



GG T48
Kick Ass



GG T49
Bee Sparkle



GG T51
Eleven Lined
Rainbow



GG T52
Swamp Fire
Sparkle



GG T53
RainBow Sparkle



GG T58
Rasta Money



GG T59
Jailbird Money/
Bail



GG T60
Spectrum White
Line 15



GG T60B
Spectrum Black
Line



GG T66
Aztec Fire



GG T68
Steel House



GG T70
River Gold



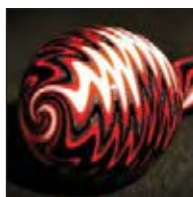
GG T72
Grass Hopper



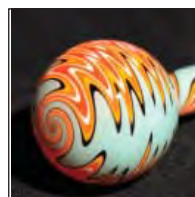
GG T75
Colorado



GG T76
Blueberry



GG T77
Blazin



GG T78
Taffy



GG T79
Bloody Mary



GG T80
Yeti



GG T81
Jail Metal



GG T82
Steel Line White
Rasta



GG T83
Steel Line Black
Rasta



GG T84
Duck Water



GG T85
Swamp Duck



GG T86
Gum Bub



GG T96S
Candy Corn



GG T97S
Peppermint HBLS



GG T98S
Mint Chocolate
MMS



GG T99S
Mistletoe HBLS/
MMS



GG T100S
Fiesta Wayyyy
HBLS



GG T101S
White Slyme

Note: HBLS indicates that the pattern contains heavy blue leprechaun stringer. MMS indicates Mighty Moss stringers

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG T102S
Gorilla HBLS



GG T103S
White HBLS
WigBow



GG T105S
Killer Green HBLS



GG T106
Kiwi Pond



GG T107S
Jail House Fire
HBLS



GG T108S
Jail House Water
HBLS



GG T109S
Sunrise Mint
HBLS



GG T110S
Navy Steel



GG T111S
Money Kitty HBLS



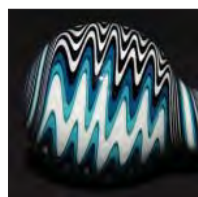
GG T112
Fire Money



GG T113
Dead Money



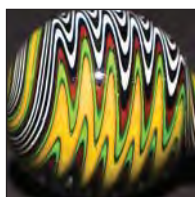
GG T114S
Fat Rasta HBLS



GG T116S
Jail House Air
HBLS



GG T117S
Jail House Earth
HBLS



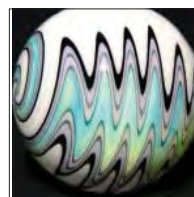
GG T118S
Jail House Gorilla
HBLS



GG T119S
Northern Lights
HBLS



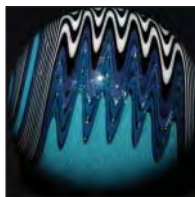
GG T120
Jail House Dead



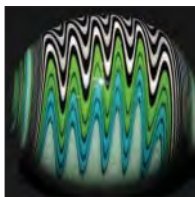
GG T121S
Slime Kitty White
HBLS



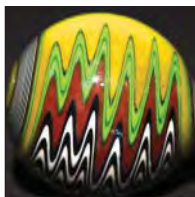
GG T122S
Water Earth
HBLS 50/50



GG T123S
Jail House Water
HBLS



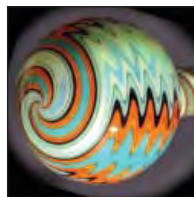
GG T124S
Jail House Earth
HBLS



GG T125S
Jail House Gorilla
HBLS 50/50



GG T126S
Bevo HBLS



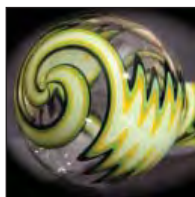
GG T127S
Fiesta Sylme
HBLS



GG T131S
Steel Kitty HBLS



GG T132S
Jail House Fire
HBLS 50/50



GG T142
Fade to Mother
Earth



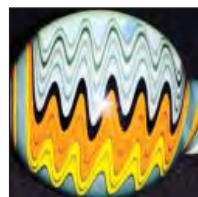
GG T143
Clear Fire 50/50



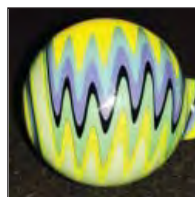
GG T146
Air Clear 50/50



GG T148
Orange/Blue/
White



GG T152
Fiesta Sylme
50/50 HBLS



GG T153
Mint Val 50/50



GG T154
Pink Caddy
Rainbow



GG T157S
Fiesta Black
with HBLS



GG T161S
Gray Blossom
HBLS



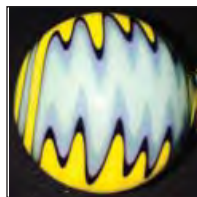
GG T162
Gray Jailbird

Note: HBLS indicates that the pattern contains heavy blue leprechaun stringer.

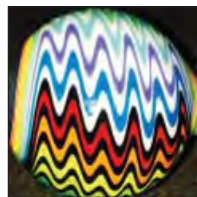
Vac Stack Tubing

Golden Gate Glassworks - Tube Color Chart

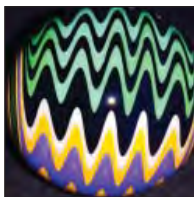
See page 36 for Golden Gate Millefiori.



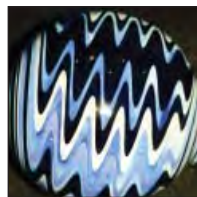
GG T163
Yellow Aqua
HBLS



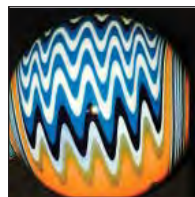
GG T164
Half Rnbw White/
Half Rnbw Blk HBLS



GG T165
Bird Pop HBLS



GG T166
Black Berry



GG T167
Mustang/Orange/
Blue/Black/White



GG T168
Coco Berry



GG T169
Alaska Thunder



GG T170
White with Clear



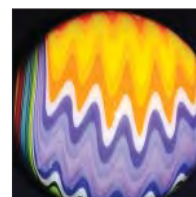
GG T171
Black with Clear



GG T172
R Cube HBLS



GG T174
Fruit with Black
50/50



GG T175
Taste the
Rainbow HBLS



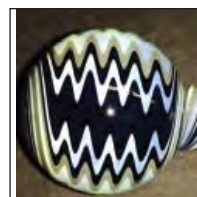
GG T176
EM's



GG T177
City Skyline



GG T178
31 Line Rainbow



GG T181S
Death Star with
Slyme



GG T182
Steel House
50/50



GG T184
Speed Racer



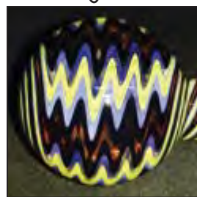
GG T187
Rip City



GG T188
Rose Garden



GG T191
Tropic Thunder
(Slyme/Aqua/Blk)



GG T192
Strawberry
Cheesecake



GG T193
Heckle Berry Pie



Note: HBLS indicates that the pattern contains heavy blue leprechaun stringer.

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG T LD
Lemon Drop



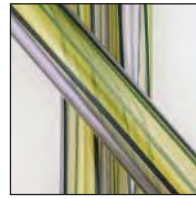
GG T LDHS
Lemon Drop
HBLS



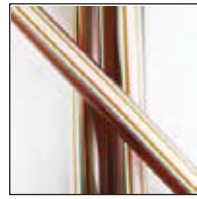
GG TSDP
Serendipity



GG TTB
Tangie Bird



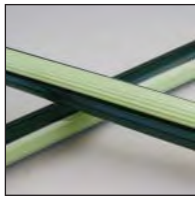
GG TPRLDS
Purple Rain/
Lemon Drop HBLS



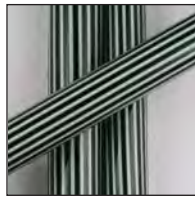
GG TSTR
Striker



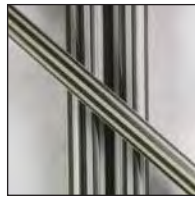
GG T SHS
Slyme HBLS



GG TSTRKW
Start Dust &
Kiwi



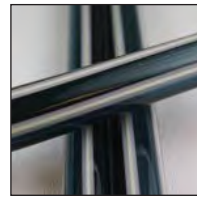
GG T SBHS
Slyme/Black
HBLS



GG TCS68
JackPot with
Double White Line



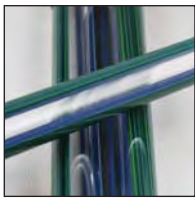
GG TJCK
Jackpot



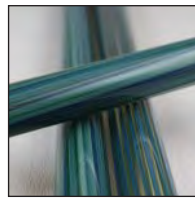
GG TSPHLHS
Slyme Pink Heavy
Stardust HBLS



GG T EX
Experimental
Green WTF



GG T EXFC
Experimental Green
with Fade to Clear



GG TEXPLD
Experimental
Green/Lemon Drop



GG TCS69
Electric Blue Velvet
with White Line



GG TCS67
Electric Blue
Velvet



GG TSLPSL
Slyme/Pink Slyme



GG TJCKPI
Jackpot & Pink



GG T PCHS
Pink Caddy/HBLS



GG TWBV
Wisteria & Electric
Blue Velvet



GG TWSTPI
Wisteria & Pink



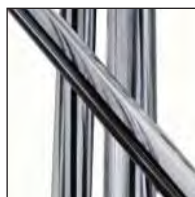
GG TWSTRB
Wisteria/RainBow



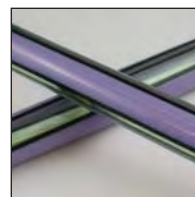
GG TWSTRBS
Wisteria/RainBow
HBLS



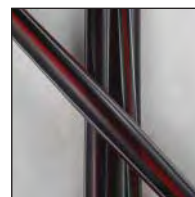
GG TFFB
Fade to Fade
to Black



GG TPPB
Purple Potion
Bird



GG TWSTKR
Wisteria &
Krypt Quad



GG TADB
Dragon's Blood



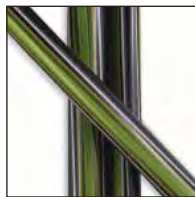
GG TELHBS
Elvis & Heavy
Blue Stardust



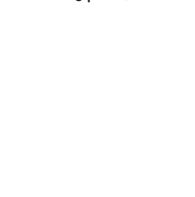
GG TEBS
Red Elvis HBLS



GG TLIB
Lilac Blk Line



GG T160S
Green Brown
HBLS



Note: HBLS indicates that the pattern contains heavy blue leprechaun stringer.



Vac Stack Tubing

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG TKRP
Kryptonite



GG TEIVY
English Ivy



GG TAND
Andromeda



GG TDG
Dark Garnet



GG TPK
Plum Crazy



GG TBD
Blue Dream



GG TBDD
Blue Dream
Double



GG TSAM
Silver Amethyst



GG TDAM
Dark Amethyst



GG TPL
Purple Lollipop



GG TPR
Purple Rain



GG TPRD
Purple Rain
Double



GG TYLW
Yellow Crayon



GG TBTSC
Butterscotch



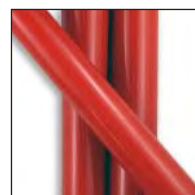
GG TSIB
Sienna Brown



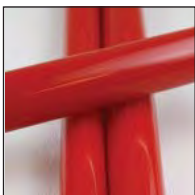
GG TRGLD
Rasta Gold
Crayon



GG TORG
Orange



GG TORR
Orange Red
Crayon



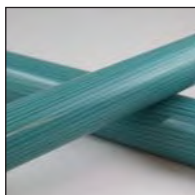
GG TRED
Red



GG TCHAR
Chartreuse



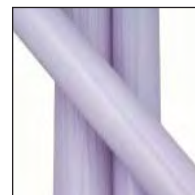
GG TMT
Mint



GG TSAQ
Silver Aqua



GG TAAZ
Aqua Azul

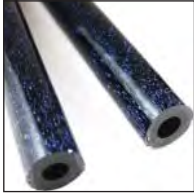


GG TPSLY
Pink Slyme



Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG TD 03
Yellow Blue
Dichro



GG TD 07
Copper Gold
Dichro



GG TD 07F
Fade Copper Gold
on Black Dichro



GG TD DELM
Dark Elvis
Magenta Dichro



GG TD ELM
Elvis Magenta
Dichro



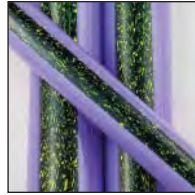
GG TD OEG
Orange Elvis
x1 Gold Dichro



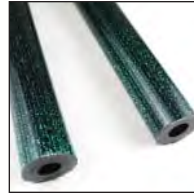
GG TD PCG
Pink Caddy x1
Gold



GG TD SUG
Sublime with Gold
Dichro



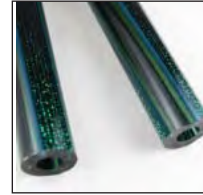
GG TD WSTG
Wisteria/Gold
Dichro



GG TD2 02
Emerald Green
x2 Dichro



GG TD2 04
Magenta x2 on
Black Dichro



GG TD2 89
Bling x2 Dichro



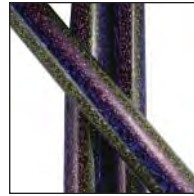
GG TD2 91S
Fire Dichro x2



GG TD2 92S
Mean Green x2
Dichro



GG TD2 93S
Dichro Slyme/
EM6rX2 Section



GG TD2 BK19
Kayos on Black
x2 DX19 Dichro



GG TD2 BKAY
Kayos on Black
x2 Dichro



GG TD2 DGG
Dark Gray Green
x2 Dichro



GG TD2 DX56
Cobalt with
Magenta x2 Dichro



GG TD2 DX57
Red & Black with
Gold x2 Dichro



GG TD2 DX58
Black Water with
Magenta x2 Dichro



GG TD2 DX59
Peacock Chaos
x2 Dichro



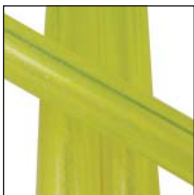
GG TD2 HRG
Haterade x2
Green Dichro



GG TD2 IG
Iris Gold x2
Dichro



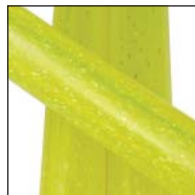
GG TD2 JRG
Jade Red Gold
Dichro



GG TD2 LDB
Lemon Drop x2
Blue Dichro



GG TD2 LDG
Lemon Drop x2
Gold Dichro



GG TD2 LDGR
Lemon Drop x2
Emerald Green
Dichro



GG TD2 LPGR
Leprechaun Green
x2 Emerald Green
Dichro



GG TD2 OEB
Orange Elvis Blue
Dichro



GG TD2 OEG
Orange Elvis Gold
x2 Dichro



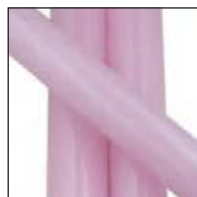
Vac Stack Tubing

Golden Gate Glassworks - Tube Color Chart

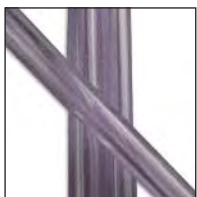
See page 36 for Golden Gate Millefiori.



GG TD2 PCGR
Pink Caddy x2
Green Dichro



GG TD2 PCM
Pink Cadillac x2
Dichro



GG TD2 PRM
Purple Rain with
Magenta x2 Dichro



GG TD2 PSLM
Pink Slyme Magenta
x2 Dichro



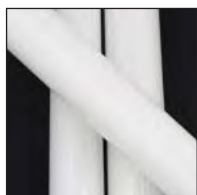
GG TD2 RZR
Rozay Red x2
Dichro



GG TD2 SLYG
Slyme Green x2
Dichro



GG TD2 SWG
Spectrum White Line
with Green x2 Dichro



GG TD2 WHTGR
White Green x2
Dichro



GG TD2 WSTG
Wisteria x2 Gold
Dichro



GG TD2 WSTGR
Wisteria x2
Green Dichro



GG TD2 YM
Yellow Magenta
x2 Dichro



GG TD4 SUGG
Sublime Gold x2
Green x2 Dichro



GG TD3 JB
Jailbird Dichro



GG TD3 KRKL
Krackle x3 Dichro



GG TD3 YJRG
Yellow Jacket with
Red & Gold x2 Dichro



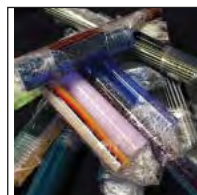
GG TD3 CGGR
Clear x2 Green
x2 Gold Dichro



GG TD4 KAY
Kayos x2 x2



GG TD4 PRGG
Purple Rain x2 Gold
x2 Green Dichro



GG QPDXM
Deluxe Dichro
Tube Mix Pack

Dichro tube codes TD, TD2, TD3, etc. indicate the number of dichroic layers involved in the pattern. Higher numbers indicate more layers of dichroic.



GG TGL1
Fade to Glow



GG TGL2
Full Glow



GG TGL3
Glow Rasta



GG TGL5
Glow Fire



GG TGL6
Glow Black



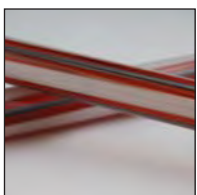
GG TGL7
Glow Jailbird



GG TGL8
Glow Heavy Blue
Stardust



GG TGL9
Glow Experimental
Green



GG TGL20
Glow / Red Elvis
Quad

Golden Gate Glassworks - Tube Color Chart

See page 36 for Golden Gate Millefiori.



GG TIBVLB
Illuminati -
Blu-V/Lucy/Black



GG TI74
Illuminati x6, Black,
Peacock, White



GG TI75
Illuminati x4, Black,
Dark Grey, White



GG TI78
Illuminati x4, Black,
Green, White



GG TLC79
Lucy x4 White/
Pink/Wisteria



GG TILLB
Illuminati with
Black Line



GG TILLFQ
Illuminati - Clear,
Jade, Mighty Moss
and Black Quadrant



GG TILLJB
Illuminati -
Jailbird



GG TILLC
Illuminati - Clear
50/50 with Black



GG TILL
Illuminati



GG TILLWI
Illuminati -
Wisteria



GG TBV
Solid Blu-V Tube



GG TBVW
Blu-V with White
Lines



GG TD2 ILLB
ILL-Uminati Blue
x2 Dichro



GG TD2 ILLM
ILL-Uminati Ma-
genta x2 Dichro



GG TLC4
Edible



GG TB4A
Booyah



GG TLCY
Lucy



GG TLCSD
Lucy over Heavy
Stardust



GG TBVB
Blu-V with Black
Lines



GG TBVLCB
Blu-V /Lucy /
Black



GG TLCRE
Lucy over Red
Elvis



= Ultraviolet reactive glass



= Color shift under fluorescent light

Vac Stack Tubing

D&L is committed to providing the newest products in a growing industry.

Colorado Color Company

- Hand pulled, vac stack tubing results in slightly varied widths and lengths.
- Tube - Length range 12 - 16 in.; Diameter range 1/2 - 1-1/2 in.
- Colorado Color Company products are sold by the pound in increments of 1/4 pound.

Colorado Color Company - Tube Color Chart



C3 T01
Electric
Watermelon 50/50



C3 T02
Electric Water-
melon 4-way



C3 T03
Electric Water-
melon Birdhouse



C3 T04
Black Dynamite



C3 T06
Blue Standust
Undercover



C3 T07
Peach



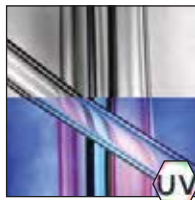
C3 T18
Solid Blu-V



C3 T19
Glacial Glow



C3 T20
Colorado Sunset
4-way



C3 T21
Glo-Kemon



C3 T22
Colorado Sunset
50/50



C3 T26
Blu-V Birdhouse



= Ultraviolet reactive glass



= Color shift under fluorescent light

Dichroic Tubing and Sheet Glass

D&L is committed to providing the newest products in a growing industry.

Coatings by Sandberg (CBS)



Sheets may be purchased in full, half, or quarter sheet, except Rainbow 1 and Rainbow 2 colored sheets which are sold as full or half sheets only. Target Rainbow is sold by the quarter sheet.

Full sheets are 19 inch diameter rounds with two flat sides approximately 17 inches apart (so no longer round - see drawing).

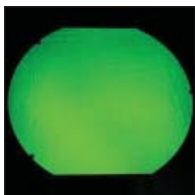
Approximate square inches of a full sheet (with flat sides) is 262 square inches. Half sheet is approximately 131 square inches.

Quarter sheet is approximately 65-1/2 square inches.

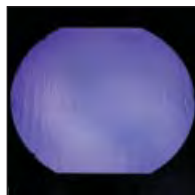
• Thin: .075 inch thick.

• Thick: .125 inch thick. Designated by "BORO125" in the item number.

Coatings by Sandberg (CBS) - Sheet Glass Color Chart



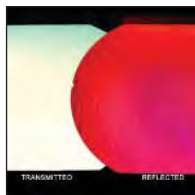
LW BORO EM
LW BORO125 EM
Emerald



LW BORO PU
Purple



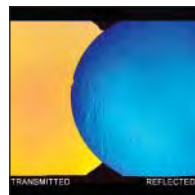
LW BORO RS
LW BORO125 RS
Red / Silver



LW BORO CAR
LW BORO125 CAR
Candy Apple Red



LW BORO BG
LW BORO125 BG
Blue / Gold



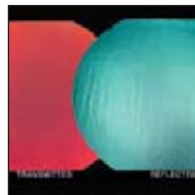
LW BORO YB
Yellow / Blue



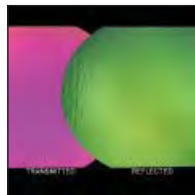
LW BORO CC
Cyan Copper



LW BORO CR
LW BORO125 CR
Cyan / Red



LW BORO RSB
Red / Silver / Blue



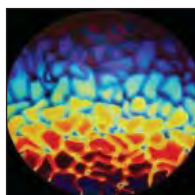
LW BORO MG
Magenta / Green



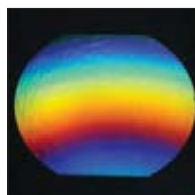
LW BORO PT
Pink Teal



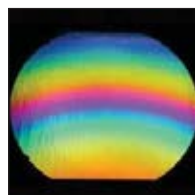
LW BORO GM
LW BORO125 GM
Green / Magenta



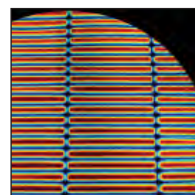
LW BORO HL
LW BORO125 HL
Hot Lava Pattern



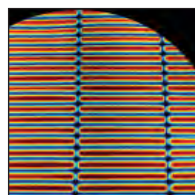
LW BORO RB1
Rainbow 1



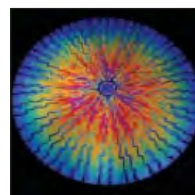
LW BORO RB2
Rainbow 2



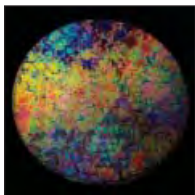
LW BORO RBA
Rainbow A
Stripes Pattern



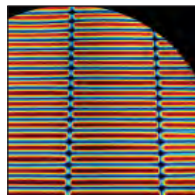
LW BORO RBACZ
LW BORO125RBACZ
Rainbow A Stripes
Pattern in Cyan
Dark Dark Red



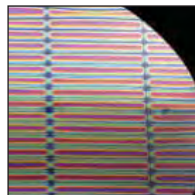
LW BORO VGBMTR
Voltage Pattern in
Green, Magenta,
Blue Target Rainbow



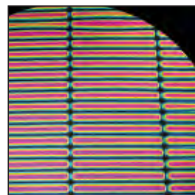
LW BORO CS
Corkscrews



LW BORO125RBACA
Rainbow A Stripes
Pattern on Candy
Apple Red



LW BORO125RBAGB
Rainbow A Stripes
Pattern on Green /
Magenta Blue



LW BORO125RBAGM
Rainbow A Stripes
Pattern on Green /
Magenta



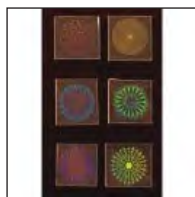
GLASS - Color Chart

Dichroic Tubing and Sheet Glass

Coatings by Sandberg (CBS) - Packs



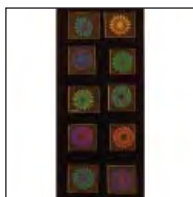
LW BORO K34
3/4 in.
Kaleidoscopes



LW BORO K1
1 in.
Kaleidoscopes



LW BORO PW12
1/2 in. Pinwheels



LW BORO PW34
3/4 in. Pinwheels



LW BORO PW1
1 in. Pinwheels



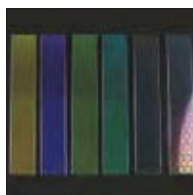
LW BORO 1X8
Individual Dichroic
Strips (1 in. x 8 in.)



LW STRIP RB1
Dichroic Strips
Rainbow 1
(16 in. x 1/4 in.)



LW BORO SCRAP
Dichroic Scrap
1/2 lb. Pack



LW BORO SAMPLE
Dichroic Sample
Set

Coatings by Sandberg (CBS) - Dichroic Extract

Dichroic Extract is a pure form of CBS's high quality coatings literally extracted off of the glass.



This innovative product gives the user a stable, brilliantly colored Dichroic effect. Currently available in six solid colors, two types of Rainbow Patterns and a sample set. As there is no coefficient (COE) associated with the Dichroic Extract, it can be used much like a gold-flake or powder. Achieve amazing results using the product in flame-working, glass blowing, fusing, stippling, painting and various other artistic methods. Dichroic Extract is sold in sheet glass equivalencies, for example: Full sheet worth of Dichroic Extract, Half (1/2) Sheet, Quarter (1/4) sheet and 1/8 sheet equivalent.

Item #	Description	Measurement Equivalent
DI EX CSS	Standard Color Sample Set (6 Colors)	1/8 sheet each color
DI EX RB1 SS	Rainbow 1 Sample	Full Sheet/8 Containers
DI EX RB3 SS	Rainbow 3 (Splinter) Sample	Full Sheet/8 Containers

**Individual colors available.
See our website!**

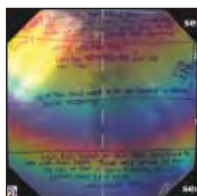
Dichroic Tubing and Sheet Glass

D&L is committed to providing the newest products in a growing industry.

Dichroic Alchemy

- Sheets: 1/2 Sheet size - approx. 8 x 16 in. 1/4 Sheet size - approx. 8 x 8 in.
 - Wizard Series is made of 42-48 layers of dichroic metals.
 - Artist Series is radical target gradient dichroic coating comprised of 24-30 layers of dichroic oxides.
 - Velvet Series sheets are comprised of 30-35 layers of dichroic oxides.
 - Galaxy Series sheets, a trichroic target pattern, or three distinct zones are comprised of 38-48 layers of dichroic metals.
- Tubes: Vary in size. Length range from 14 -16 in. Diameter approximately 29mm x 6mm thick.
 - Dichroic Alchemy tubes are sold by the pound in increments of 1/4 pound.

Dichroic Alchemy - Sheet Glass Color Chart



DAL HRD51
Starship
Wizard Series
1/2 Sheet



DAL QRD53
Diamond Tical Wizard Series - 1/4 Sheet



DAL QRD03
Sapphire / Gold Artist Series - 1/4 Sheet



DAL QRD14
Flamingo Turquoise Velvet Series - 1/4 Sheet



DAL QRD67
Tangerine Galaxy Series - 1/4 Sheet

Dichroic Alchemy - Solid Tube Color Chart

Solid Tube approximate length is 14 in.



DAL TD14
Flamingo
Turquoise
on Cobalt



DAL TD15
Purple / Teal
on Cobalt



DAL TD17
Cyan / Yellow
on Cobalt



DAL TD69
Rasta Red on
Cobalt

Dichroic Alchemy - Pattern Tube Color Chart

Pattern Tube approximate length is 16 in.



DAL TSST
Sunset



DAL TGDM
Golden Marine



DAL TNEM
Neon Magenta

See page 27 & 28 for
Golden Gate Dichroic Tubing

GLASS - Color Chart



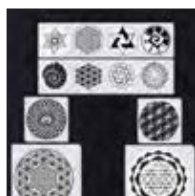
Dichroic Tubing and Sheet Glass

Dichroic Alchemy - Image Packs

Add a variety of dichroic images to your work with any of the dichroic mix image packs. Packs contain a variety of images based upon a theme; choose from Sacred Images, East Asian, Rasta and more. Most packs contain 8-1/2, 2-3/4 in., and 2-1 in. images.



DAL P001
Grateful Mix



DAL P002
Sacred Geo Mix



DAL P003
Zodiac Mix



DAL P004
Rasta Mix



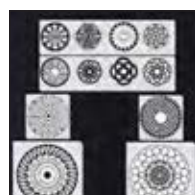
DAL P005
Light Mix



DAL P006
Dark Mix



DAL P007
Ancient Egypt



DAL P009
Radial Geo Mix



DAL P010
East Asia Mix



DAL P012
Sacred Geo 2 Mix



DAL P013
Radial Geo 2 Mix



Opals, Millefiori & Fuming Metals

D&L is committed to providing the newest products in a growing industry.

Opals

Sold by piece unless indicated.



OP R4W (4mm)
Round - White



OP R4B (4mm)
Round - Black



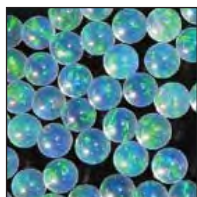
OP RC8W (8mm)
OP RC10W (10mm)
OP RC15W (15mm)
Round Coin - White



OP RC10M (10mm)
Round Coin - Mint



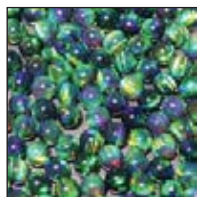
OP RC8B (8mm)
Round Coin - Black



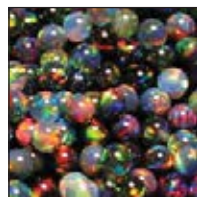
OP S3C (3mm)
OP S4C (4mm)
Sphere - Crystal



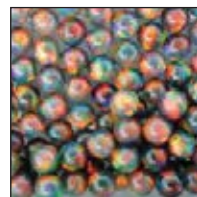
OP S4W (4mm)
Sphere - White



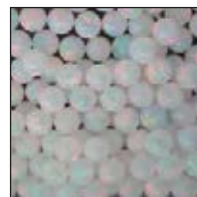
OP S3G (3mm)
Sphere - Green



OP S3B (3mm)
Sphere - Black



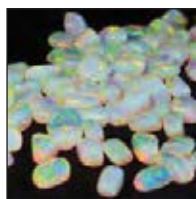
OP S4B (4mm)
Sphere - Black



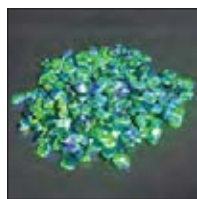
OP S3W (3mm)
Sphere - Black



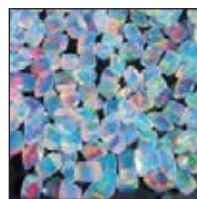
OP TUMW*
Tumbled White



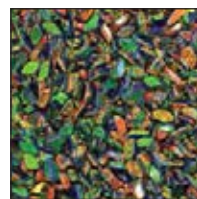
OP TUMM*
Tumbled Mint



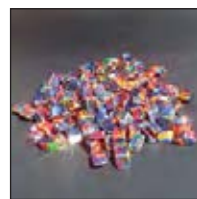
OP TUMG*
Tumbled Green



OP TUMRBW*
Tumbled Rainbow



OP TUMRGB*
Tumbled RGB



OP TUMB*
Tumbled Black



OP CM5W (5mm)
Crescent - White



OP ST4W (4mm)
Star - White



OP B1312W (12mm)
13 Point Bolt - White



OP CRUWGB*
Crushed White - Galaxy Blend



OP CRUW*
Crushed White



OP CRUB*
Crushed Black



OP RGHB*
Rough - Black



OP RGHC*
Rough - Crystal

GLASS - Opals, Millefiori & Fuming Metals



*Sold by the gram

800.525.0940 • 303.449.8737

© 2017 D&L Art Glass Supply®

D&L ART GLASS
SUPPLY

35

Opals, Millefiori & Fuming Metals

D&L is committed to providing the newest products in a growing industry.

Millefiori - Golden Gate Glassworks

Sold by the gram.



GG M30
Mushroom Scene
#1



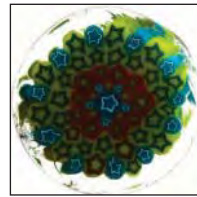
GG M32
Mushroom Scene
#3



GG M33
Mushroom Scene
#4



GG M59
Strobel & GG
Colab Cluster



GG M62
Carnival Star
Cluster



GG M88
Spider



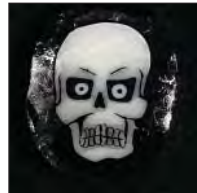
GG M89
Butterfly



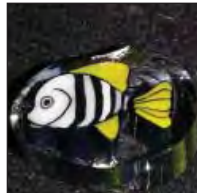
GG M90
Rose



GG M91
Plumeria Red



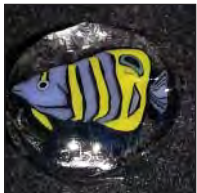
GG M108
Skull w/ Eyes v.2



GG M109
Convict Fish



GG M113
Angel Fish



GG M114
Copperband
Butterflyfish #1



GG M115
Copperband
Butterflyfish #2



GG M117
Dolphin



GG M119
Seahorse



GG M120
Starfish
Lavender



GG M121
Starfish Yellow



GG M224
Leaf Vol 3.

Fuming Metals

Silver (Fine)



Sold by the foot

Item #	LW FSF
--------	--------

Gold - 24 K (22 Gauge)



Sold by the inch

Item #	Gauge
LW 24KGW	22

Clear Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

Simax Kavalier Tube and Rod



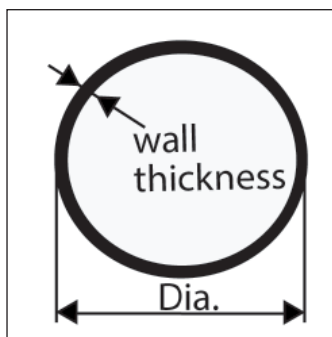
Simax borosilicate glass is produced to exacting standards and lends itself to a myriad of artistic lampworking glass applications. Tubes and rods and several shape profiles are available in a variety of thicknesses with slight +/- variance. Non-stock sizes or profiles may be special ordered and range from 4 mm tubing to 180 mm outside diameter.

- Rods - Length: from 3 mm to 44 mm.
- Tubes - Length: 9 mm to 60 mm.
- Simax products are sold by the case.

Simax Kavalier - Tube Chart

Tube Length and Variances

- 4-7 mm outside diameter is 1500 mm +/- 20 mm with cut ends
- 8-10 mm outside diameter is 1500 mm +/- 10 mm with cut ends
- 11-48 mm outside diameter is 1500 mm +/- 10 mm with trimmed and glazed ends
- 50-165 mm outside diameter is 1500 mm +/- 5 mm with trimmed and glazed ends
- 12-50 mm outside diameter lon-X Tubing is 500 mm length with +/- 20 mm with glazed ends



Tubes

Item #	Overall Dia. (mm)	Wall Thickness (mm)	Pieces per Case	Weight per Case
SX 246 040 080	4	0.8	400	23.8
SX 246 060 150	6	1.5	170	26.6
SX 246 063 120	6.35	1.2	170	22
SX 246 080 100	8	1	100	16.3
SX 246 080 150	8	1.5	100	22.4
SX 246 080 200	8	2	100	27.7
SX 246 090 150	9	1.5	81	21.1
SX 246 095 200	9.53	2	64	22.7
SX 246 100 100	10	1	64	13.4
SX 246 100 150	10	1.5	64	18.9
SX 246 100 220	10	2.2	64	25.3
SX 246 110 220	11	2.2	50	22.4
SX 246 120 100	12	1	100	25.5
SX 246 120 220	12	2.2	49	24.42
SX 246 127 240	12.7	2.4	81	48.62
SX 246 130 220	13	2.2	81	44.66
SX 246 140 220	14	2.2	64	38.5
SX 246 150 120	15	1.2	49	18.7

Tubes (continued)

Item #	Overall Dia. (mm)	Wall Thickness (mm)	Pieces per Case	Weight per Case
SX 246 150 250	15	2.5	49	35.42
SX 246 159 240	15.9	2.4	49	36.74
SX 246 160 120	16	1.2	49	20.24
SX 246 160 250	16	2.5	49	38.28
SX 246 170 250	17	2.5	36	30.14
SX 246 180 120	18	1.2	36	16.72
SX 246 180 250	18	2.5	36	32.34
SX 246 190 180	19	1.8	64	45.76
SX 246 190 320	19	3.2	36	42.02
SX 246 200 120	20	1.2	49	25.52
SX 246 200 250	20	2.5	49	49.5
SX 246 220 120	22	1.2	36	20.68
SX 246 220 180	22	1.8	36	30.36
SX 246 220 250	22	2.5	36	40.48
SX 246 220 300	22	3	36	47.52
SX 246 222 320	22.2	3.2	36	51.04
SX 246 240 180	24	1.8	36	33.22
SX 246 240 250	24	2.5	36	44.66
SX 246 250 150	25	1.5	36	29.26
SX 246 254 400	25.4	4	25	49.5
SX 246 260 200	26	2	36	39.82
SX 246 260 280	26	2.8	36	54.12
SX 246 280 200	28	2	25	30.14
SX 246 280 280	28	2.8	25	40.7
SX 246 280 400	28	4	16	35.42
SX 246 300 140	30	1.4	36	33.44

GLASS - Clear Tubes & Rods

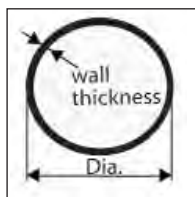


Clear Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

Simax Kavalier - Tube Chart

Tube Length and Variances See Page 37.



Tubes (continued)

Item #	Overall Dia. (mm)	Wall Thickness (mm)	Pieces per Case	Weight per Case
SX 246 300 280	30	2.8	25	44
SX 246 317 400	31.7	4	16	40.92
SX 246 320 200	32	2	25	34.76
SX 246 320 280	32	2.8	25	47.3
SX 246 330 400	33	4	16	42.9
SX 246 360 200	36	2	16	25.08
SX 246 380 200	38	2	16	26.62
SX 246 380 280	38	2.8	16	36.52
SX 246 381 400	38.1	4	16	50.38
SX 246 400 230	40	2.3	16	32.12
SX 246 400 320	40	3.2	16	43.56
SX 246 420 160	42	1.6	16	23.98
SX 246 420 320	42	3.2	16	45.98
SX 246 440 320	44	3.2	16	48.4
SX 246 440 480	44	4.8	9	39.16
SX 246 444 400	44.4	4	16	59.84
SX 246 500 250	50	2.5	12	33

Tubes (continued)

Item #	Overall Dia. (mm)	Wall Thickness (mm)	Pieces per Case	Weight per Case
SX 246 500 350	50	3.5	12	33.88
SX 246 500 500	50	5.0	9	46.9
SX 246 500 700	50	7.0	9	62.9
SX 246 510 200	51	2	12	27.28
SX 246 520 350	52	3.5	9	35.42
SX 246 560 180	56	1.8	12	27.06
SX 246 580 250	58	2.5	12	38.5
SX 246 600 420	60	4.2	4	21.78
SX 246 600 500	60	5	4	25.52
SX 246 600 700	60	7	4	34.32
SX 246 650 420	65	4.2	8	47.3
SX 246 650 500	65	5	4	27.72
SX 246 700 500	70	5	4	30.14
SX 246 750 320	75	3.2	4	21.34
SX 246 750 500	75	5	4	32.34
SX 246 800 500	80	5	4	34.76
SX 246 850 500	85	5	4	36.96
SX 246 900 500	90	5	4	39.38
SX 246 950 250	95	2.5	4	21.34
SX 248 000 250	100	2.5	3	16.94
SX 248 300 300	130	3	2	17.6

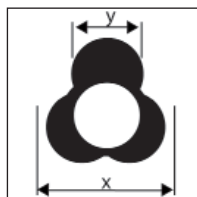


Clear Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

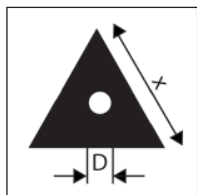
Simax Kavalier - Profile Tube Chart

Daisy, Iris and Scallop (Profile) Tubing Length and Variances
 15-48 mm outside diameter is 1500 mm +/- 10 mm with trimmed and glazed ends
 50-80 mm outside diameter is 1500 mm +/- 5 mm with trimmed and glazed ends



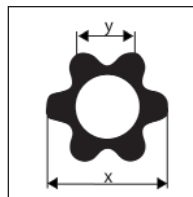
Iris (Tri-Shape) Tubes

Item #	X Dia. (mm)	Y Dim. (mm)	Pieces per Case	Weight per Case
SX 246 888 051	19	9.5	36	44.4
SX 246 888 056	24	10.5	25	48.2



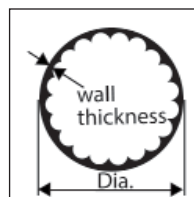
Triangular Capillary Tubes

Item #	X Dia. (mm)	D Dim. (mm)	Pieces per Case	Weight per Case
SX 261 710 301	11	1-1.5	75	32.8
SX 261 710 305	7	1-1.5	175	30.8



Daisy (Hexagonal) Tubes

Item #	X Dia. (mm)	Y Dim. (mm)	Pieces per Case	Weight per Case
SX 246 888 108	16	7.1	49	42.5
SX 246 888 110	18	7.8	36	37.8
SX 246 888 113	22	11.5	36	50.4
SX 246 888 116	28	17.5	16	32.3
SX 246 888 118	32	19	16	36.5



Scallop Tubes

Item #	Overall Dia. (mm)	Wall Thickness (mm)	Pieces per Case	Weight per Case
SX 246 889 003	60	2.3	12	46.9
SX 246 889 221	22	1	36	22.4
SX 246 889 261	26	1.5	36	37.0
SX 246 889 301	30	2.0	36	55.7
SX 246 889 402	40	2.0	16	34.8
SX 246 889 502	50	2.8	8	44.0



GLASS - Clear Tubes & Rods

Clear Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

Simax Kavalier - Rod Chart

Rod Length and Variances

3-7 mm diameter rod is 1500 mm +/- 20 mm with cut ends

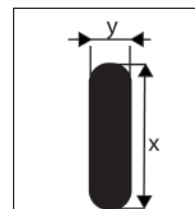
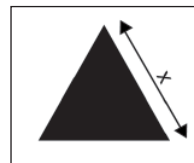
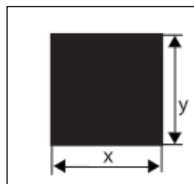
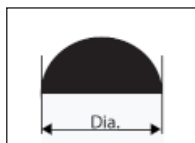
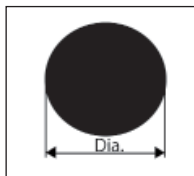
8-17 mm diameter rod is 1500 mm +/- 10 mm with cut ends

18-44 mm diameter rod is 1500 mm +/- 30 mm with cut ends

Flat Rod Length and Variances

10-17 mm diameter flat rod is 1500 mm +/- 10 mm with cut ends

18 mm diameter flat rod is 1500 mm +/- 30 mm with cut ends



Standard Rods

Item #	Diameter (mm)	Pieces per Case	Pounds per Case
SX 271 030 000	3	700	37
SX 271 040 000	4	400	37
SX 271 050 000	5	256	37.2
SX 271 060 000	6	170	35.6
SX 271 070 000	7	121	34.3
SX 271 080 000	8	100	37
SX 271 090 000	9	81	38.1
SX 271 100 000	10	64	37
SX 271 110 000	11	50	35
SX 271 120 000	12	49	40.7
SX 271 127 000	12.7	30	27.9
SX 271 159 000	15.9	16	23.3
SX 271 160 000	16	16	23.8
SX 271 180 000	18	16	29.9
SX 271 190 000	19	16	33.4
SX 271 200 000	20	16	37
SX 271 220 000	22	9	25.1
SX 271 240 000	24	9	29.9
SX 271 254 000	25.4	9	33.7
SX 271 260 000	26	9	35.2
SX 271 280 000	28	4	18
SX 271 300 000	30	4	20.9
SX 271 317 000	31.7	4	23.3
SX 271 381 000	38.1	4	33.7
SX 271 440 000	44	4	44.7

Half Rods

Item #	Dia. (mm)	Pieces per Case	Pounds per Case
SX 271 750 801	8	150	26.4
SX 271 751 201	12	70	27.50
SX 271 751 501	15	45	28.60
SX 271 751 601	16	42	28.8

Rectangular Rods

Item #	X Dia. (mm)	Y Dim. (mm)	Pieces per Case	Weight per Case
SX 272 040 501	4	5.4	280	43.8
SX 272 081 001	8	10.8	70	42.9
SX 272 121 601	12	16	30	40

Triangular Rods

Item #	X Dia. (mm)	Pieces per Case	Pounds per Case
SX 271 710 301	8	150	26.4
SX 271 710 304	8	100	24.4
SX 271 710 305	7	130	24.6
SX 271 710 306	6	180	24.9

Flat Rods

Item #	X Dia. (mm)	Y Dim. (mm)	Pieces per Case	Weight per Case
SX 271 126 428	12	6.4	72	33.4
SX 271 167 128	16	7.1	50	35.6
SX 271 188 028	18	8	40	35.9
SX 271 381 128	38	9.8	12	29.0



Clear Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

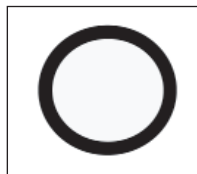
Schott Tube and Rod

SCHOTT

SCHOTT Artistic tubing and rod measures approximately 1500 mm (59 inches) long

- 3.3 expansion borosilicate glass
- Tubing from 10mm to 110mm OD
- Rods range from 2mm to 40mm OD
- Made in Germany according to DIN EN ISO 9001:2000
- Sold by the closed case only.

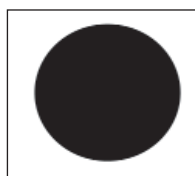
Schott - Tube Chart



Tubes			
Item #	Size (mm)	Pieces per Case	Pounds per Case
SBA T080 150	8 x 1.5	147	34
SBA T095 200	9.5 x 2.0	108	42
SBA T120 220	12 x 2.2	42	21
SBA T127 240	12.7x2.4	42	24
SBA T160 250	16 x 2.5	25	20
SBA T190 320	19 x 3.2	36	43
SBA T220 250	22 x 2.5	30	38
SBA T260 280	26 x 2.8	12	19
SBA T260 400	26 x 4.0	12	25
SBA T320 280	32 x 2.8	16	31

Tubes			
Item #	Size (mm)	Pieces per Case	Pounds per Case
SBA T320 400	32 x 4.0	16	42
SBA T380 280	38 x 2.8	9	21
SBA T380 400	38 x 4.0	9	29
SBA T440 320	44 x 3.2	9	28
SBA T440 400	44 x 4.0	9	34
SBA T450 500	45 x 5.0	9	42
SBA T500 500	50 x 5.0	6	32
SBA T500 900	50 x 9.0	6	52
SBA T600 500	60 x 5.0	4	26
SBA T650 500	65 x 5.0	4	24
SBA T700 500	70 x 5.0	4	31
SBA T750 500	75 x 5.0	4	33
SBA T800 500	80 x 5.0	4	42
SBA T850 500	85 x 5.0	4	45

Schott - Rod Chart



Rods			
Item #	Size (mm)	Pieces per Case	Pounds per Case
SBA R040	4	298	28
SBA R050	5	183	27
SBA R060	6	140	30
SBA R070	7	98	28
SBA R080	8	80	30
SBA R100	10	45	26
SBA R120	12	35	30
SBA R160	16	20	30
SBA R200	20	16	37
SBA R260	26	6	36
SBA R320	32	6	36



Chinese Tubes & Rods

D&L is committed to providing the newest products in a growing industry.

Chinese Tubes & Rods

- Rod size: 6-8 mm size. Full cases are 44#s. Larger diameter rods are sold by the piece and case weights vary. Available in 17 colors, sold in 4 foot lengths.
 - Tubing is sold by the piece with best price at full case quantities. Available in 13 colors, sold in 4 foot lengths.
- Chinese Color Tubing and Rods is a value priced product which is best suited for certain applications; this is based upon wider range of efficiency and general quality tolerances. When in doubt, test before overcommitting! A great value when used within its tolerances.

Chinese Tubes and Rods - Rod Color Chart

Tube item numbers below.



A33 RAM8
Amber



A33 RBB8
Blue



A33 RBGR8
Bright Green



A33 RCHM8
Champagne



A33 REMGR8
Emerald Green



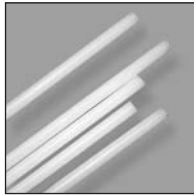
A33 RGRY8
Gray



A33 RIMGR8
Imperial Green



A33 RJGR8
Jade Green



A33 RJW8 (6-8mm)
A33 RJW26(26mm)
Jade White



A33 RLB8
Light Blue



A33 RLGR8
Lake Green



A33 RPAM8
Purple Amethyst



A33 RPI8
Pink



A33 RSRD8
Str Red



A33 RW8
White Striker



A33 RYL8
Yellow



A33 RBLK8 (6-8mm)
A33 RBLK12 (12mm)
A33 RBLK 20 (20mm)
A33 RBLK26 (26mm)
Black



Color Description	Tubes (mm = outside diameter. All tubes are heavy wall.)								
	9mm	12mm	16mm	19mm	25mm	32mm	38mm	44mm	50mm
Clear	-	-	-	-	A33 TCL26*	-	A33 TCL38	A33 TCL44	A33 TCL50
Amber	A33 TAM9	A33 TAM12	A33 TAM16	-	A33 TAM25	A33 TAM32	A33 TAM38	-	-
Blue	A33 TBLU9	A33 TBLU12	A33 TBLU16	A33 TBLU19	A33 TBLU25	A33 TBLU32	A33 TBLU38	A33 TBLU44	-
Emerald Green	A33 TGR9	A33 TGR12	A33 TGR16	A33 TGR19	A33 TGR25	A33 TGR32	A33 TGR38	-	-
Gray	-	A33 TGRY12	-	-	-	A33 TGRY32	-	-	-
Imperial Green	A33 TIGR9	A33 TIGR12	-	-	-	-	-	-	-
Jade White	A33 TJW9	A33 TJW12	A33 TJW16	-	A33 TJW25	A33 TJW32	A33 TJW38	-	-
Lake Green	A33 TLGR9	-	A33 TLGR16	-	A33 TLGR25	A33 TLGR32	A33 TLGR38	-	-
Purple Amethyst	A33 TPAM9	A33 TPAM12	-	A33 TPAM19	-	A33 TPAM32	A33 TPAM38	-	-
Pink	A33 TPNK9	A33 TPNK12	-	-	A33 TPNK25	A33 TPNK32	A33 TPNK38	-	-
Yellow	-	-	-	-	-	A33 TYL32	-	-	-
Black	A33 TBLK9	A33 TBLK12	A33 TBLK16	A33 TBLK19	A33 TBLK25	A33 TBLK32	A33 TBLK38	A33 TBLK44	-

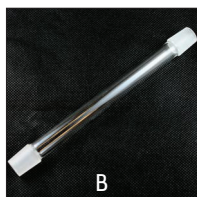
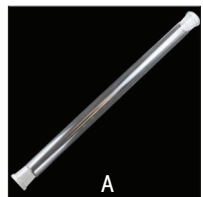
* A33 TCL26 = 25.4 mm

Ground Joints

D&L is committed to providing the newest products in a growing industry.

Chinese Ground Joints

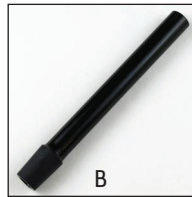
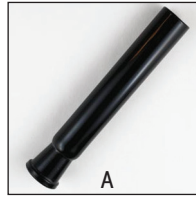
Ground Joints



Note: Images depict style only, not specific item.

ID	Item #	Type	Top Outer Dia.	Grind Length
A	GJ 14F	Female	14 mm	20 mm
B	GJ 14M	Male	14 mm	20 mm
A	GJ 19F	Female	19 mm	22 mm
B	GJ 19M	Male	19 mm	22 mm

Colored Ground Joints

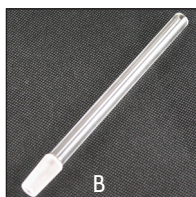


Note: Images depict style only, not specific item. Black shown.

ID	Item #	Type	Color	Top Outer Dia.	Grind Length
A	GJC B14F	Female	Black	14 mm	20 mm
B	GJC B14M	Male	Black	14 mm	20 mm
B	GJC CO14M	Male	Cobalt	14 mm	20 mm
B	GJC GR14M	Male	Green	14 mm	20mm

AccuGrind Ground Joints

Ground Joints



Note: Images depict style only, not specific item.

ID	Item #	Description	Dimensions		
			Inner Dia.	Wall Thickness	Length
A	GJA 10F	Female - 10/19	10mm	2mm	127mm
B	GJA 10M	Male - 10/19	5mm	2mm	127mm
B	GJA 14M	Male 14/23- 1.5 wall	12mm	1.5mm	125mm
	GJA B14F	Bistabil - Female - 14/23	19mm	2.8mm	125mm
	GJA B14M	Bistabil - Male - 14/23	12mm	2.5mm	125mm
C	GJA B14MDUB	Bistabil - Male Double - 14/23	12mm	2.2mm	-
E	GJA B19F	Bistabil - Female - 19/26	26mm	2.8mm	125mm
B	GJA B19M	Bistabil - Male - 19/26	16mm	2.5mm	125mm
C	GJA B19MDUB*	Bistabil - Male Double - 19/26	16mm	2.5mm	-

Note: Images represent style only

* Double Bistabil ground joint, with 50mm gap between two ends.

Drop Stem



Drop Stem 14/19 - 8.5 in.

Item # GJA DS1419

Bushing Adaptor



Low profile bushing adaptor is a 19/26 male fitting with a 14/23 female fitting inside of it.

Item #	Description
GJA LP1014	Low Profile Bushing Adaptor 10F/14M



Ground Joints

D&L is committed to providing the newest products in a growing industry.

Lenz Ground Joints



Note: Images depict style only, not specific item.

ID	Item #	Description	Dimensions		
			Inner Dia.	Wall Thickness	Length
A	GJL 10F	Female - 10/19	10mm	2mm	130mm
B	GJL 10M	Male - 10/19	5mm	2mm	115mm
A	GJL 12F	Female - 12/23			
B	GJL 12M	Male - 12/23			
A	GJL 14F	Female - 14/23	17mm	1.8mm	130mm
B	GJL 14M	Male - 14/23	13mm	2.2mm	130mm
A	GJL 19F	Female - 19/26	22mm	1.8mm	130mm
B	GJL 19M	Male - 19/26	16mm	2.5mm	130mm
A	GJL B14F	Bistabil - Female - 14/23	22mm	2.5mm	130mm
A	GJL B19F	Bistabil - Female - 19/26	26mm	2.8mm	130mm
D	GJL D10F	Dewar Female - 10/19	8mm	2mm	130mm
D	GJL D14F	Dewar Female - 14/23	17mm	1.8mm	130mm
D	GJL D19F	Dewar Female - 19/26	26mm	2.8mm	130mm
E	GJL U19F	Uber Female - 19/26	26mm	4mm	130mm

Ground Joint Holders - Blast Shield



Note: Images depict style only, not specific item.

ID	Item #	Description
A	GJH 10F	Female- 10
B	GJH 10M	Male- 10
A	GJH 14F	Female- 14
B	GJH 14M	Male-14
A	GJH 19F	Female- 19
B	GJH 19M	Male- 19

Ground Joint Clip



Item #	Description
GJ 14CL	L14/20
GJ 19CL	19/22

Diffuser Discs



Honeycomb diffuser discs create diffused water and air flow. Available in standard sizes; clear 33 COE borosilicate glass.

Item #	Diameter	Color
LW DHC8	8 mm	Clear
LW DHC26	26 mm	Clear
LW DHC32	32 mm	Clear
LW DHC38	38 mm	Clear
LW DHC44	44 mm	Clear
LW DHC50	50 mm	Clear
LW DHC60	60 mm	Clear
LW DHC65	65 mm	Clear

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

AIM



AIM Manufacturing Co. produces specialty lampworking kilns. Many feature a slanted door closure is for a tighter seal and innovative punty door and hinge designs.

AIM P9 - 9" W x 9" H x 10" D



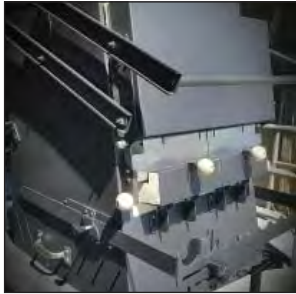
Specifications: Mercury Relay, NEMA Plug: 6-15, Power Cord: 14/3, Wall Thickness: 2.5 /3 in. Door, Element Quantity: 2, Breaker Size: 20-30amp., Approx. Chamber Volume: 047 Cubic F, Shipping Weight: 125 lbs.

AIM P91 - 16" W x 9" H x 10" D



Specifications: Mercury Relay, Nema Plug: 16-5/ 5-15, Power Cord: 12/3, Wall Thickness: 2.5 Walls/ 3 in. Floor, lid, & Door, Element Quantity: 2, Breaker Size: 20-30amp 120V/ 20amp 240v, Approx. Chamber Volume: 0.83 Cubic F, Shipping Weight: 175 lbs.

AIM C12 - 12" W x 12" H x 12" D



Specifications: Mercury Relay, Breaker Size: 20 amp 120v/ 15-20amp 240v, Power Cord: 14/3-12/3, Nema Plug: 6-15/ 5-15, Wall Thickness: 2.5 in./ 3 in., Element Quantity: 2, Approx Chamber Volume: 1 Cubic F, Shipping Weight: 170 lbs.

AIM C17 - Humboldt Kiln - 17" W x 15.5" H x 15" D



Specifications: Power Cord: 30 Amp. Molded Dryer Cord., Wall Thickness: 3 Brick, Element Quantity: 3, Breaker Size: 30-50 amp, Approx. Chamber Volume: 2.21 Cubic F, Shipping Weight: 238 lbs.

AIM HOPC - 26" W x 12" H x 18" D



Specifications: Mercury Relay, Power Cord: 30amp Molded dryer cord, Wall Thickness: 3 in. Brick, Element Quantity: 2, Approx Chamber Volume: 1.68, Breaker Size: 30-50 amp. Shipping Weight: 457 lbs.



At A Glance - AIM Kilns

Item #	Description	Dimensions (W x H x D)		Amps	Volts	Watts	Max. Temp.
		Chamber	Exterior				
AIM P9	AIM P9 Kiln	9 x 9 x 10 in.	17 x 21 x 27 in.	13.5	120	1608	1200 F
AIM P91	AIM P91 Kiln	16 x 9 x 10 in.	25 x 22 x 28 in.	14	120	1680	1200 F
AIM C12	AIM C12 Kiln	12 x 12 x 12 in.	20 x 25 x 31 in.	14	120	14/9	1200 F
AIM C17	Humboldt	17 x 15.5 x 15 in.	27 x 30 x 38 in	22	240	5280	1200 F
AIM HOPC	AIM HOPS Kiln	26 x 12 x 18 in.	42 x 29 x 39 in.	23	240	5520	1200 F

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Paragon Kilns



Paragon Industries is a family owned company founded in 1948. Paragon is commitment to the kiln market, focusing on designing high quality standard and custom kilns



PAR BLB - Paragon BlueBird Kiln - 20" W x 2.75" H x 6" D

BlueBird specifications: 3-key Sentry Xpress digital controller and 2 in. tall, 10 in. wide double doors giving a total of 20 inches of width. The Blue Bird has a 3-key Sentry Xpress digital controller to maintain the annealing temperature that you program. Controls stay cool in a slotted base. UPS-able. Shipping Weight 55 lbs.



PAR BLBXL - Paragon BlueBird XL Kiln - 20" W x 4.5" H x 9" D

BlueBird XL This kiln is a lampworker's dream! 10 in. wide double doors gives artists 20 in. total width. Kiln comes with a short door on the left and a tall door on the right. The short door features a 1/2 in. gap underneath and includes a double mandrel holder. The tall door fits snugly against the kiln floor when in the closed door position. The doors are interchangeable. A stainless steel glass rod warmer is featured on top of the kiln. The BlueBird XL has a 3-key Sentry Xpress digital controller to maintain the annealing temperature that you program. UPS-able. Specifications: Shipping Weight: 86 lbs.



PAR F120- Paragon F-120 Kiln - 10.75" W x 7" H x 11" D

The F120 is great for lampworking, annealing. Make work up to 5 in. tall. Designed with a smaller punty rod door. (The punty rod extends outside the firing chamber for safe annealing.) Elements are mounted in the top. This kiln plugs into a standard household outlet. Specifications: built-in digital Sentry Xpress 3-key controller, Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight 135 lbs.



PAR F130E- Paragon F-130 Kiln - 11" W x 13" H x 11" D

The F130 Elite is great for lampworking and annealing. Make work up to 11 in. tall. Raise the spring-loaded vertical-drop door to insert a glass figurine with a punty rod. Designed with a smaller punty rod door. (The punty rod extends outside the firing chamber for safe annealing.) Elements are mounted in the side and back-wall with an extended rod rest. Specifications: Requires 5-20 receptacle. Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight 162 lbs. Note: this 120 volt kiln requires a non-standard 5-20 receptacle and 20 amp breaker. Special order element configurations (top-fire or top and side) available.



PAR F200 - Paragon F-200 Kiln - 25" W x 8" H x 15" D

A high performance kiln. Anneal work up to 6 in. tall. The 2 in. tall, 11 in. wide double doors give 22 in. of width for inserting rods.

Dual mechanical relays; the optional mercury relay upgrade is available, 1-1/4 in. thick ceramic fiber punty rod doors, Mandrel holder with 19 slots. The F200 has elements in the top, allowing for fusing and slumping glass options in this large, 25 in. wide x 15 in. deep versatile kiln. Specifications: 3-key digital Sentry Xpress controller. This Item Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight: 278 lbs.



PAR F240- Paragon F-240 Kiln - 18" W x 13" H x 18" D

F240 Great for lampworking and annealing. Make work up to 11 in. tall. Includes two punty rod doors & extended rod rest. The F240 has side and back wall heating elements and maintains the annealing temperature with the built-in digital Sentry Xpress 3-key controller. Special order configurations (top and side, or top only) are available. Specifications: This Item Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight 320 lbs.

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Paragon Kilns



PAR F500- Paragon F-500 Kiln - 24" W x 22.25" H x 18" D

This is a true workhorse kiln that will increase the production of your glass studio. The F-500 has durable 3 in. insulating firebricks in the top, walls, bottom and door; Mercury relay; Counter-weight vertical-drop door; adjustable rod rest and more. The heating elements are protected in dropped, recessed wall grooves. The F-500 has no roof elements. Specifications: Outer dimensions: 35 in. W x 29 in. D x 38 in. H, chamber dimensions: 24 in. W x 18 in. D x 22-1/4 in. H. Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight: 601 lbs.



PAR CRDD - Darby Dipper Crucible Kiln - 7.5" W x 7.5" H x 9" D

Darby Dipper Crucible Kiln lets you enjoy the freedom of crucible firing in a small space. Access to the crucible is easy and manageable through the 6 in. hole in the firebrick top. All walls, the top and bottom are made of 3 in. high temperature K-25 firebricks for prolonged high temperature holds. The walls are also wrapped with ceramic fiber blanket, offering extra insulation. Due to these elements, the Darby Dipper is reliable during very long heat soaks. UPS-able. D&L stocks the model with the mercury relay upgrade, non-upgrade versions can be special ordered also. Shipping Weight: 95 lbs. 1-year Manufacturer Warranty (does not cover heating elements), Sentry Xpress Digital Controller Deluxe S-Type platinum thermocouple with ceramic protection tube.

At A Glance - Paragon Kilns

Item #	Description	Controller	Chamber Dimensions W x H x D	Cubic Ft.	Amps	Volts	Watts	Max. Temp.
PAR BLB	Paragon BlueBird Kiln	Sentry Xpress	20 x 2.75 x 6 in.	0.19	8	120	1500	1200 F
PAR BLBXL	Paragon BlueBird XL Kiln	Sentry Xpress	20 x 4.5 x 9 in.	0.47	14	120	1700	1500 F
PAR F120	Paragon F-120 Kiln	Sentry Xpress	10.75 x 7 x 11 in.	0.48	14/20	120	1680	1700 F
PAR F130E	Paragon F130 Elite Kiln	Sentry Xpress	11 x 13 x 11 in.	0.9	20	120	2400	1700 F
PAR F200	Paragon F-200 Kiln	Sentry Xpress	25 x 8 x 15 in.	1.73	20/20	240	4800	1700 F
PAR F240	Paragon F-240 Kiln	Sentry Xpress	18 x 13 x 18 in.	2.4	20	240	4800	1700 F
PAR F500	Paragon F-500 Kiln	Sentry Xpress	24 x 22.25 x 18 in.	5.5	29	240	6850	1200 F
PAR CRDD	Darby Dipper Crucible Kiln	Sentry Xpress	7.5 x 7.5 x 9 in.	0.29	19	240	2300	2350 F

Crucibles



Small Crucible

Used in Paragon Darby Dipper kiln. Item #PAR CRDD found on pg. 47.
Specifications: 8-10 lbs of borosilicate glass or 10-12 lbs of soft glass. Shipping Weight: 12 lbs

Large Crucible

Used in Skutt Crucible kiln. Item #SKUTT CR818 found on pg. 48. A larger crucible that can be used in either the Trifecta or Vulcan kilns.
Specifications: 30 lbs of borosilicate glass or 38-40 lbs of soft glass. Shipping Weight: 30 lbs

Item #	Description	Dimensions
PAR CRPSM	Small	6 W x 7 H in.
PAR CRPLG	Large	9 W x 12 H in.



Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Skutt Glass Kilns



Skutt Glass Kilns, founded in 1953, remains dedicated to manufacturing quality products for over 50 years. Annealing kilns have been designed by noted lampworking artist Marcel Braun.



SKUTT SCMIC - Micro Scarab Annealing Kiln - 12" W x 7.5" H x 9.25" D

The Scarab Micro, a household annealing kiln featuring a stainless steel flip up door with cool to the touch wood handle. All components exposed to heat are constructed of heavy gauge stainless steel. The removable chassis slides out for easy access to all components. The solid state relays are designed to handle the strenuous cycling times associated with annealing, also includes oversized heat sinks and a built in cooling fan. Shipping Weight: 170 lbs.



SKUTT SCMN - Mini Scarab Annealing Kiln - 12" W x 16" H x 12" D

The Scarab Mini, a tabletop flameworking kiln featuring an easy-to-use controller. Main door with adjustable, scalloped point rests and a smooth re-engineered hinge that allows users to work with larger diameter tubing. Slide out chassis allow easy access to components; Solid state relays for long life. The Scarab Mini Annealing Kiln operates on a 16 AMP breaker. Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight: 220 lbs.



SKUTT SCA - Scarab Annealing Kiln - 27" W x 16" H x 12" D

The Scarab, the standard for flamworkers, features three stainless steel doors with wood handles and adjustable point rests design; a main counter-weighted door that holds in any position; Independent center door which allows you to work with larger diameter tubing; Solid state relays for long life and multiple handles for easy moving. Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight: 460 lbs.



SKUTT SCXL - XL Scarab Annealing Kiln - 27" W x 26" H x 20" D

The Scarab XL is designed for large pieces and production. It has similar features as the Scarab but built with a larger chamber and operates on a 48 AMP breaker and 11520 watts. Ships Via Truck Only, Does NOT ship UPS/Fed-X. Shipping Weight: 735 lbs.



SKUTT CR818 - Crucible Kiln - 17" W x 17" H x 18" D

The Crucible Kiln was designed to provide artists a kiln that is affordable and inexpensive to operate. Rated to 2350F this furnace is designed to melt both soft glass and borsilicate glass. Key features include: GlassMaster Controller, a touchpad controller allowing you to store up to 12 customized firing programs with up to 16 segments; A type S Thermocouple which performs extremely well in high temperatures & corrosive atmospheres; Solid state relays, A hinged top hat door with wood handle, and long lasting APM elements. Shipping Weight: 190 lbs.



At A Glance - Skutt Kilns

Item #	Description	Controller	Opening Dimensions W x H, D	Cubic Ft.	Amps	Volts	Watts	Max. Temp.
SKUTT SCMIC	Skutt Micro Scarab	GlassMaster 33	12 x 7.5 x 9.25 in.	.5	14.3	120	1650	1700 F
SKUTT SCMN	Skutt Mini	COE Controller	12 x 16 x 12 in.	1.4	16	240	3840	1700 F
SKUTT SCA	Skutt Scarab	GlassMaster 33	27 x 16 x 12 in.	3	27	240	6480	1700 F
SKUTT SCXL	Skutt Scarab XL	GlassMaster 33	27 x 26 x 20 in.	8.1	48	240	11520	1700 F
SKUTT CR818	Skutt Crucible Kiln	GlassMaster 33	17 x 17 x 18 in.	2.3	30	240	7200	2350 F

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Jen-Ken Kilns



Jen-Ken Kilns is a family owned and operated kiln manufacturing company since 1951. Committed in building electric kilns for all aspects of contemporary fired arts.

JK CPAF - Chili Pepper Bead Annealer - 16" W x 4" H x 6.5" D



Large front load 16 in. x 4 in. access door. Orton Autofire 3 button controller (AF3P): 6 (8 segment) programs, w/ add time, add temp & skip step features. Lightweight & portable. Specifications: Plug: 5-15R, Breaker: 15, Circuit wire gauge: 14. Shipping weight: 25 lbs. UPS- able, 1 year limited warranty.

At A Glance - Jen-Ken Kiln

Item #	Description	Controller	Chamber Dimensions W x H x D	Amps	Breaker	Volts	Watts	Max. Temp.
JK CPAF	Chili Pepper Bead Annealer	Digital AF3P	16 x 4 x 6.5 in.	8	15	120	960	1100 F

Evenheat Kilns



Evenheat - Serving the ceramic, glass, heat treat and metal clay markets was founded in 1948 by John and Margaret Watson. Today Evenheat Kilns are designed with features such as, custom lid and door handles; lid lift systems designed to help lift the lid and to protect the kiln and pivoting swing-up controls for comfortable useage.

EVEN FBA - Fishbone Annealer - 14.25" W x 3.5" H x 7.5" D



The Evenheat Fishbone Annealer is designed with useful features such as: A 25 tooth mandrel rest spaced 1/2 inch apart, 7-1/2 in. deep chamber, a two point mandrel rest allowing you to suspend your beads above the fiber floor and providing a stable base on which to rest, a Mandrel Crown placed atop the Fishbone for mandrel drying and storage, and a cool-touch handle. Equipped with the Set-Pro 3-key controller. Approximate shipping weight: 45 lbs, UPS-able.

At A Glance - Evenheat Kiln

Item #	Description	Chamber Dimensions W x H x D	Cubic Ft.	Amps	Volts	Watts	Max. Temp.
EVEN FBA	Fishbone Annealer	14.25 x 3.5 x 7.5 in.	.22 cubic feet	12	120	1440	1200 F

D&L carries a wide range of Fusing and Annealing Kilns.
We are always adding new items.
See them all at www.dlartglass.com

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Carlisle



All Carlisle Burners shown may be used with a mixture of oxygen and either natural gas, propane or hydrogen. Carlisle machine works, established in 1918, provides top quality equipment to the scientific and artistic glass community. All Carlisle Burners shown may be used with a mixture of oxygen and either natural gas, or propane.

LW CMCC - Carlisle Mini CC Burner



Carlisle Mini CC is a 7 jet surface mixed burner. This high oxygen bench burner is suited for use with both hard and soft glass. The body of the Mini CC is constructed of brass with cooling fins. The tube matrix, which is constructed of seven tubes, is made of stainless steel. The stand is designed for ease of use and places the burner head at a 45° angle. The connection of the body to the stand is made with a ball joint, allowing for an increased or decreased tilt of 15° and articulation. The stand may be permanently mounted or used on a table top.

LW CHC - Carlisle Hellcat Burner



The Hellcat is a surface mixed 4 inlet burner suited for use with both hard and soft glass. The body of the Hellcat is constructed of brass and has a stainless steel nose cone. The tube matrix is constructed of seven tubes in the center (exactly the same as the Mini CC) and 14 tubes on the outer fire all made of stainless steel for a total of 21 jets. The Hellcat stand is designed for ease of use and places the burner head at a 45° angle. The connection of the body to the stand is made with a ball joint, allowing for an increased or decreased tilt of 15° and articulation. The stand may be permanently mounted or used on a table top.

LW CWC - Carlisle Wildcat Burner



Carlisle Wildcat Bench Burner is a surface mixed burner. The Wildcat features a solid brass body construction with a stainless steel tube matrix of 19 fuel ports surrounded by 12 oxygen ports cut into the front brass casing. This "Vortex" cooling system, produces a powerful flame that remains gentle enough to use with colored glass and dichroic glass. The wider flame produced by the Wildcat allows for solid borosilicate work up to 1-1/2 in. thick and solid soft glass work up to 2 in. thick. The stand is designed for ease of use and places the burner head at a 45° angle. The connection of the body to the stand is made with a ball joint, allowing for an increased or decreased tilt of 15° to articulate the head in virtually any direction or rotation. The stand may be permanently mounted or used on a table top.

At A Glance - Carlisle Burners

Item #	Model	Stand Option	Center Fire		# Inlets	Fittings	Full Flame Consumption	
			Fire	Mix			Gas	Oxygen
LW CMCC	Mini CC Burner	Ball Joint	7 ports	Surface	2		Usage: 1.5 LPM Pressure: 2 PSI	Usage: 7 LPM Pressure: 5 PSI
LW CHC	Hellcat Burner	Ball Joint	21 ports	Surface	4		Usage 4.5 LPM Pressure: 2-3 PSI	Usage: 21 LPM Pressure: 5 PSI
LW CWC	Wildcat Burner	Ball Joint	19 ports	Surface	2		Usage 3 LPM Pressure: 2 PSI	Usage: 15 LPM Pressure: 5 PSI
LW CC BP	CC Burner	Ball and Post	#5	(C) Pre-Mix, (O) Surface	4	B		
LW CC BP2	CC Burner	Ball and Post	#5	(C) Pre-Mix, (O) Surface	2	B		
LW CC3 BP	CC Burner	Ball and Post	#3	C) Pre-Mix, (O) Surface	4	B		
LW CC3 BP2	CC Burner	Ball and Post	#3	C) Pre-Mix, (O) Surface	2	B		
LW CC RP	CC Burner	Rack and Pinion	#5	(C) Pre-Mix, (O) Surface	4	B		
LW CCP BP	CC+ Burner Plus	Ball and Post	#3	(C) Pre-Mix, (O) Surface		B		
LW CCP RP	CC+ Burner Plus	Rack and Pinion	#3	(C) Pre-Mix, (O) Surface		B		



Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Carlisle



LW CC RP shown

Carlisle CC Burner - See chart for burner options and item #.

The Carlisle CC, or cannon style burner has a large outer case producing two distinctive flames. The centerfire, a flame characteristic of a single ported tip (similar to Carlisle hand torch) and the surface mixed outer fire. The brass outer shell and post are threaded onto a machined brass body. The fuel gas supply provides four metering valves which are attached to the back of the body. Manufactured from aluminum, the Heat Exchanger dissipates heat from the burner body.



Carlisle CC Plus Burner - See chart for burner options and item #.

The Carlisle CC+ Burner is a larger version of the CC burner. It has an added row of tubes on the outer fire resulting in a larger flame. The standard hose connections on the CC+ are welding hose "B fittings". Manufactured from perforated stainless steel, the Heat Shield protects the user from the heat of the burner body. Some applications with high radiant heat transfer, will find the water cooling option desirable.

Options for the CC Burners

Centerfire: #5 or #3. The #5 tip has the largest orifice of the piloted centerfire tips; this produces more BTU's than the smaller #3 tip. The #3 centerfire tip produces a smaller, more defined flame.

Inlets: 2 or 4. CC's may be configured with a crossover to limit inlets to 2 (a single fuel & oxygen line) or 4 inlets to allow for use with a foot pedal. (page 59)

Mounts: Rack & Pinion or Ball & post. CC's are available on the more economical Ball & Post stand or the Rack & Pinion which allows for a greater range of positioning as well as single handed adjustment.

See below chart for common configurations and item #'s. Configurations not shown may be special ordered.

At A Glance - Carlisle Burners

Item #	Model	Stand Option	Center Fire		# Inlets	Fittings	Full Flame Consumption	
			Fire	Mix			Gas	Oxygen
LW CMCC	Mini CC Burner	Ball Joint	7 ports	Surface	2		Usage: 1.5 LPM Pressure: 2 PSI	Usage: 7 LPM Pressure: 5 PSI
LW CHC	Hellcat Burner	Ball Joint	21 ports	Surface	4		Usage 4.5 LPM Pressure: 2-3 PSI	Usage: 21 LPM Pressure: 5 PSI
LW CWC	Wildcat Burner	Ball Joint	19 ports	Surface	2		Usage 3 LPM Pressure: 2 PSI	Usage: 15 LPM Pressure: 5 PSI
LW CC BP	CC Burner	Ball and Post	#5	(C) Pre-Mix, (O) Surface	4	B		
LW CC BP2	CC Burner	Ball and Post	#5	(C) Pre-Mix, (O) Surface	2	B		
LW CC3 BP	CC Burner	Ball and Post	#3	C) Pre-Mix, (O) Surface	4	B		
LW CC3 BP2	CC Burner	Ball and Post	#3	C) Pre-Mix, (O) Surface	2	B		
LW CC RP	CC Burner	Rack and Pinion	#5	(C) Pre-Mix, (O) Surface	4	B		
LW CCP BP	CC+ Burner Plus	Ball and Post	#3	(C) Pre-Mix, (O) Surface		B		
LW CCP RP	CC+ Burner Plus	Rack and Pinion	#3	(C) Pre-Mix, (O) Surface		B		



Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Bethlehem



Bethlehem torches are equipped with modular valves with precision needles making fuel adjustment smooth and precise. With the low pressure design and reconfigured front face, the artist will experience a flame that combusts at the face of their art work, wrapping their glass in a penetrating heat at a far better fuel ratio. All Bethlehem torches can run propane, natural gas and hydrogen.



LW BTAL - Alpha Glass Bead Burner

The Alpha Glass Bead Burner is a low-pressure, stainless steel starter burner. The Alpha delivers more flow at a low gas pressure producing the ideal glass working flame. The Alpha will melt both soft and borosilicate glass with ease. The torch can also be used at the traditional flame settings of 5 psi gas and 20 psi oxygen. The Alpha Glass Bead Burner Features: All stainless steel construction that stays cool while the flame is super hot. Operate on household gas (1/4 psi) and oxygen concentrator (7 psi). Works equally well with propane or natural gas; also hydrogen for high temperature quartz work. Specifications: Pentagon shape. Dimensions: 5 in. long with a 6 in. base. Net weight: 2-1/2 lbs



LW BTBR - Bravo Bench Burner

The Bravo Bench Burner is a dual-purpose torch - it works with both soft and borosilicate glass. The Bravo's output is surface-mixed and whisper-soft. By varying the atmosphere of the flame, you can use your torch like a fiery paintbrush for shading and highlights. The razor-sharp center is excellent for creating small details. This torch is low-pressure and made of stainless steel. Features: An improved design replacing the popular Barracuda Burner All stainless steel construction. A unique design that allows for a higher volume of fuel at a lower inlet pressure. Operate on household gas (1/4 psi) and oxygen concentrators (7 psi). Works equally well with propane or natural gas; also hydrogen for high temperature quartz work. Dimensions: 6 in. long with a 6 in. base. Net weight: 3-1/2 lbs.



LW BTCH - Champion

The Champion Glass Working Torch - engineered for a low-pressure, high heat performance. The Champion will help lampworkers create large complex pieces without losing the ability to produce intricate details. With the Champion bench burner, artists get the experience of working with a full-capability torch with the hottest and largest outer fire flame, while also maintaining control and precision with a pinpoint center fire. The Champion's stainless steel construction keeps the torch cool to the touch, even at its hottest flame. Also comes standard with a four stud manifold, and reconfigured gas and O2 ports for most efficient fuel combustion. Dimensions: 6-7/8 in. long with an 8 in. base. Net weight: 8-3/4 lbs.



LW BTGR - Grand

The Grand is a stainless steel, surface mix bench burner with three separately controlled rings of fire. Each stage is controlled by two needle valves providing artists with unmatched control over flame size, heat potential and fuel mixture ratios. The Grand produces clean even heat. The torch can easily produce a wide range of flames; from small and gentle for fine detail stringer work, to flames large enough to fully encompass 11 in. + diameter tubing. The torch is mounted on Bethlehem's scroll base positioning arm, an upgrade from the traditional rack-n-pinion gear, enabling smooth torch adjustments that automatically lock in place. The Grand combines the Bethlehem Alpha, Bravo and Champion torches into one easy to use Bench Burner! The three separately controlled stages provide glass artists with unsurpassed control over flame sizes, heat potential and fuel mixture, making the Grand the most versatile and fuel efficient glass working torch. Dimensions: 7-1/2 in. long with a 8 in. square base. Net weight: 9-3/4 lbs.

At A Glance - Bethlehem Torches

Item #	Description	Fire /Jets			Face Dia.	Full Flame Consumption		Works	
		Center	Middle	Outer		Gas	Oxygen	Rod	Tube
LW BTAL	Alpha	6 Jets	-	-	5/8 in. (15.875 mm)	2 PSI; 7 cu. ft./hr. (198 l/hr.)	8 PSI; 27 cu. ft./hr. (765 l/hr.)	5/8 in. (16 mm)	19 mm
LW BTBR	Bravo	6 Jets	-	12 Jets	1 in. (25.4 mm)	2 PSI; 15 cu. ft./hr. (425 l/hr.)	8 PSI; 66 cu. ft./hr. (1867 l/hr)	1 in. (26 mm)	38 mm
LW BTCH	Champion	6 Jets	-	30 Jets	1-1/8 in.	5 PSI; 38.14 cu ft./hr.	20 PSI; 185.83 cu. ft./hr	44 mm	80 mm+
LW BTGR	Grand	6 Jets	12 Jets	24 Jets	1-3/8 in.	5 PSI; 12 lpm (720 lph).	20 PSI; 60 lpm (3,600 lph)	50 mm+	200 mm+

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

TOOLS - Kilns, Torches & Burners

The Little Torch

The Little Torch Kit



Item # LW SLTK

The Smith Little Torch is a small, multi-purpose torch ideal for getting into small spaces with a pinpoint flame. Variable flame lengths are possible by adjusting the oxygen and fuel gas valves on the torch body. Color coded hoses and valve safety features help prevent errors in setup and operation.

Specifications:

Torch body: Aluminum alloy

Weight: 1.5 ounces

Flame Settings and Size: Stable flame up to 6000° F

Fuels: acetylene, hydrogen, propane, propylene, MAPP, or natural gas

Flexibility: commercially used fuel gas and flexible hoses connect to any standard pressure regulator.

Included:

11-1101C torch, size #3, #4, #5, #6, and #7 curved tips, 8' hoses and complete instruction manual. "B" hose connections fuel 9/16"-18-LH, Oxygen 9/16"-18-RH.

Torch Stand - Mini



Adjustable height stand allows you to use your hand torch as a bench burner. Ideal for very small and intricate work

Item #	Height Range	Base Plate
LW TSM	2-1/4 to 6-1/4 in.	3-1/2 in. sq.

Tips for Mini Torches - Hornet



Produce a powerful, fine point flame with these stainless steel Hornet tips. Compatible with Smith or GenTec mini torches. Angle and Artist tip shown only.

ID	Item #	Tip	Opening Size
-	LW HT13	Standard	3 in. x 1.3mm
-	LW HT15	Standard	3 in. x 1.5mm
-	LW HTTEN 13	Standard	10 in. x 1.3mm
-	LW HTTEN 15	Standard	10 in. x 1.5mm
A	LW HT9015	90°	4.25 in. x 1.5mm
B	LW HTA13	Artist	3 in. x 1.3mm
B	LW HTA15	Artist	3 in. x 1.5mm



Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Nortel - Hand Torches and Bench Burners

NORTEL MANUFACTURING Limited All Nortel torches can run propane, natural gas and hydrogen.

Hand Torches - Nortel

LW RANGER - Ranger



The Ranger hand torch is a surface-mix torch. This burner offers all of the features of the Minor Lampworking Torch on a hand torch. The Ranger Hand Torch features precision needle valves to regulate the fuel and oxygen flow. The valve bodies can be rotated to suit the operator.

LW NMUT - UniTorch 6-Tip



The UniTorch features a stainless steel manifold, and nozzle tubes with 6 stainless steel tips. Ideal for lathe work, dewars, fritted discs, round bottoms, ring seals, graded seals, glass to metal seals, and flame cutting. Easily works 40mm quartz or 75mm borosilicate glass standard wall tubing. Weighs 1-1/2 lbs. and is 17 in. overall in length.

LW NRMH - Red Max



Red Max hand-held Torch features stainless steel head. Large concentrated flame, great for Borosilicate.

Bench Burners - Nortel

LW Minor - Minor Bench Burner



The Minor Bench Burner is Nortel's first choice for entry level or small scale lampworking. The Minor puts out a quiet, soft, surface-mixed flame that is ideal for soft-glass lampworking as well as smaller borosilicate sculpture. Surface mix; flame diameter from 1/8 to 3/4 in. Runs on Oxygen and Propane, line pressures; 25 to 5 PSI of Gas, 5 to 15 PSI of Oxygen.

LW MGMR - Mega Minor Burner



Mega Minor Burner The Mega Minor Bench Burner by Nortel is an upgraded version of the ever popular Minor Burner; re-tooled burner jets create a larger and hotter flame. The Mega Minor works soft glass faster, larger, and is more suited for small-scale borosilicate sculpture. Yet can be dialed down to a small precise flame for detail and stringer work. Surface mix; flame diameter from 1/8 in. to 7/8 in. Runs on Oxygen and Propane, line pressures; 25 to 5 PSI of Gas, 5 to 15 PSI of Oxygen.

LW MID - Midrange Bench Burner



For Large soft glass work or borosilicate. Can be fitted with a top-mounted Minor or Mega torch. A larger torch - with a flame up to 1 inch across. Specs.: Natural Gas and Oxygen or Propane and Oxygen (bottled or concentrators - requires 3 concentrators for optimum performance.).

Midrange Plus - See chart for burner options and item #.



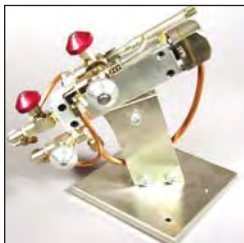
A Mid-Range torch with a Minor burner mounted on top, for extreme versatility. The smaller, top mounted torch has the versatility to still work on small projects without changing out the torch or moving to a new workstation. Both torches can be run simultaneously. Swap back and forth between torches for large projects that require fine detail work with a pin point flame. For production work in soft glass, borosilicate and sculptural work. Minor Specs.: Surface mix, 7 port. Natural Gas and Oxygen or Propane and Oxygen (bottled or concentrator).

Kilns, Torches & Burners

D&L is committed to providing the newest products in a growing industry.

Bench Burners - Nortel

Major Burner - See chart for burner options and item #.



The Major torch is designed with 64 ports and a top mounted minor burner. For preventative maintenance a fine needle tool is included for the tube cleaning. Natural Gas and Oxygen or Propane and Oxygen.

Red Max - See chart for burner options and item #.



The Red Max burner is a 45-port, round torch, configured as a center ring of 16 ports surrounded by a ring of 27 ports. Flame width can be up to 1.25 inches. A top mounted burner can be added (Minor, Mega Minor or a Premix with N11 (11 holes) and N3 tips. Runs on Natural Gas and Oxygen or Propane and Oxygen. Use 3/8 inch or 5/16 inch hoses.

LW NRR - Rocket a/k/a Red Rocket



The Red Rocket is a surface mix torch with independent centerfire controls. Produces a flame diameter from very small to 2 in. Features include stainless steel head and all inner tubes, geared tilt control for precision placement and precision needle valves with smooth control. Runs at 2-6 PSI propane and 7-15 PSI Oxygen.

LW NMM - Mini Milon Bench Burner



Mini Milon Bench Burner was designed for renowned glass artist Milon Townsend, the Mini Milon is a Pre-Mix Burner which uses 7/16 in. threaded, 'National' style tips. Included are tip numbers: 0, 1, 2, 3 & N11. Ball-style mounted stand enables easy up & down and side to side adjustment. Torch uses 1/4 in. hose set with B fittings. Flashback arrestors are required with this Pre-Mix torch.

At A Glance - Nortel Bench Burners

Item #	Description	Type	Top Fire	Flame Dia.
LW RANGER	Ranger	Hand Torch	Surface	3/4 in.
LW NMUT	UniTorch 6 Tip	Hand Torch	Premix	
LW NRMH	Red Max	Hand Torch		
LW MINOR	Minor	Bench Burner	Surface	1/8 in. to 3/4 in.
LW MGMR	Mega Minor	Bench Burner	Surface	1/8 in. to 7/8 in.
LW MID	Midrange	Bench Burner	Surface	1 in.
LW MIDPP	Midrange Plus	Bench Burner	w/Premix Topfire	1 in.
LW MIDPS	Midrange Plus	Bench Burner	w/SurfaceTopfire	1 in.
LW MAJBP	Major Burner	Bench Burner	w/ Block & Premix	1-1/2 in.
LW MAJBS	Major Burner	Bench Burner	w/ Block & Surface	1-1/2 in.
LW MAJP	Major Burner	Bench Burner	w/ Premix Topfire	1-1/2 in.
LW MAJS	Major Burner	Bench Burner	w/Surface Topfire	1-1/2 in.
LW RMAXP	Red Max	Bench Burner	w/Premix Topfire	1-1/4 in.
LW RMAXS	Red Max	Bench Burner	w/Surface Topfire	1-1/4 in.
LW NRR	(Red) Rocket	Bench Burner	Surface	up to 2 in.
LW NMM	Mini Milon	Bench Burner	Premix	

TOOLS - Kilns, Torches & Burners



Kilns, Torches & Burners

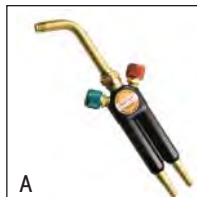
D&L is committed to providing the newest products in a growing industry.

National Torch



National Torch is a specialty manufacturer of heating, brazing, and welding torches. Established in the 1950's, in 1995 Premier Industries purchased and expanded the National Torch, torches, tips and torch accessories line.

Hand-Held Torches & Stand



ID	Item #	Description
A	NT 3AB	3A w/Barbs
B	NT 3BB	3A w/B Fittings
C	NT TS191	Stand for NT 3AB & NT 3BB

Features a specially designed leak-proof "O" ring union permits the tip and elbow assembly to be rotated to any desired angle without the aid of a wrench. These pre-mix hand torch operates efficiently on a variety of fuel gases (city, natural, mixed, propane, butane) with oxygen or compressed air. The torch operates with low pressure fuel gas @ .25 PSIG when air or oxygen is supplied @ 20 PSIG or more. Tips sold separately.

Bench Torch



The NT 6B Torch features a 360° free rotating elbow, which has been made possible by including an O-ring on the elbow ensuring a positive seal. Rotating Leak-Proof Union: A specially designed leak-proof "O" ring union permits the tip and elbow assembly to be rotated to any desired angle without the aid of a wrench. The elbow can still be set to a fixed position simply by torquing down the nut. Tips sold separately.

Item #	NT 6B
--------	-------

Torch Tips - National

NT Series Single Hole



NT OX1



NT OX3



NT OX5

OX Series tips produce sharp, high temperature flames. Very effective for soldering, brazing, etc. on small parts where quick heat is essential.

Pre-Mix Oxy / Gas Tip: Compatible with natural gas, propane, butane, hydrogen & acetylene

Fuel/Oxygen

- Hydrogen/Oxygen (OX-00 thru OX-5 only)
- Oxy/Acetylene (OX-00 thru OX-5 only)
- 7/16-24 (Female) Thd. Connection

Item #	Orifice Size
NT OX1	0.042 in.
NT OX2	0.055 in.
NT OX3	0.070 in.
NT OX4	0.082 in.
NT OX5	0.100 in.
NT OX6/8	0.159 in.

HTC Series



NT HTC0



NT HTC3

The HTC Series tips feature center and smaller orifices than other national torch tips, which allows the HTC series tips to deliver a quieter, tighter burning pattern. Complete: includes elbow nut, O-ring/s & retaining ring

Pre-Mix Oxy / Gas Tip: Compatible with natural gas, propane, butane, hydrogen & acetylene.

- Fuel/Oxygen
- Hydrogen/Oxygen (HTC-0 thru HTC-3 only)-
- Oxy/Acetylene(HTC-0 thru HTC-3 only)
- 7/16-24 (Female) Thd. Connection

Item #	Orifice Size
NT HTC0	Center/0.031 in.
NT HTC1	Center/0.039 in.
NT HTC2	Center/0.045 in.
NT HTC3	Center/0.050 in.
NT HTC4	Center/0.050 in.

HTM Series



NT HTM1



NT HTM2

The HTM Series tips feature multiple orifices. Complete: includes elbow nut, O-ring/s & retaining ring

Pre-Mix Oxy / Gas Tip: Compatible with natural gas, propane, butane, hydrogen & acetylene.

- Fuel/Oxygen
- 7/16-24 (Female) Thd. Connection

Item #	Orifice Size
NT HTM1	Multi/0.040 in. x 9
NT HTM2	Multi/0.048 in. x 9



Kilns, Torches & Burners

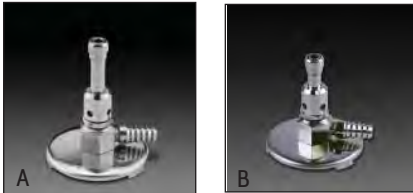
D&L is committed to providing the newest products in a growing industry.

Bunsen Burners

Bunsen Burner - Carlisle

Carlisle Bunsen Burners are manufactured from brass and may be nickel plated. The base is manufactured out of steel. All Carlisle Bunsen Burners come with an integral hose adapter that fits from 1/4 in. to 3/8 in. ID hosing. D&L stocks propane versions only.

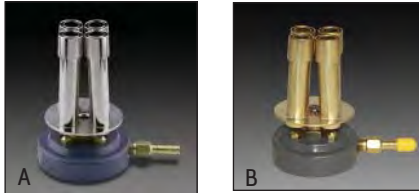
Carlisle #116



This Bunsen Burner (Micro) has an air shutter located at the bottom of the mixing tube. Enhanced by it's stabilizing tip the No. 116 is capable of producing a very small soft flame.

ID	Item #	Size	Height
A	CMW B116T	Tall	3 in. .
B	CMW B116S	Short	2-3/8 in.

Carlisle #122



The No. 122 is a multiple barrel Bunsen Burner. It has four Bunsen Burner heads which are pointed slightly inward towards a common center focus point. This Bunsen Burner is extremely hot and has found it's way into all sorts of warming applications.

ID	Item #	Size	Size
A	CMW B122T	Tall	4-1/2 in.
B	CMW B122S	Short	3-3/4 in.

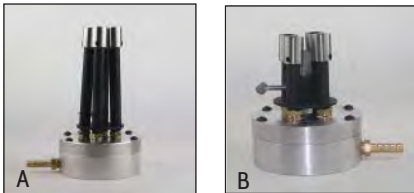
Carlisle #130



The largest of the single head Bunsen Burners the No. 130 comes equipped with a No. 6 heat intensifying head. This head, which is made up of perforated metal, allows for a very stable and broad flame. Constructed with an air shutter at the bottom of the main mixing tube. The air shutter can be opened or closed to control the amount of inspired air necessary for your application.

Item #	Size
CMW B130	8-3/4 in. H. (includes #6 head), base 3-1/2 in. W

Bunsen Burner - Blast Shield



The burner height may be adjusted up for flame modification. A square middle shaft always keeps ports aligned. For easy, secure mounting a large magnet and 2 screw holes are included in the bottom of the burner.

ID	Item #	Description	Size
A	BLS BBT	Tall	5-3/4 in. .
B	BLS BBS	Short	3-3/4 in.

Torch Hose Set



Item #	Size	Description
LW H38BB	3/8 in. x 12-1/2 ft.	brass fittings on each end
LW H14BC	1/4 in. x 12-1/2 ft.	Brass fitting on one end and cut hose w/hose clamp on other
LW H14BB	1/4 in. x 12-1/2 ft.	Brass fittings on each end (Fits the Mega Minor Burner)



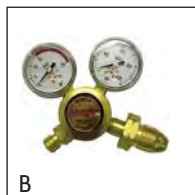
Torch Accessories

D&L is committed to providing the newest products in a growing industry.

Torch Regulators

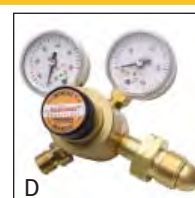
Compact size (1.63 in. dia. x 3.02 in. h). Machined bar stock body eliminates porosity. Cartridge style valve assembly. Built-in overpressure relief valve. Reduced particle contamination with 40 micron stainless steel inlet filter

Torch Regulators - Premier- 25 PSI



ID	Item #	Type	Pressure (psi)	
			Max. Inlet	Outlet Control
A	LW RPO	Oxygen	3500	1-25
B	LW RPP	Fuel	400	1-15

Torch Regulators - National - 50 PSI



ID	Item #	Type	Pressure (psi)	
			Max. Inlet	Outlet Control
C	LW RPOHD	Oxygen	4000	100
D	LW RPPHD	Fuel	400	60

Hose 4-to-2 Kit - Y Splitter

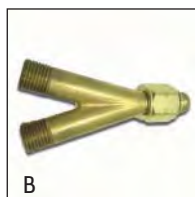


The Four Inlet to Two Inlet Hose Assembly Kit with B Fittings allows for a 4 inlet torch to become a 2 inlet torch. The benefit of a 4 inlet torch is that it can be

connected to a foot pedal. If no foot pedal is being used, this kit is perfect for making it easy to connect to the tanks/regulators.

Item # LW Y42

Y Splitter



Standard "B" Size Fittings

ID	Item #	Description
A	LW YSO	Oxygen
B	LW YSP	Fuel

Quick Connect (Hose-Hose)



Instantly connect or disconnect any torch without turning off the gas supply. Connects in-line (hose-to-hose). NOTE: Regulators and hoses are for North America only.

Item # LW QCHH

Flashback Arrestor Set



Helps prevent reverse gas flow and flashback. An important safety device on larger torches or multiple smaller torches hooked into the same fuel lines.

Connects between regulators and hose. NOTE: Regulators and hoses are for North America only.

Item # LW FAS

Torch Mount Marvers

Graphite Pad Marver

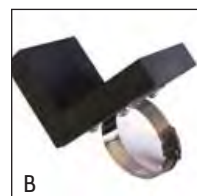
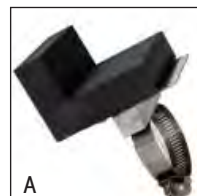


Sits at an angle to the barrel of the torch body, giving you a more level working surface and more clearance around the valve knobs.

Fits the following torches and more: Hot Head, Minor Burner, Mega Minor, Mid Range Plus with Mega Minor top torch, Major Burner with Mega Minor top torch, Alpha, Bravo, Bobcat, Lynx, Cheetah, Phantom, Mirage, Cricket, Bobcat, Scorpion, Sidewinder, Little Dragon 7, Little Dragon 21, Mini CC, Hellcat, and Hellfire.

Item #	Size	Fits Barrel
LW TMHHM	2-1/2 x 3 in.	1-1/4 Dia.

Graphite L-Shaped Marver



Sits at an angle to the barrel of the torch body, giving you a more level working surface and more clearance around the valve knobs.

A - Fits Bethlehem Bravo & Champ torches.
B - Fits Bethlehem Barracuda, Carlisle CC & PM2D.

ID	Item #	Bottom	Back
A	LW TMLBR	3 x 2 in.	1-1/4 in. tall
B	LW TMLCC	3 x 3 in.	2-1/4 in. tall

Graphite L-Shaped Marver



Solid aluminum mount.

A - Fits Bethlehem Bravo torch
B - Fits Bethlehem Champion & Grand torches.

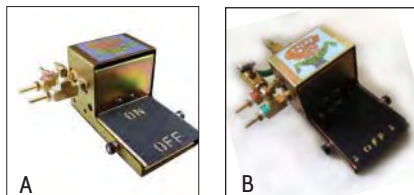
ID	Item #	Bottom	Back
A	LW BSTMLBR	3 x 2 in.	1-1/2 in.
B	LW BSTMLCG	3 x 2-1/2 in	1-1/2 in.

Torch Accessories

D&L is committed to providing the newest products in a growing industry.

TOOLS - Torch Accessories

Rock-It Foot Pedal - Griffin



This non-electric on/off pedal system is designed for constant outer fire usage of one hour or more, with more rapid operations that require quick shut-off. Constructed with top quality, high-volume valves and a durable and professionally engineered stainless steel foot pedal body. A maintain switch will keep the outer fire on until otherwise depressed, and as a safety precaution, the gas lines are located 4 inches from the floor, the base of the foot pedal.

ID	Item #	Description
A	LW GRIP	Standard
B	LW GRIPOX	with Oxygen Bypass

Oxygen Generator

EX Oxygen Generator



Extreme oxygen generators are tailored to the glass industry. Each unit provides a cost effective and convenient alternative to typical glass setups by eliminating

the need for an external oxygen source. 3 year warranty.

These refurbished medical units that have been restored for use in the art glass industry. Small cosmetic blemishes may be present, but performance parts have been fully inspected and/or replaced by Extreme Oxygen.

Item #	Description	PSI/LPM
UNO M20	EX20	20/10

H-1 Oxygen Generator



The H-1 is perfect for running multiple smaller torches and mid-range torches requiring no more than 31.77 SCHF at 20 PSI. Dropship Only.

Item #	Description	PSI/LPI
UNO HURR	H-1	10/15

Spark Lighter



Uses flint to create a spark to light your torch safely.

Caution: Matches or a butane lighter should never be used to light a propane torch.

Item #	LW SPKL
--------	---------

Tools and More!

Silicone Blow Hoses

Light Duty - Silicone Blow Hose



For 1/4 in. Swivels and mouthpieces.

The mouthpieces are nylon, angled, and barbed. Nylon is durable, but will yellow in UV light.

The barbs act as grips

to keep the blowhose where you want it, & the angle encourages the blowhose to hang straight down from your mouth. This is great because it puts less torque on your mouth while hanging, and keeps the blowhose more out of your way. The dark blue is slightly translucent, so you can see any condensation, and more easily see when it needs a cleaning.

Item #	Dia.	Length
LW BHSB	3/16 in.	6 ft.

Heavy Duty - Silicone Blow Hose



For lathe work. This orange silicone hose with barbed nylon mouth-piece allows you to blow into your glass while maintaining the ability to spin it and keep it in your

desired position. The silicone can be boiled clean. Exposing the mouthpiece to sunlight/UV will cause a yellowing discoloration. Mouth-piece is nylon. Swivel sold separately.

Item #	Length
LW BHSO	6 ft.

Mouth Piece - Large



Large mouth piece: Length 1-3/4 in. Small mouth piece length 1-1/2 in. Both fit snugly inside 1/4 in. inner tube diameter. Blowing hole width 1/16 in.

Item #	LW BHML	5-Pack
--------	---------	--------

Blow Hose Assembly



Blow Hose assemblies are used to blow air by mouth into a glass tube, while rotating the tube and applying heat to it. Assembly comes with a 1/4 in. diameter

90° angle swivel, six feet of 5/32 in. I.D. latex tubing and two mouthpieces. Swivel also sold separately. Swivel sold separately.

Item #	Dia.	Length
LW BHA	1/4 in.	6 ft.

Blow Hose Adapter - Silicone



Silicone Blow Hose Adapter measures 3 in. long and fits below mm size handles, as well as 1/4 and 3/8 in. swivels.

ID	Item #	Size	Handle Size
A	LW SA10	10 mm	9.5mm-11mm.
B	LW SA12	12 mm	12.7mm-13mm

Tools and More!

D&L is committed to providing the newest products in a growing industry.

Swivels

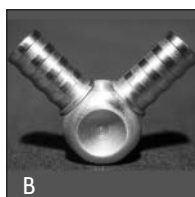
Brass Swivel



For use with blow hose set-ups.
Use with LW BHA

Item #	Size	Degrees
LW BS14	1/4 in.	90°

Stainless Steel Swivels - Firekist



Double sided, lightweight stainless steel swivel used for glassblowing. Made of 304 stainless steel, which is known to be rust resistant, but should avoid contact with chlorine solutions or strong acids. For use with blow hose set-ups.

ID	Item #	Size	Degrees
A	LW FS14180	1/4 in.	180°
B	LW FS1490	1/4 in.	90°
A	LW FS38180	3/8 in.	180°
B	LW FS3890	3/8 in.	90°

Stainless Steel Swivel - Griffin

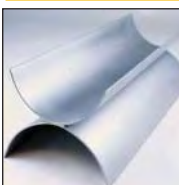


This stainless steel material spins freely and won't bind up or build corrosion.

Item #	Size	Deg.
LW GSS01	1/4 in.	90°

Frit Trays

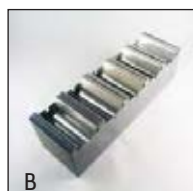
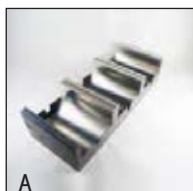
Frit Trays - Double Sided



The double sided frit tray features 2 different widths, 2-1/2 and 3-1/8 in. width.

Item #	Description	Length
LW FTDS	Stainless steel	9 in.

Frit Trays - Griffin



ID	Item #	Description
A	LW GFT3	3 Section
B	LW GFT5	5 Section

Graphite Tape



Provides a heat resistant spacer while working with ground joints. Available in 1 in. or 1/2 in. widths, .40 or .25 mm thickness.

Item #	Size	Length
LW GT1225	1/2 in. x .25mm	5 ft.
LW GT1240	1/2 in. x .40mm	5 ft.
LW GT125	1 in. x .25mm	5 ft.
LW GT140	1 in. x .40mm	5 ft.

Rubber Marble Stand



Black, hard rubber marble stand. Base measures 2x2x2 in. and is 1 in. tall. Accommodates marbles from 1 in. to 3.5 in.

Item #	LW RMS
--------	--------

Ti-Pen Glass Marking Scribe



Ti-Pen™ is the ideal glass signing tool. The Ti-Pen™ tool writes by friction of the metal titanium point leaving behind a metal deposit in a silver color.

Item #	GM TIP
--------	--------

Frit/Powder Scoop



Use this handy scoop to apply frit, powders, or enamels. 6 in. overall length, 2.5 in. at the widest point. Scoop has a flat bottom, so it won't tip.

Item #	FUS FPS
--------	---------



Tools - Safety Equipment

D&L is committed to providing the newest products in a growing industry.

Eyewear

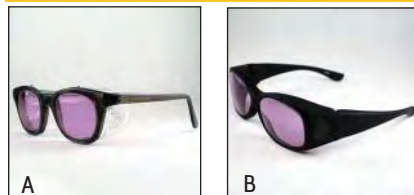
It is essential to protect your eyes from the sodium flare and infra-red radiation that can occur while working glass with a torch.

Suggested protection:

Hard glass (borosilicate/ 33 COE) is a Didymium base coated with a green filter for further ultra violet and infra-red protection.

Soft glass (90-104 COEs) is a Didymium or ACE lens; this provides protection from sodium flare.

Didymium Plus/ACE Glasses



ID	Item #	Description
A	LW GDP	Plastic Frame
B	LW GDFO	Fit-over rubberized nylon Frame

Clip On Green #3 Safety Glasses



For LW GDP, Didymium glasses above. For both borosilicate and kiln firing to reduce Infrared glare. Infrared flip-up polycarbonate shade 3.0 easily clips on and maneuvers to user preference.

Item # LW GCLP3

CHUMS Glasses Holder



Assorted colors

Item # SE CHM

Aura Boro Shades #3



The Aura Boro Shades feature the Aura AGW250 Filter with #3 and #5 Shade. Stock frames are sized for 'average adult'. All Aura frames, lenses and sizes are available by special purchase at D&L.

ID	Item #	Description
A	AV B3LC2	Leader C2 (red)
B	AV B3OG2	OG220 (clear & black)
C	AV B3OG4	OG400 (Tortoise Shell)
D	AV B3SG2	SG200 (Brown Fade)

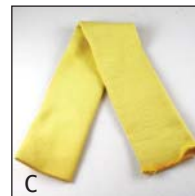
Aura Boro Shades #5



Features the #5 Shade in SG200 brown fade frame.

Item # AV B5SG2

Kevlar Lightweight Gear



Protect yourself while working with these lightweight and flexible kevlar accessories.

ID	Item #	Description
A	SE KVG L	Large Gloves
B	SE KVGF L	Fingerless Large Gloves
C	SE KVS22	Sleeve - 22 in.
D	SE KVST22	Sleeve w/Thumb hole - 22 in.

Zetex Plus Gloves



Length: 14 in. long, rated to 1800° F

Item # FUS ZGPL

Aluminized Sleeve



18 in. (1 each)

Item # FUS AS18

"Carbon X" Heat Pad



The Carbon X, soft twill, material was developed for Nascar racing. Heat Defense Pads are made of 4-Ply carbon X material that can readily withstand temperatures up to 2000°F.

Item #	Size	Temp Tolerance
SE CX12S	12 x 12 in.	2000° F

New tools always getting added!
Visit www.dlartglass.com
to see the latest!

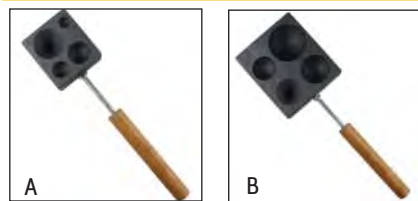


Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Graphite Marble Molds and Paddles

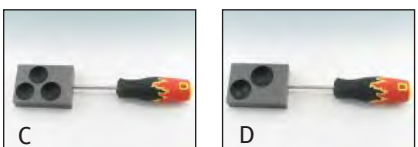
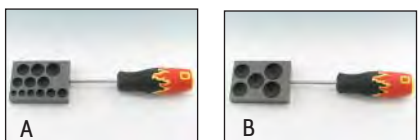
Marble Molds - Blast Shield



Constructed from high density isostatic graphite and complete with a 6 in. robust wooden handle. Four different cavity sizes.

ID	Item #	Size	Cavity Size
A	LW BSMMS	Small	1/2, 3/4, 1, & 1-3/8 in.
B	LW BSMMM	Med.	1-1/4, 1-3/8, 1-1/2, & 2 in.

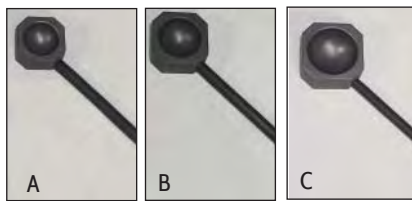
Marble Molds - Graphite



High-grade graphite mold with colorful rubber handle.

ID	Item #	Size	Cavity Size
A	CG MM1	Small	12 Sizes - 8 through 19mm
B	CG MM2	Medium	5 Sizes - 20, 21, 22, 23, & 24mm
C	CG MM3	Large	3 Sizes - 25, 26, & 27mm
D	CG MM4	Jumbo	2 Sizes - 28 & 30mm
E	CG MM5	Mega	2 Sizes - 32 & 34mm

Marble Molds - Graphite



ID	Item #	Cavity Size
A	LW MM114	1-1/4 in.
B	LW MM112	1-1/2 in.
C	LW MM2	2 in.

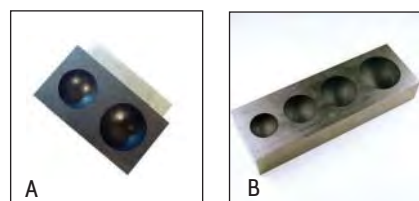
6-in-1 Graphite Marble Paddle



A graphite paddle with six half-spheres. Forms round beads or marbles, three on one side and three on the other. 3/8, 1/2, 5/8, 3/4, 7/8, and 1 in. High temperature resistant handle. LW MM6 shown.

Item #	Sizes
LW MMB6	with mandrel grooves
LW MM6	-

Marble Mold - Bench



High-grade graphite molds.
A - Aluminum bracket attached for bench mounting.
B - Measuring 8-1/2 in. x 2-3/4 in.

ID	Item #	Cavity Sizes
A	LW MM23	2-1/2 & 3 in.
B	LW MMB4	1-1/4, 1-1/2, 1-3/4 & 2 in.

Graphite Paddle - Economy



Use this tool to marver and shape beads. Threaded with a rubber coated handle.

Item #	Size
LW GP1X2	1 x 2 in.
LW GP2X3	2 x 3 x 3/8 in.
LW GP2X4	2 x 4 x 3/8 in.
LW GP3X4	3 x 4 x 3/4 in.

Graphite Paddle - Blast Shield



Constructed from high density isostatic graphite and a strong wooden handle. All edges have been softened to help protect your work, and each side is surface ground. Wooden handles.

Item #	Size
LW BSP23	2 x 3 in.
LW BSP34	3 x 4 in.
LW BSP46	4 x 6 in.

Mini Graphite Paddle - Griffin



The Mini-Ultimate paddle is made of high quality isostatic graphite. Two bevels and one fillet along the three working edges with durable aluminum handle.

Item #	Size
LW MUP	1.5 x 2 in..

Graphite Paddle - Griffin



These paddles have a 6 in. long aluminum handle with a 2 in. wide stainless steel section connecting the handle to the graphite plate.

Item #	Size
LW GP3X5	3 x 5 in.
LW GP4X6	4 x 6 in.

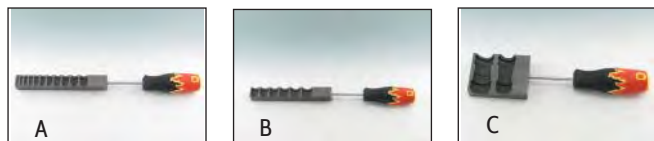


Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Ear Gauge Molds

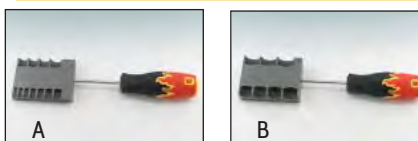
Tunnel Molds - Graphite



High-grade graphite mold with colorful rubber handle.

ID	Item #	Size	Cavity Size (mm)
A	CG EG144	Small	11 Sizes - 3x12, 4x12, 5x12, 6x12, 7x12, 8x12, 9x12, 10x12, 11x12, 12x12, 13x12
B	CG EG145	Medium	6 Sizes - 14x12, 15x12, 16x12, 17x12, 18x12, 19x12.
C	CG EG149	Large	4 Sizes - 20x12, 22x12, 24x12, 26x12.

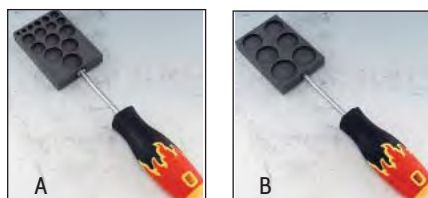
Plug Molds- Graphite



High-grade graphite mold with colorful rubber handle.

ID	Item #	Size	Cavity Size (mm)
A	CG EG147	Small	10 Sizes - 3x12, 4x12, 5x12, 6x12, 7x12, 8x12, 9x12, 10x12, 11x12, 12x12, 13x12.
B	CG EG148	Medium	7 Sizes - 14x12, 15x12, 16x12, 17x12, 18x12, 19x12, 20x12.

Ear Gauge Plug Ends - Graphite



Press the ear plug into a cavity to flare the ends larger.

ID	Item #	Size	Cavity Size (graduate by 1 mm)
A	CG EG163	Small	16 Sizes - 4mm through 19mm
B	CG EG164	Medium	6 Sizes - 20mm through 25mm

Picks

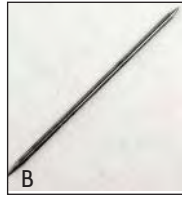
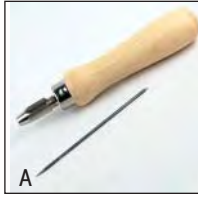
Tungsten Pick with Pin Vise



Used to poke holes in glass, make small bubbles, rake and "drag" glass for feathering, marbling and more. Tungsten is very brittle & will snap rather than bend.

Item #	Size
LW TP332	3/32 in. Dia, 5-1/2 in. L

Tungsten Pick with Pin Vise



ID	Item #	Description
A	LW TP116	Pin Vise & 1/16 in. pick
B	LW T116	1/16 x 6 in. pick
B	LW T332	3/32 x 6 in. pick

Poke - Tungsten



Features a 3-1/2 in. handle and the tungsten tip is 3-3/32 in. long.

Item #	Size
LW TTP332	3/32 in.



Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Shapers

Triangle Shaper - Blast Shield



Graphite

Item # LW BSGTS

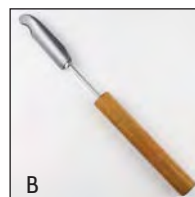
Curve Shaper - Blast Shield



Carve and shape with these tools featuring 3 in. graphite blades and wooden handles.

ID	Item #	Size
A	LW BSCUSS	Small
B	LW BSCUSL	Large

Shaper - Blast Shield



Carve and shape with these tools featuring 3 in. graphite blades and wooden handles.

ID	Item #	Description
A	LW BSBTR	Butter Knife
B	LW BSBUC	Buck Knife

Flares

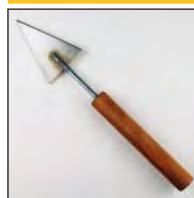
Stainless Flare - Economy



A stainless steel triangular shape wedge mounted in a handle. Used to flare holes, manipulate & shape hot glass. 1 in. blade, 5 in. overall.

Item #	Blade Size
LW FT	1 in.

Stainless Flare - Blast Shield



Carve and shape your glass using these tools which feature 3 in. blades and wooden handles.

Item #	Blade Size
LW BSFS	3 in.

Graphite Flares - Blast Shield



Tapered graphite point flaring tool, with wood handle, is used to enlarging small holes, sculpting and flaring feet.

Item #	Size
LW BSGF12	1/2 in.
LW BSGF14	1/4 in.
LW BSGF316	3/16 in.
LW BSGF38	3/8 in.

Push Tool

Graphite Push - Economy



Push measures 9-3/4 in. length. Features a 2 in. long graphite tip & 5 in. long rubber coated handle.

Item #	Size
LW BP12	1/2 in.
LW BP34	3/4 in.

Graphite Push - Blast Shield

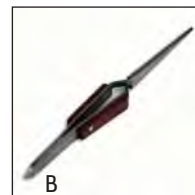


Wooden handle

Item #	Size	Description
LW BSBP12	1/2 in.	-
LW BSBP12T	1/2 in.	w/ Tip
LW BSBP58	5/8 in.	-
LW BSBP58T	5/8 in.	w/ Tip
LW BSBP34	3/4 in.	-
LW BSBP34T	3/4 in.	w/ Tip

Tweezers

Locking Tweezers



Strong cross-locking tweezers hold work securely.

ID	Item #	Description
A	LW LTZC	Curved
B	LW LTZS	Straight

Blunt End Tweezer



Used for shaping, pinching and holding glass

Item #	Size
LW TWZ8	8 in.
LW TWZ12	12 in.

Eye Tweezer



Item #	Size
LW TWZEYE	6.5 in.

Tweezer Set - Fireworks



Three sizes - use with the rubber tips for a secure grip on warm glass. Remove the tips to place frit, create stringers, handle hot glass and more. Fireworks™ brand.

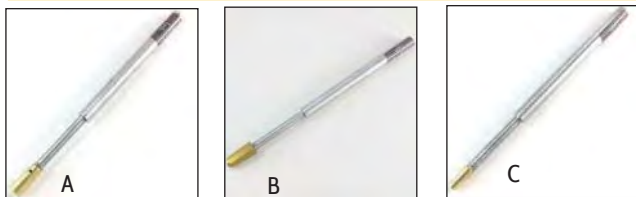
Item #	DTI FW707
--------	-----------

Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Formers / Reamers / Plugs

Aluminum with Brass - Griffin



Tools are composed of an aluminum base, with brass tips

ID	Size	Item #		
		10 mm	14 mm	19 mm
A	Former	GJF 10F	GJF 14F	GJF 19F
B	Reamer	GJF 10R	GJF 14R	GJF 19R
C	Plug	GJF 10P	GJF 14P	GJP 19P

Reamers

Octagonal Reamer - Graphite



For shaping and manipulating hot glass projects. Expand holes in the sides or ends of tubing. Small reamer measures 5 in. long. Large reamer measures 6 in. long.

Item #	Size	Size Range
LW ORS	Small	12-14 mm
LW ORL	Large	10-25 mm

Round Reamer - Graphite



Tapers from 3mm to 15mm (3/16 to 5/8 in.) and is 127mm (5 in.) long. The overall length of 324mm (12-3/4 in.). Round, tapered reamer with a handle. Heat, chemical and flame resistant handle cover.

Item #	Size	Size Range
LW RRS	Small	3-15 mm

Universal Brass - Griffin



Universal brass reamer with 1-10 taper machined to a ± 0.001 in. tolerance. The reamer size range is just smaller than a 10mm fitting to just over 19mm fitting at the widest point.

Item #	GJF UR
--------	--------

Octagonal Reamer - Griffin



These deluxe Menzies Series features high density graphite, hardwood handle and a brass counterweight.

ID	Item #	Description	Size Range
A	LW ORDS	Small	2-15mm
B	LWL ORDL	Large	10-25mm

Short Octagonal Reamer - Griffin



This reamer has the same features as LW ORDS but with a steeper taper for flaring small objects easier. The small pointed graphite tip is more durable due to less thin material.

Item #	Size	Size Range
LW ORDSM	Short/Medium	2-22 mm

Beeswax



Filtered beeswax provides a protective coating to metal tools and helps prevent sticking. Produced by hard-working American Bees! 1 oz. bar.

Item #	Size
LW BW1	1 oz. Bar

Square Reamer - Brass - Griffin



The square shape of this reamer works just like an octagonal reamer. The tip is ideal for pendant loops, small diamond sheared openings and very intricate tube shapes.

Item #	Size	Size Range
LW GBSR	Small	1-14 mm

Ground Joints can be found on pages 43 & 44

Octagonal Reamer - Brass



For shaping and manipulating hot glass projects. Expand holes in the sides or ends of tubing. Small reamer measures 11-1-1/2 in. long. Large reamer measures 11-3/8 in. long.

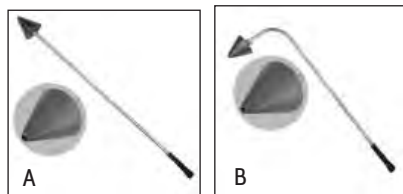
Item #	Size	Size Range
LW ORBS	Small	2-15 mm
LW ORBL	Large	5-20 mm



Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

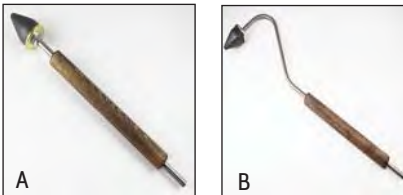
Graphite Puffer - Economy



Puffers are used to inflate or re-inflate hollow forms. Snugly seals to holes ranging from 1/4 - 1-1/2 in. The graphite head is mounted to a special steel tube that allows you to easily bend it to a shape that suits your needs.

ID	Item #	Tube	Length
A	LW GPUS	Straight	18 in.
B	LW GPUB	90° Bend	15 in.

Sophieta Blow Tube - Blast Shield



For reversals and puffing holes. Tapered graphite ends accommodate holes 6 to 25 mm. Brass backing plates protect the graphite ends and the stainless steel tubes have wooden handles.

ID	Item #	Description	Size
A	LW BSSBT	Straight	9-1/2 in.
B	LW BSSBTC	Curved	14 in.

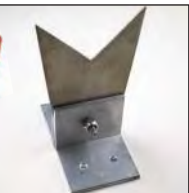
Necking Tool - Graphite - Griffin



Griffin 3 in. Necking Tool is ideal for either blown or solid work. The graphite V-shaped blade is an excellent tool for creating very tight shaping and restrictions.

Item #	Size
LW NTGG	

Bench Mount - Blast Shield

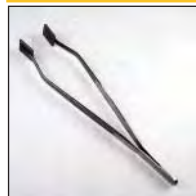


Stainless steel V blade.

Item #	Size
LW BSBSV	

Mashers

Tweezer Mashers



Item #	Size
LW TWM	8 in.

Mini Masher Pliers



Item #	Size
LW MMP	

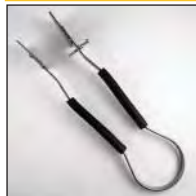
Hand Masher - Graphite



Constructed from high density isostatic graphite and features a sturdy wooden handle to avoid touching hot glass. Level and surface ground.

Item #	Size
LW GHM	5-1/2 x 6 in.

BBQ Masher



12 in. long with rubber handles & 2 in. square mashing surfaces. Adjustable set screw allows plates to close to predetermined thicknesses.

Item #	Size
LW BBQM	

Stump Sucker



Includes hose attachments with in-line filter and mouthpiece. Stump sucker has a 2 1/2 in. height, a total width of 2 in., and the opening measures 1 1/2 in..

Item #	Size
LW STSU	

Angle Leaf Masher Veined



Length 6-3/4 in. (171mm). These mashers aid in making leaves or similar objects with a torch, and save marvering time when producing angular shapes. They require little pressure to achieve the desired shape.

Item #	Impression Dia.
LW ALMV	1-1/8 in. (29mm)

Parallel Masher - Graphite



Super lightweight tool. Features an adjustable stop for exact pressing thicknesses, custom spring action, which allows for mashing with ease, and interchangeable 1-3/4 in. graphite wide heads,

Item #	Size
LW MTP	10 in.

Heavy Duty Masher



Stainless Steel with masher ends measuring 1-1/2 in. length and 1-1/4 in. width.

Item #	Size
LW M9HD	9-1/2 in.

Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Jacks

Magic Mini Jacks - Griffin



Made of hardened stainless steel. Blades dimensions are .5mm at the tip to 12mm at the widest edge. The flare dimension range is from 1mm to 55mm.

Item #	Size
LW J8	8.5 in.

Jacks - Griffin



Tempered stainless steel. The jack blades are 2.75 in long and have a rounded back edge. The tip curves in and comes to a fine point. The blades have been turned 90° from the arms like traditional jacks. The overall length is

arms like traditional jacks. The overall length is

Item #	Size
LW J11	11 in.

Tungsten Jacks - Griffin



Use the outward force of the beveled edge jack blades for opening any 2 in. or smaller tube or encalmo section. Made of hardened stainless steel.

Item #	Size
LW J9T	9 in.

Round Soft Jacks



Lightweight 8 in. 'soft-flex' jacks with round tips that taper from 1/8 in. width to 1/16 in. width. The lightweight handle offers very little resistance to compress.

Item #	Size
LW JSR8	8 in.

Brass Stump Shaper



Item #	Size
LW SSBS	Small

Square Tip Tag - Griffin

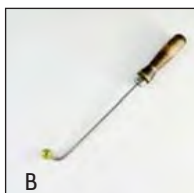
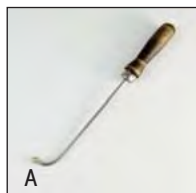


A Hot Shop must have paddle. Use the flat surface anywhere a thing and narrow paddle is needed for sculpting or shaping. All three sides have a sharpened edge that can be used

as a knife blade for carving lines and sculpting details.

Item #	Size
LW SSTT	

Inside Sculpting Tool - Griffin



Griffin inside sculpting tools were modeled after the popular hot shop inside sculpting tools. Simply open a bubble or tube form and spot heat the area to be shaped. Then use this tool to go inside the bubble to push out details in a sculpted object such as eye brows, nose, and cheek bones.

ID	Item #	Size
A	LW IS516	5/16 in.
B	LW IS916	9/16 in.

Sculpting Filet Knife - Brass



Push, carve, and sculpt crisp clean details in any hollow or solid form. Featuring two useful edges, as well as a pointed tip for a great variety of uses.

Item #	Size
LW BFK	

Graphite Sculpting Knife - Griffin



The graphite blade's beveled edge and medium sharp point is the ideal shape for pushing and moving molten glass while creating minimal stress in the glass.

Item #	Size
LW SGK	

Carbon Rods



Item #	Size
LW CR18	1/8 x 12 in.
LW CR14	1/4 x 12 in.
LW CR316	3/16 x 12 in.
LW CR38	3/8 x 12 in.
LW CR12	1/2 x 12 in.
LW CR58	5/8 x 12 in.
LW CR34	3/4 x 12 in.
LW CR1	1 x 12 in.

Carbon Rod Shape Set



Three different carbon rods included; simple cylinder, tapered cylinder & shaved cylinder. All rods measure 4 in. long & 1/4 in. diameter, with the rubber coated handle measuring 3 1/2 in. length. Easily change out the rods.

Item #	Size
LW CRSS	



Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

Shears

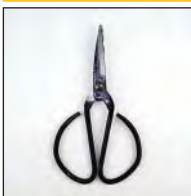
6 in. Diamond Shears - Economy



Features a large V notch in the blades. Close the shears onto hot, pliable glass up to 1 in. diameter to form a square or diamond around the glass. Squeeze the shears closed a little, and the glass uniformly constricts; or close the shears all the way to cut the glass clean.

Item # LW DS6

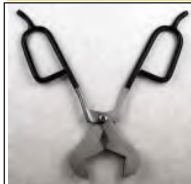
Hot Glass Shears - Economy



Trim the ends of hot glass rods & use for other soft or hot glass applications.

ID	Item #	Blade Size	Size
A	LW SHEARS	2 in.	6 in.
B	LW SHEARSL	2 in.	7-3/4 in.

8 in. Diamond Shears - Griffin



Diamond shears are ideal for making clean, sharp openings with tubes when working with borosilicate and soft glass.

Item # LW DS8

9-1/2 in. Diamond Shears - Griffin

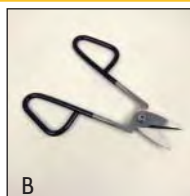
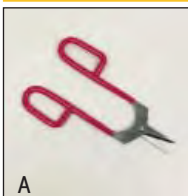


Large V shaped blades. When the shears are closed onto hot, pliable glass, up to 1 in. diameter, they form a square or diamond that uniformly constricts the glass. When closed completely the glass is cut clean.

Blade length is 50 mm and thickness is 5 mm.

Item # LW DS95

8 in. Cup Shears - Griffin



Stainless steel with protective handles.

ID	Item #	Size	Blade Length	Blade Thickness
A	LW CSS	Small	1-1/2 in.	2.5 mm
B	LW CSL	Large	1-1/2 in.	4 mm

Glass Tube Cutter

Glass Tube Cutter - Small



Cast steel construction with rubber coated handles and a carbide cutting wheel. Includes one extra cutting wheel and wheel removal dowel. 6 in. overall length.

Item #	Description
LW JWS	Up to 18mm rod, tube or millies
LW JWW	Replacement Wheel

Glass Tube Cutter - Large



Solid aluminum construction, stainless steel rollers and a carbide cutting wheel. Includes one extra cutting wheel and wheel removal dowel. 8 in. overall length.

Item #	Cutting Description
LW JWL	Up to 80mm tubing by hand or almost any size on lathe.
LW JWW	Replacement Wheel

Silberschnitt Glass Tube Cutter



Nickel-plated with Silberschnitt steel wheel.

Item #	Description
LW GTC	Cuts tubes 40-30mm dia.
LW GTCW	Replacement Wheel

Scoring Knife



Score all types and sizes of glass rod and tubing. Tungsten carbide blade with two edges.

Item # LW SK2



Tools - Shaping, Cutting and Holding

D&L is committed to providing the newest products in a growing industry.

TOOLS - Shaping, Cutting & Holding

Claw Holders

Hot Fingers - Claw Holders



Easily hold various objects while working with them in a flame. A sliding collar closes spring steel "fingers" around the objects. Flared for inside grabbing, and without

flare for holding the outside of the piece.

Small: Ideal for holding buttons and marbles between 3/8 in. and 3/4 in.

Medium: Will hold marbles up to 1-1/2 in. diameter.

Large: Great for 2 in. marbles and small goblets.

X-Large: Can hold objects up to 3 in. diameter.

Item #	Size	Tool Length	Feature
LW HFS	Small	9 in.	No Flare
LW HFM	Medium	10 in.	No Flare
LW HFMF	Medium	10 in.	w/Flare
LW HFL	Large	11 in.	No Flare
LW HFLF	Large	11 in.	w/Flare
LW HFXL	X-Large	22 in.	No Flare

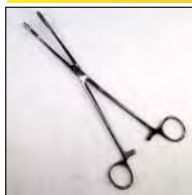
Claw Holders



Claw holder closes and has a set screw to lock. Features a wooden handle.

Item #	Length	Size	Feature
LW CHM	6-1/2 in.	Medium	-
LW CHMF		Medium	w/Flare
LW CHLCW	12 in.	Large	Center Weight

Hemostat - Looped



Use this hemostat to make buttons and small pendants.

Item #	Size
LW HEM9L	9-1/2 in.

Claw Tool - Griffin



Heavy duty holding fingers with an opening range from 2-70mm. The weighted handle is high-temperature powder coated and features a locking slide nut to help

artists eliminate the last punty in the process by holding the object with the claw fingers.

Item #	Size	Tool Length
LW CTS	Standard	13.5 in.
LW CTL	Large	16 in.

Bench Roller

York Roller with Stand



The rollers on this tool allow your glass to slide in and out toward your flame at any angle with a smooth flow. Adjust the ball roller to accommodate the tube size you are using, as well as

the height of the rollers, up to 13 in. The stand features rubber feet and holes in the base so it can be bolted to your workbench.

Item #	Size
LW BSYR	13 in.

Brass Wheel Bench Roller



Lock rollers in place from 6 in. to 12 in. Polished brass wheels, high quality bearings, and a sturdy, stable power-coated trapezoidal base.

Item #	Size
LW GBR	13 in.

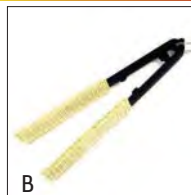
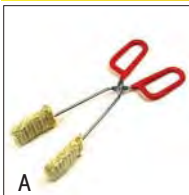
Rod & Tool Rest



Place up to 10 rods and/or tools on the rest. Prevent your tools and glass from rolling around, picking up unwanted debris, and/or burning your work surface.

Item #	Size
LW RR	7-1/2 in.

Finishing Tongs - Griffin

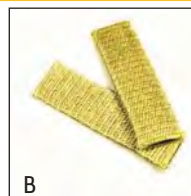
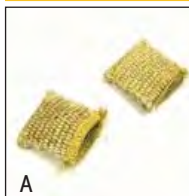


Ideal for finishing pieces and moving hot items around in the kiln.

The woven covers/sleeves are rated for 2,000°F and easily replaced.

ID	Item #	Size	Size
A	LW GFNTS	Small	10 in.
B	LW GFNT	Large	16 in.

Finishing Sleeve - Griffin



These replacement covers slip easily over Griffin finishing tongs. Rated 2000°F

ID	Item #	Description
A	LW GFSS	Small.
B	LW GFLS	Large

Rod Holder



Designed to utilize your smaller pieces of glass without requiring a pontil, and allows the user to put full pressure onto the glass, without a chance of the glass sliding or moving in the holder. Features a wooden handle.

ID	Item #	Size	Rod Size
A	LW BSRHS	Small	0 - 8 mm
B	LW BSRHL	Large	6 mm - 1/2 in.

Bead Tools and Accessories - Soft Glass

D&L is committed to providing the newest products in a growing industry.

Beginner Beadmaking Kit - Fireworks



This kit includes everything needed to get started in lampworking. Includes a Fireworks self-igniting torch head, step-by-step instructions, 10 mandrels, a dual sided

marver plate, rod scrubber, heat resistant 14 in. x 17 in. work surface, bottle holder, bead release, 15 moretti rods and 1 annealing blanket. Great kit for use in classes.

Item # DTI FW632

Bead Starter Kit with HotHead Torch



Kit includes Hot Head Torch, 10 mandrels, a dual sided marver plate, a rod scrubber, a heat resistant 14 in. x 16 in. work surface, a bottle holder for your propane

cannister, a glass rake, a 7 oz. bottle of bead release, 6 assorted 12 in. Moretti rods, 1 oz. millifiori assortment, an annealing blanket and complete, step-by-step instructions.

Item # LW BSK

Self-Lighting Torch (MAPP/ Propane) - Fireworks



Designed exclusively for Fireworks, this unique torch has a self-igniting system for easy use. Special regulator dial at the base of nozzle allows you to adjust airflow for

truer, clearer and more vibrant colors. For use with propane or MAPP gas.

Item # DTI FW701

MAPP Bottle Holder - Fireworks



Clamp a MAPP or propane bottle securely to your table. No slipping or scratching. Fireworks™ brand.

Item # DTI FW704

Mandrels & Bead Rake Set Fireworks



Stainless steel mandrels (1/8 in. diameter) have a low heat transfer to keep your fingers cool when working with a direct open flame. Bead rake may be used to manip-

ulate molten glass (dragging, raking, swirling) and to poke holes or produce air bubbles in glass. Fireworks™ brand.

Item # DTI FW703

Hot-Head Bead Making Torch (MAPP/ Propane)



Developed specifically for the glass beadmaking industry, this torch head introduces more oxygen into the flame to create beautiful glass beads without muddy

colors. This is a single-gas torch, needing only one-pound propane or MAPP gas canisters. No hoses or regulators required.

Item # LW HHT

Mapp Gas Holder w/Work Surface



Securely holds a small propane or MAPP gas bottle off of the edge of your work surface. Adjustable height. Includes a 9 x 18 in. metal work surface which can be fastened to your work table

Item # LW MGH

Heat Resistant Work Surface



Large, 2 piece, 17 x 14 in. textured insulated plated steel work surface. Collapses to 9 in. L x 14-1/8 in. W. Easy assembly, insert sections together and slide protective cover over seam.

Item # Assembled Size

DTI FW705 16-7/8 x 14-1/8 in.

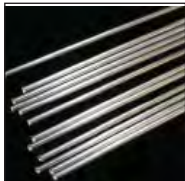
Bead Hole Brush - Fireworks



Spiral brush on wood handle. Push back and forth through the bead hole to remove bead release residue. Fireworks™ brand.

Item # DTI FW724

Mandrels



Stainless steel; three diameters available. Wrap molten glass over these rods (coated with separator) for perfect bead holes.

Item #	Dia.	Length
LW MAN116	1/16 in.	12 in.
LW MAN332	3/32 in.	12 in.
LW MAN18	1/8 in.	12 in.

Bead Rake - Fireworks



The bead rake may be used to manipulate molten glass (dragging, raking, swirling) as well as poking holes or producing air bubbles in glass. Stainless steel with angled end. Fireworks™ brand

Item # DTI FW726 Stainless Steel

Foster Fire Bead Release



Air or flame dry bead release. Regular formula or heavy duty for larger boro beads.

Item #		Size
LW FF4	Regular	4 oz.
LW FF16	Regular	16 oz.
LW FF4HD	Heavy Duty	4 oz.
LW FF16HD	Heavy Duty	16 oz.

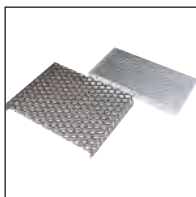


Bead Tools and Accessories – Soft Glass

D&L is committed to providing the newest products in a growing industry.

Marver Plate

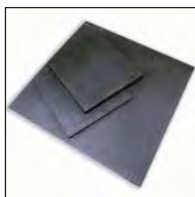
Shaping Marver Set - Fireworks



2 in. x 4 in. metal surfaces for pressing and rolling glass for interesting surface patterns. Roll at different angles for a more unique bead texture. Fireworks™ brand

Item #	Size
DTI FW708	2 x 4 in.

Smooth



Smooth graphite plate for marvering. Flatten the bottom of vessels or silver & gold leaf while rolling hot glass beads over them.

Item #	Size
LW MP6X6	6 x 6 x 1/4 in.
LW MP6612	6 x 6 x 1/2 in.
LW MP1212	12 x 12 x 1/2 in.

Grooved/ Smooth



A combination marver & pattern impresser. One side is a smooth finish, the other side is 12 vertical parallel fins with rounded tops. Rolling the hot glass over the fins produces a linear, grid, or a diamond (pineapple) pattern. Made of solid aluminum

Item #	Size
LW AMP2X4	2-1/8 x 4 x 5/8 in.

D&L carries all COEs in a large variety of colors and coatings!

104 COE, 96 COE
90 COE and 82 COE
See all at
www.dlartglass.com



A

A33 TPAM32.....42

A33 TPAM38.....42

A33 RAM8.....42

A33 RBB8.....42

A33 RBGR8.....42

A33 RBLK8.....42

A33 RBLK12.....42

A33 RBLK 20.....42

A33 RBLK26.....42

A33 RCHM8.....42

A33 REMGR8.....42

A33 RGRY8.....42

A33 RIMGR8.....42

A33 RJGR8.....42

A33 RJW8.....42

A33 RJW26.....42

A33 RLB8.....42

A33 RLGR8.....42

A33 RPAM8.....42

A33 RPI8.....42

A33 RSRD8.....42

A33 RW8.....42

A33 RYL8.....42

A33 TAM9.....42

A33 TAM12.....42

A33 TAM16.....42

A33 TAM25.....42

A33 TAM32.....42

A33 TAM38.....42

A33 TBLK9.....42

A33 TBLK12.....42

A33 TBLK16.....42

A33 TBLK19.....42

A33 TBLK25.....42

A33 TBLK32.....42

A33 TBLK38.....42

A33 TBLK44.....42

A33 TBLU9.....42

A33 TBLU12.....42

A33 TBLU16.....42

A33 TBLU19.....42

A33 TBLU25.....42

A33 TBLU32.....42

A33 TBLU38.....42

A33 TBLU44.....42

A33 TCL26.....42

A33 TCL38.....42

A33 TCL44.....42

A33 TCL50.....42

A33 TGR9.....42

A33 TGR12.....42

A33 TGR16.....42

A33 TGR19.....42

A33 TGR25.....42

A33 TGR32.....42

A33 TGR38.....42

A33 TGRY12.....42

A33 TGRY32.....42

A33 TIGR9.....42

A33 TIGR12.....42

A33 TJW9.....42

A33 TJW12.....42

A33 TJW16.....42

A33 TJW25.....42

A33 TJW32.....42

A33 TJW38.....42

A33 TLGR9.....42

A33 TLGR16.....42

A33 TLGR25.....42

A33 TLGR32.....42

A33 TLGR38.....42

A33 TPAM9.....42

A33 TPAM12.....42

A33 TPAM19.....42

B

BC T01.....19

BC T02.....19

BC T03.....19

BC T04.....19

BLS BBS.....57

BLS BBT.....57

BS BAB.....16

BS BC.....16

BS BRB.....16

BS BSH.....16

BS BW.....16

BS CB.....16

BS CML.....16

BS COL.....16

BS CTN.....16

BS EBL.....16

BS EGG.....16

BS EGY.....16

BS ELG.....16

BSF BSH F.....16

BSF BSH S.....16

BSF BW F.....16

BSF BW S.....16

BSF CB F.....16

BSF CB S.....16

BSF EGG F.....16

BSF EGG S.....16

BSF LMG F.....16

BSF LMG S.....16

BSF LZG F.....16

BSF LZG S.....16

BSF SP F.....16

BSF SP S.....16

BSF TNG F.....16

BSF TNG S.....16

BS IVT.....16

BS LAZ.....16

BS LBST.....16

BS LMG.....16

BS LZG.....16

BS MB.....16

BS MST.....16

BS OZ.....16

BS PBLK.....16

BS PUP.....16

BS SB.....16

BS SP.....16

BS SSH.....16

BS STGY.....16

BS TAW.....16

BS TNG.....16

BS UBSH.....16

BS YLW.....16

C

C3 T01.....30

C3 T02.....30

C3 T03.....30

C3 T04.....30

C3 T06.....30

C3 T07.....30

C3 T18.....30

C3 T19.....30

C3 T20.....30

C3 T21.....30

C3 T22.....30

C3 T26.....30

CG EG144.....63

CG EG145.....63

CG EG147.....63

CG EG148.....63

CG EG149.....63

CG EG163.....63

CG EG164.....63

CG MM1.....62

CG MM2.....62

CG MM3.....62

CG MM4.....62

CG MM5.....62

CMW B116S.....57

CMW B116T.....57

CMW B122S.....57

CMW B122T.....57

CMW B130.....57

D

DAL HRD51.....33

DAL P001.....34

DAL P002.....34

DAL P003.....34

DAL P004.....34

DAL P005.....34

DAL P006.....34

DAL P007.....34

DAL P009.....34

DAL P010.....34

DAL P012.....34

DAL P013.....34

DAL QRD03.....33

DAL QRD14.....33

DAL QRD53.....33

DAL QRD67.....33

DAL TD14.....33

DAL TD15.....33

DAL TD17.....33

DAL TD69.....33

DAL TGDM.....33

DAL TNEM.....33

DAL TSST.....33

DI EX CSS.....32

DI EX RB1 SS.....32

DI EX RB3 SS.....32

DTI FW632.....70

DTI FW701.....70

DTI FW703.....70

DTI FW704.....70

DTI FW705.....70

DTI FW707.....64

DTI FW708.....71

DTI FW724.....70

DTI FW726.....70

E

EVEN FBA.....49

F

FUS AS18.....61

FUS FPS.....60

FUS ZGPL.....61

G

GA 287.....8

GA 380.....8

GA 385.....8

GA 386.....8

GA 441.....8

GA 443.....8

GA 445.....8

GA 446.....8

GA 489.....8

GA 510.....8

GA 511.....8

GA 514.....8

GA 515.....8

GA 516.....8

GA 544.....8

GA 546.....8

GA 548.....8

GA 587.....8

GA 592.....8

GA 773.....8

GA 783.....8

GA 786.....8

GA 788.....8

GA 833.....8

GA 864.....8

GA 974.....8

GA 987.....8

GA 1933.....8

GA 1939.....8

GA 2380.....8

GA 2383.....9

GA 4494.....9

GA 4497.....9

GA 4585.....9

GA 4595.....9

GA 4598.....9

GA 4838.....9

GA 5192.....9

GA 5194.....9

GA 5195.....9

GA 5486.....9

GA 5595.....9

GA 6585.....9

GA 8475.....9

GA 8595.....9

GA 9749.....9

GA 9958.....9

GA 9977.....9

GA 9992.....9

GA 9995.....9

GA F000 M.....10

GA F000 S.....10

GA F287 F.....10

GA F287 L.....10

GA F287 M.....10

GA F287 S.....10

GA F385 F.....10

GA F385 L.....10

GA F385 M.....10

GA F385 S.....10

GA F386 F.....10

GA F386 L.....10

GA F386 M.....10

GA F386 S.....10

GA F441 F.....10

GA F441 L.....10

G

GA F441 M.....10

GA F441 S.....10

GA F446 F.....10

GA F446 L.....10

GA F446 M.....10

GA F446 S.....10

GA F489 F.....10

GA F489 L.....10

GA F489 M.....10

GA F489 S.....10

GA F515 F.....10

GA F515 L.....10

GA F515 M.....10

GA F515 S.....10

GA F544 F.....10

GA F544 L.....10

GA F544 M.....10

GA F544 S.....10

GA F546 F.....10

GA F546 L.....10

GA F546 M.....10

GA F546 S.....10

GA F548 F.....10

GA F548 L.....10

GA F548 M.....10

GA F548 S.....10

GA F587 F.....10

GA F587 L.....10

GA F587 M.....10

GA F587 S.....10

GA F786 F.....10

GA F786 L.....10

GA F786 M.....10

GA F786 S.....10

GA F974 F.....10

GA F974 L.....10

GA F974 M.....10

GA F974 S.....10

GA F987 F.....10

GA F987 L.....10

GA F987 M.....10

GA F987 S.....10

GA F1939 F.....10

GA F1939 L.....10

GA F1939 M.....10

GA F1939 S.....10

GA F2383 F.....10

GA F2383 L.....10

GA F2383 M.....10

GA F2383 S.....10

GA F4494 F.....10

GA F4494 L.....10

GA F4494 M.....10

GA F4494 S.....10

GA F4595 F.....10

GA F4595 L.....10

GA F4595 M.....10

GA F4595 S.....10

GA F4598 F.....10

GA F4598 L.....10

GA F4598 M.....10

GA F4598 S.....10

GA F5192 F.....10

GA F5192 L.....10

GA F5192 M.....10

GA F5192 S.....10

GA F5194 F.....10

GA F5194 L.....10

GA F5194 M.....10

GA F5194 S.....10

G

GA F5195 F.....10

GA F5195 L.....10

GA F5195 M.....10

GA F5195 S.....10

GA F5486 F.....10

GA F5486 L.....10

GA F5486 M.....10

GA F5486 S.....10

GA F6585 F.....10

GA F6585 L.....10

GA F6585 M.....10

GA F6585 S.....10

GA F9749 F.....10

GA F9749 L.....10

GA F9749 M.....10

GA F9749 S.....10

GA F9992 F.....10

GA F9992 L.....10

GA F9992 M.....10

GA F9992 S.....10

GA F9995 F.....10

GA F9995 L.....10

GA F9995 M.....10

GA F9995 S.....10

GG M30.....36

GG M32.....36

GG M33.....36

GG M59.....36

GG M62.....36

GG M88.....36

GG M89.....36

GG M90.....36

GG M91.....36

GG M108.....36

GG M109.....36

GG M113.....36

GG M114.....36

GG M115.....36

GG M117.....36

GG M119.....36

GG M120.....36

GG M121.....36

GG M224.....36

GG QPDXM.....28

GG T01.....21

GG T02.....21

GG T03.....21

GG T04.....21

GG T05.....21

GG T06.....21

GG T07B.....21

GG T09.....21

GG T11.....21

GG T12B.....21

GG T13.....21

GG T15.....21

GG T18.....21

GG T19.....21

GG T20.....21

GG T21.....21

GG T22.....21

GG T23.....21

GG T24.....21

GG T25.....21

GG T26.....21

GG T27.....21

GG T29.....21

GG T30.....21

GG T31.....21

GG T32.....21

GG T33.....21

GG T34.....21

GG T35.....21

GG T37.....21

L

N

75

TG 33 53	12	TG 33 F01C.....	13	TG 33 F21C	13	TG 33 F41C	13	TG 33 T32	13	TG 33 T65	13
TG 33 54	12	TG 33 F01F.....	13	TG 33 F21F.....	13	TG 33 F41F.....	13	TG 33 T33	13	TG 33 T66	13
TG 33 55	12	TG 33 F01M.....	13	TG 33 F21M.....	13	TG 33 F41M.....	13	TG 33 T41.....	13	TG 33 T67	13
TG 33 56	12	TG 33 F02C.....	13	TG 33 F25C.....	13	TG 33 T01.....	13	TG 33 T42.....	13	TG 33 TD17S	13
TG 33 57	12	TG 33 F02F.....	13	TG 33 F25F.....	13	TG 33 T02.....	13	TG 33 T43.....	13	TG 33 TMTP.....	12
TG 33 58	12	TG 33 F02M.....	13	TG 33 F25M.....	13	TG 33 T05	13	TG 33 T45.....	13		
TG 33 59	12	TG 33 F07C.....	13	TG 33 F27C.....	13	TG 33 T06	13	TG 33 T52	13		
TG 33 60.....	12	TG 33 F07F.....	13	TG 33 F27F.....	13	TG 33 T07.....	13	TG 33 T54.....	13		
TG 33 61.....	12	TG 33 F07M.....	13	TG 33 F27M.....	13	TG 33 T17S	13	TG 33 T58.....	13		
TG 33 62.....	12	TG 33 F17.....	13	TG 33 F33C.....	13	TG 33 T17SAT.....	13	TG 33 T59.....	13		
TG 33 63	12	TG 33 F17C.....	13	TG 33 F33F.....	13	TG 33 T17SUB.....	13	TG 33 T60	13		
TG 33 64	12	TG 33 F17M.....	13	TG 33 F33M.....	13	TG 33 T18.....	13	TG 33 T61.....	13		
TG 33 65	12	TG 33 F18C.....	13	TG 33 F39C.....	13	TG 33 T21.....	13	TG 33 T62	13		
TG 33 66	12	TG 33 F18F	13	TG 33 F39F.....	13	TG 33 T25.....	13	TG 33 T63	13		
TG 33 67	12	TG 33 F18M.....	13	TG 33 F39M.....	13	TG 33 T31.....	13	TG 33 T64	13		

U

UNO HURR.....	59
UNO M20.....	59



D&L Art Glass Supply® SERVICE

D&L stocks thousands of products and the best new products are added on a continual basis. D&L employs an outstanding staff of knowledgeable and experienced people ready to assist you with every order. "Quality service from people who care." It's our motto, it's our goal.

PRICES

Non-account holders purchase at manufacturers list prices with some exceptions. For lampworking account holders, D&L offers the following discounts:

• 25% discount on standard boro color rod

Standard Northstar, Glass Alchemy, Trautman, Momka only (excludes non-standard, specialty, small-batch color, and some tubing, which is offered at list prices or a different discount schedule)

• 15% discount on Simax cases

• 30% discount on Schott Boro Artistic cases

• Wholesale pricing on tools and equipment

Not all product lines allow for discounts – but most do!

Many products have deeper discounts based upon bulk purchases. Call or visit our website to see.

All prices and discounts are subject to change without notice.

ORDER MINIMUMS

D&L's minimum order requirements are as follows:

UPS order \$75.00

Walk-in/Pick-up No minimum

Orders below the minimum are subject to an additional charge.

MERCHANDISE OUT OF STOCK

Back orders: D&L keeps a fantastically well-stocked inventory. Occasionally an item you wish to order may be out of stock due to popularity or manufacturer out-of-stock. D&L staff will be happy to suggest substitutions for any out of stock glass. For your convenience, glass, tools and supplies which are temporarily out of stock will be back ordered unless we receive other instructions from you. We will notify you when your back ordered item(s) have arrived, prior to shipping.

SPECIAL ORDERS

We understand that you may require something we are not stocking and we will be happy to help you acquire any item through a special order. A special order may also be placed for regular stock items at greater quantities than we carry or bulk products. When you request special order glass, we will notify you of the expected date of availability based on information from the manufacturer. For a special order tool request, we will inform you of price and expected delivery. When you confirm a special order you are committed to the product and payment in full. Special order items cannot be canceled nor returned for any reason. A nonrefundable deposit up to 100 percent of the order may be required before we can place a special order. We encourage you to get a deposit from your customer(s) as well.

PROTECTING YOUR INFORMATION

When you do business with D&L, you can be assured that we will protect your customer information. We will not sell or share your information with other companies for marketing purposes. D&L values our relationship with you.

CUSTOMER SATISFACTION POLICY

Ordered It Wrong?

Returns are accepted within 15 days of purchase (excluding glass, special orders, books, and discontinued items). If you need to return merchandise you must call your account representative first. You will be instructed to clearly mark the package for return. Returned items must include the D&L invoice, all accessories, the reason for return and the original packaging. You will be responsible for return freight and up to 25% restocking fees.

ALL GLASS SALES ARE FINAL. RETURNS WILL NOT BE PERMITTED FOR GLASS, SPECIAL ORDERS, BOOKS, OR DISCONTINUED ITEMS.

Items Shipped in Error...Call US NOW

If incorrect merchandise or quantities are received from D&L, please allow us to correct the problem. Call your account representative within 10 days of receipt. The D&L invoice is required. Failure to notify D&L will be considered evidence that D&L has satisfactorily performed its obligations.

Defective Merchandise

D&L honors all manufacturers' warranties. If you receive a defective item, call your account representative. Your D&L invoice is required. Your representative will tell you whether to return the item to D&L or directly to the manufacturer. Many manufacturers require items be returned directly to them. Upon verification of

defect, you will receive a replacement, a repaired product or a credit.

D&L will honor only defective material that is backed by manufacturer's warranty and sold by D&L. D&L's sole obligation is limited to repair or replacement of the subject merchandise as provided herein. There shall be no express or implied warranty of merchantability or of fitness for a particular purchase. In no event shall D&L be liable for consequential or incidental damages. No claims for labor or damage will be allowed.

Damaged Merchandise

D&L Art Glass Supply® ensures that all merchandise is in good condition when it leaves our warehouse. We are not responsible for any subsequent damage. If you receive damaged goods, you must accept shipment, note evidence of damage on your delivery receipt and file a damage claim with the freight carrier. D&L will provide information to assist you with your claim.

If you receive a damaged UPS/Fed Ex shipment retain all packaging and call your account representative. If you receive a damaged motor freight delivery, note evidence of damage on your delivery receipt. File a damage claim with the freight carrier. Do not alter the box or contents until the freight carrier has inspected them. Do not dispose of the box, crate or content until the freight carrier has inspected them.

If you refuse any shipment from D&L, you will be liable for the purchase price of the merchandise, storage charges, subsequent freight charges to and from D&L, as well as any additional charges.

SUPPLY SHIPMENTS

Supply orders are shipped via UPS and Fed Ex with additional fees assessed for the following:

Insurance charge

Oversized boxes including:

Simax, Schott or Chinese tubing and rod at full length

Additional handling charge

Shipment send by Truck will be subject to a palletizing charge

Note: All hazardous materials require special packaging and carrier handling fees. Hazardous materials may be shipped via motor freight only. ORMD items are also regulated and may require special packaging and fees. D&L will pack your hazardous and ORMD items as required by federal regulations.

Expedited service is available via UPS or Fed Ex Next-Day Air, Second-Day Air, Three-Day Select for an additional freight charge. UPS and Fed Ex will only guarantee Next-Day delivery weather permitting. When requested, D&L ships via the U.S. Postal Service. Packages are picked up by 9 a.m.

TERMS OF SALE

All sales are subject to the terms and conditions listed on D&L's invoice. Delivery shall be F.O.B. Denver, Colorado, except as otherwise specified on an invoice. Buyer assumes all risk of loss or damage in transit. D&L will use its best effort to make deliveries as scheduled, but delivery dates are approximate only. D&L shall not be liable to Buyer for any damages that Buyer may claim are caused by late delivery.

Credit Cards: MasterCard, VISA and Discover cards are accepted for payment only at the time of purchase. Paypal is not accepted.

This site is protected by Trustwave's Trusted Commerce program.

Wire Transfer: For wire transfers, please call for D&L bank information.

Bad Check Warning: If your check is returned, you will be held liable for a service charge. If your check fails to clear your bank, you could be liable for 3 times the amount of your check, but not less than \$100, plus interest and cost of collection, including reasonable attorney's fees. (Colorado Civil Code 13-21-109). If you learn that your check is to be returned, don't jeopardize your professional relationship, notify D&L's accounting department immediately.

ADDITIONAL TERMS AND CONDITIONS

This site is offered "AS IS." While we do our best to provide accurate and timely information and images, there are no guarantees of the accuracy or completeness of the information provided on the site. If you see information you believe is in error, please contact us so that we may review it.

You use this site at your own risk and assume all responsibility for doing so. You are responsible for keeping your password and account information safe. We reserve the right to cancel your account and deny you access to our site if you violate the site Terms and Conditions. Occasionally, we may make changes to the Terms and Conditions. It is your responsibility to read the site Terms and Conditions from time to time. Your continued use of the site will indicate your agreement to the revised Terms and Conditions.

