

Dichrosilicate Double Sleeve Technique

By Jason Lee

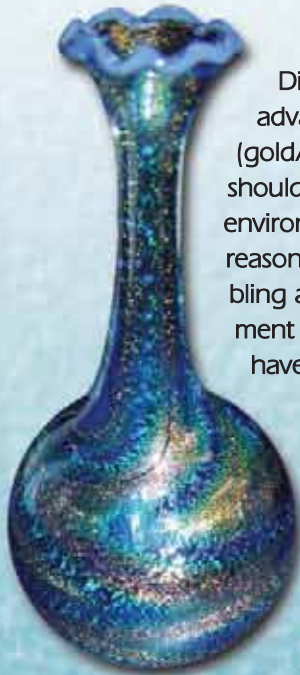
Photos by Mike Eastman

Tools:

sm and large reamers
med paddle
90° marver

Materials:

Dichroic Tubes 3" sections
26 x 1.5 clear tubing 3"
31 x 4.0 clear tubing 3"
12.7 heavy handles
6 mm punty



Dichroic is an expensive and technologically advanced cousin of the metal fumes we all use (gold/silver). All the same cautionary measures should be employed (ie. ventilation, cleanliness and environment of combustion). Ventilation for health reasons, cleanliness for clarity of effect (both dichro bling and clear glass clarity), and flame environment because different temperatures and mixtures have an affect on clarity of dichro bling.

Two main factors contribute to burnout more than any others: 1. Exposure to too high of a peak temperature (white hot glow), although if brief it can be less damaging. 2. Exposure to too long of a duration at lower molten states. This is commonly experienced when trying to baby a piece by working either too reducing or too far from the torch.

Torch tuning should be oxidizing without aggression (hiss) crisp and consistent. Average distance of flame impact should vary from 3'-6" depending on preferred mixture. Never strike the surface of the dichro with an open flame. Always warm in a kiln (preferably for a short duration to avoid over break-up of coating). Scratch and punty to cut pieces or use a saw but never pull points (the coating can't handle it).



Take a 20mm Dichrosilicate tube, cut it down by one of 3 desired methods. a) Score and break, b) Hot rod thermal shock crack off, c) Wet saw with diamond blade (preferred method).



Do the same with clear sleeve 26x1.5 and then stick the dichrosilicate tube inside the clear sleeve.



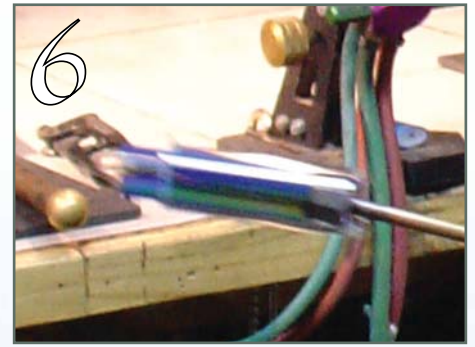
Put them into a cold kiln and heat to 1050°F. Note-do not soak tube for more then 4 hours or dichroic will start to flake!



4
Flare open one end of a 12.7mm tube.



5
Open kiln, take a large reamer and slip the the larger reamer into the dichrosilicate tube, pull it out of the kiln.



6
Allow the clear sleeve to slide down slightly until it sticks to the reamer allowing a little of the dichrosilicate tube to hang out for the blowtube.



7
Attach 12.7 flare to dichrosilicate, holding at an angle to keep sleeve in place. Apply heat on 12.7 flare when welding to minimize dichrosilicate flame exposure.



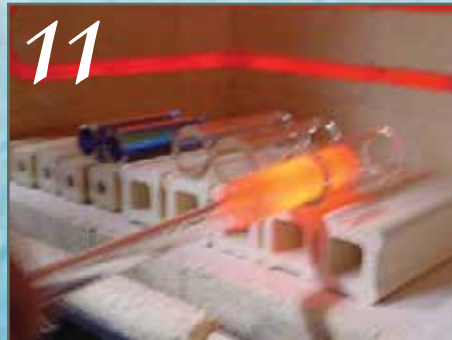
8
Slide clear sleeve into place over whole dichrosilicate tube once 12.7 blowtube has been welded on.



9
Begin wiping close using 7mm punty rod, heat end of tube by heating both rims of dichrosilicate and clear sleeve and wipe close, heating least amount possible.



10
Smash the sleeve on the dichrosilicate tube 1/2" bands at a time with L-marver & hand graphite paddle. A shiny glare is visible until they are completely sealed.



11
Slide 31.7x4 over dichrosilicate then repeat sleeve steps, but now you can use more heat and speed, but still paddle down in 1/2" increments.

Troubleshooting Guide:

1. 1st sleeve has to be gently applied so overheated glass does not touch the dichrocoated tube. 2nd sleeve can be gooey high temp applied once technique is mastered.
2. Keeping dichrosilicate in kiln too long will peel lines off the coating.
3. 1st sleeve should be thin and second sleeve should be thick.

Advantages of Sleeve process over old style of cut strips?

- a) Solid fields of dichroic without seams,
- b) By far faster and structurally stronger,
- c) Due to less work done to dichroic coating, a much better bling effect.

Implications of New double and Triple Sleeveing Concept

- a) Gives dichrosilicate more stretchability and doubles your yields of finished product,
- b) Larger and Larger Vessels and deeper clear magnification which enhances the dichro sparkle to look brighter,
- c) Bypassing all stages of prep work it enables artist to spend time perfecting shape and finished product.

I was able to get this Dichrosilicate tubing from Dichroic Alchemy, who's investment into new ideas are obvious and transforming our industry. Call them 866-434-2476 and let them know that Jason Lee sent you. If any one needs classes I can be e-mailed at glassturbate@hotmail.com.

Thanks, Jason Lee

