

BORO NEWS NEWSLETTER

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Main Article by Robert Mickelsen

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Questions?

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www.northstarglass.com

NORTHSTAR REVIEW

The following are reviews of two videos aimed at enhancing your working knowledge and understanding of the ever increasing world of borosilicate glass and a book showcasing the amazing range of pieces created by artists today.

Dichroic Alchemy: Liberating Creativity in Glass (Volume One): This is a finely crafted intro to Dichroic Alchemy that features a number of artists working dichroic in their own style. The property of the glass to sparkle grabs the attention of the viewer right away, and the montages of beautiful pieces, set against stationary and moving backgrounds, keeps one's attention sharply focused.

With a run down of tools, the location of the flame's sweet spot on a number of different torches, and photography from a number of angles, this film does a great job of introducing the Dichroic Alchemy line of products. Each section is preceded by a listing of the glass and tools used in the demo. The first section on using the images talks the viewer through the process, carefully pointing out how to manipulate the surrounding glass so as not to distort the image. With this basic info safely tucked away, each following section introduces an artist, their specialty, and then

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Powder: Explore the Options

Welcome to the Boro News Newsletter. This month we are focusing on powdered glass and the amazing possibilities with its use. While we have touched on this subject before, the vast potential of their usability demands another look. In this issue we will get insight on the incredible working properties of powder and inventive color techniques from Robert Mickelsen.

PREFACE

One of the most inventive and creative lampworking artists is Robert Mickelsen. With his diverse palette of styles, Mickelsen's work has truly elevated lampworking to a higher art form. Along with his unprecedented artistic design is his creative utilization of frit and powder. We are privileged to receive this informational article about working powder from one of the masters! Pay close attention and be sure to take a look at his website (www.mickelsenstudios.com) for tons of inspiration! For additional information on safely using frit and powder, please refer to our User's Manual and our past newsletters (especially Issue 7 on frit and powder) found at www.northstarglass.com.

USING POWDERS

I have been using powders as a surface application for more than five years now and have learned a lot about how they work and the hazards and pitfalls involved. I believe that powders add a new dimension to color application and that any difficulties or hazards are well worth the risk.

First a word about safety. Powdered glass is a hazardous material. Activities such as dumping the powder onto the powder tray and pouring it back into its container will raise steam-like wisps of powder that are light enough not to respond readily to gravity. Breathing even small quantities of this can lead to serious health problems including silicosis. But powder can be worked with safely. I always handle powders in a "powder box" which is ventilated so that any dust that is raised while handling is kept away from me. I also wear a dust mask when handling powders. I do not wear a mask when working because I have to have my mouth clear to blow, but I consider that to be the least hazardous activity. It is the handling that is dangerous. If you work in a well-ventilated area you should be fine. To keep handling to a minimum, I also keep my powders in low, square Tupperware containers with airtight lids. This saves having to use funnels to pour the powder back into its original bottle.

There are two basic methods for applying powder to the surface of a glass bubble or gather... you either roll the piece in the powder to give it a smooth, even coating, or you sprinkle it on using a sieve or sifter of some sort. Each method yields different results and each color behaves slightly differently. I will describe each method and share with you some of my favorite powdered colors and the effects I can achieve with them.

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LEFT: Crimson Graal Bottle 20" x 4" x 4" 2003, Robert Mickelsen
NS-45 Blue Moon powder graal pattern over NS-65 Cherry, NS-47
Aurora shards over NS-33 Turbo Cobalt powder, NS-65 Cherry
topper, and NS-63 Canary lip-wraps.

simply lets the viewer watch and concentrate solely on the visual process of creating each piece, picking up styles and ideas to apply to their own work.

The upbeat music, glowing glass, varying artists and techniques makes this video a must have for all those who use or want to use dichro.

Using Frit and Powder: The second in the Milon Townsend series entitled *Focus on Flamework*, this video delves into creation, uses, and effects of frit and powder. For those who have never used frit and powder, Milon's careful explanation of their unique working properties opens the door to a whole new world of possibilities.

Milon once again shares his methodical working techniques and reasons behind his choices as he guides the audience through a number of demonstrations. This video is an excellent introduction to the possibilities of frit and powder, offering yet another way to create remarkable borosilicate glass art.

Both videos are currently available through Northstar Glass and various local distributors. Or go to the source:

Focus on Flamework Series

Blue Moon Press,
866-564-4848 or www.thebluemoonpress.com

Glassworks Video Production,
786-293-1987 or www.glassworksmultimedia.com

Liberating Creativity in Glass

Dichroic Alchemy,
866-4-DICHO or
www.dichroicalchemy.com

Formed of Fire: The new book from Bandhu S. Dunham is a well crafted look at selections in contemporary lampworked glass. The introduction serves to educate the reader on the history of lampworking as well as outline the vast range of work being done today. The visual feast that follows features over 70 artists, samples of their work, and often comments from the artists themselves. The plethora of work contained in this beautiful 126 page book will have you eagerly paging through again and again in wonder, amazement, and even inspiration. With a forward by Tina Oldknow, curator of Modern Glass at the Corning Museum of Glass, this is must have for anyone interested in lampworked glass, for it truly is a "feast for the eyes".

The book is available directly from Bandhu S. Dunham at his website www.salusaglassworks.com for \$29.95 plus shipping and handling (or call 800-515-7281) and from other retailers. Check with yours today!



NEW MILON TOWNSEND COLUMN

Over the course of the next couple of months Milon Townsend will be contributing a series of articles to the Boro News Newsletter. These articles are aimed at sharing information, ideas, and advice he has picked up as a flameworker with the next generation of flameworkers. Northstar is proud to host this series and hopes that it comes in handy for everyone from hobbyists to the struggling artist to the advanced flameworker. This first column is a basic introduction from Milon and will be followed by more in-depth columns with illustrations and photographs to help guide the artist.

Northstar Proudly Presents

Elements of Design

Milon Townsend

Young borosilicate flameworkers today are in the interesting position of possessing formidable skills and figuring out what to do with them. Many are moving from one area to another, within the medium, and beginning to design saleable objects and artwork for the first time.

There are some basic components of design that I think will be useful for any artist to have an awareness of, and ultimately master. The most common error that I see is artists incorporating everything that they know how to do in a single piece. Dinah Hulet told me once, "Listen, sugar, just because you *can* do it isn't a good enough reason *to* do it..."

It is much easier to make a complex piece of artwork that is impressive than to make a simple one that is profoundly moving. It takes much more skill and knowledge of the forms that you're working with to be able to use just enough to lead your viewer in the direction you want them to explore. If you can minimize the visual information that you offer, or at least have it hang together comprehensively, you'll have created a work with much greater staying power, with more universal appeal (don't overlook the fact that universally appealing work will generally sell better too).

The key elements of design that affect our field are as follows: line, form/shape, color, surface/texture, space, and proportion. Principles for using these elements include: unity, balance, dominance, repetition, rhythm, contrast, and theme/variation.

I'd like to present a series of brief statements and illustrations of some of the elements and principles of design, as they relate to our world of borosilicate flameworking. My thanks go to Northstar for offering this forum, and my hopes are that this will be of some use to those of us who are in the ongoing process of designing and refining our artwork.

Rolling in the powder will generally give you a smooth, eggshell coating. This is best achieved by first placing a quantity of powder, usually 4oz. or more, into a powder tray. Powder trays are currently being made by a number of manufacturers including Arrow Springs, Wale, and Carlisle Machine Works. But the real application tool is the pile of powder itself. You need to put enough powder into the tray so that you can roll the piece in the pile without hitting bottom. If you do not have enough in the pile you will not get a nice even coating.

To apply the powder, heat your bubble and roll it in the powder turning it in the opposite direction from the way you push. In other words, if you roll the bubble so that it turns like a wheel would in contact with the ground, you are doing it wrong. Turn it the other way so that friction between the bubble and the pile of powder is maximized. Go back and forth taking care not to push the powder out of the tray. The longer you continue this action, the smoother the coating will become. Heat each coat in until it is glassy and smooth before applying the next coating. The more intense colors may require only two or three coatings to achieve a good covering while the less intense colors may require as many as six or seven coatings. Even so, this is a far less expensive and much quicker way to coat a bubble than by coil-casing.

Here are some of my favorite colors to apply in this manner. NS-11 Jade, in spite of its reputation as being less-than-cooperative at times, is one of the most beautiful colors applied as a powder. Only four or five coatings of NS-11 Jade will yield a glassy, eggshell-smooth coat that is wonderful as a background for surface decorations or as a top layer for graal. Avoid using it as an underneath layer though...it may crackle on you. Three coats of NS-45 Blue Moon will give you a wonderful gray-blue coat with tiny speckles and hints of silver. If you apply it in an oxidizing flame, you will get a mirror finish from the silver in the glass. It also makes a wonderful background color and is perfect for graal applications. NS-33 Turbo Cobalt can actually be made to come out in two entirely different colors, depending on if you apply it in an oxidizing (lapis-

blue) or reducing (charcoal-black) flame. Either color makes a good background for surface decorations and is a good contrasting color for graal. Six coats of NS-07 Ruby will give you a translucent red surface. If you want an opacified surface, try coating the bubble first with either NS-54 Star White or NS-41 Butterscotch. The exotics are so amazing used in powder form that I could write an entire essay about just those colors. They should all be applied in an oxidizing flame and then reduced at the end to control the effect. They are all very intense and require no more than two or three coats to get a complete covering. NS-47 Aurora should be applied in the same way, but is not as intense so it takes more coatings to cover well. Like the exotics, you can get interesting surface effects from oil-slick iridescence to silver or copper plating. Sadly, NS-13 Amber Purple powder will not strike purple. In fact, you get essentially the same thing as when you use NS-41 Butterscotch powder so you may as well use NS-41 Butterscotch because you just apply fewer coatings. NS-41 Butterscotch yields a pleasant yellowish-beige that is good for backgrounds or as an opacifier for more translucent colors. It is also good as a light contrasting color for use in graal. NS-52 Teal is very much like NS-11 Jade only without the cracking issues. It gives a beautiful eggshell surface after about five coatings.

And that is only the beginning. There are many more than I can write about in this limited space so I encourage you to experiment. Remember...as a general rule always apply powder in an oxidizing atmosphere. Watch the surface carefully as you melt in each coating and don't get it too hot. If you apply powder in the way I have described, you can achieve lovely surfaces that rival those achieved by soft glass workers.

Many pieces that I make do not warrant smooth pretty surfaces. I have a thing for rough organic surfaces, precisely the sort of thing that glass does not usually do very well. But with powders, such surfaces can be achieved easily and with really exciting results. It only requires a slightly different method of application.

To achieve a rough, organic surface, you use the same powder tray but with a sifter or sieve. I use a spoon-like strainer I bought at a kitchenware store. I will usually case the bubble with a strongly contrasting color such as NS-07 Ruby or NS-33 Turbo Cobalt since the rough surface coating will show some gaps allowing the underneath color to show through. Finish shaping your bubble but do not open it. Working within a ventilated powder box, heat small portions of the bubble and scoop up a couple of tablespoons of powder and sprinkle it through the sifter onto the piece. You might have to tap the sifter with your finger to get the powder to fall through at a reasonable rate. Ideally, you want the powder to stick to the bubble thickly enough so that some of it falls off, leaving little voids and craters. Then return the bubble to the flame. Keep it in the far outer range of the flame and warm it up slowly until the powder starts to glow a little. This will ensure that it does not fall off the bubble in big flakes when you try to melt it in. Once the powder on the surface is glowing, bring the piece in close to the hottest part of the flame and blast the surface as hard as you can without destroying the bubble. Watch what happens to the powder as it starts to melt. It will cling to itself and crawl off the surface in some areas and stick to the surface in others. Repeat until the entire surface is covered. The result will be a really interesting, organic, rough surface with characteristics that will vary from color to color. This technique is wonderful for sculptural pieces where an organic surface is desirable. My favorite colors for this surface technique are the Exotics, especially NS-27 Green Exotic, NS-28 Blue Exotic, NS-41 Butterscotch, NS-45 Blue Moon, and NS-47 Aurora, but I have also gotten interesting results with NS-07 Ruby and NS-33 Turbo Cobalt. Combinations of different colored powders also work well. Again, I encourage experimentation.

So, stay safe and have fun. Powders rule!!!

Robert A. Mickelsen

For more photos of work with powder turn to the back page. And keep your eyes peeled for more powder pieces in next month's Boro News Newsletter.



Robert Mickelsen Pieces

ABOVE: "Cocoon Series Emergence" 14" x 20" x 7" 2002
NS-47 Aurora powder over NS-11 Jade, NS-05 Orange/NS-09 Yellow tentacles,
silver fuming over NS-16 Black figure.

ABOVE LEFT: "Bruja" 16" x 20" x 9" 2002
NS-28 Blue Exotic powder over NS-33 Turbo Cobalt, NS-01 Cobalt tentacles,
silver-fumed figure.

BELOW: "Beach Bowl and Seashell Stand" 14" x 12" x 12" 2002
NS-07 Ruby, NS-41 Butterscotch, NS-33 Turbo Cobalt, and NS-52 Teal powders
with NS-28 Blue Exotic frit and trailing and NS-07 Ruby frit.

RIGHT: Powder Piece by Darby Holm utilizing NS-01 Cobalt, NS-53 Forest Green, NS-63 Canary, NS-64 Lava, and NS-65 Cherry powders on the inside with NS-28 Blue Exotic on the outside. The webbing effect was created by sandblasting the piece. Stands 9.75" x 3" x 3"

Darby Holm was born in 1972 in southern Oregon. His younger brother taught him the basics of blowing glass in April of 1996 and they worked together for the next couple of years.

Darby moved to Grants Pass and started D.C. Glasswerx. He currently works in his private studio with two other lampworkers.

Darby works on a Delta Elite, a Phantom on his lathe, and uses Aim kilns. Future projects include larger scale wall sculptures and large vases and vessels (larger than average boro sizes).

He is teaching classes for intermediate to advanced lampworkers and working on a line of his personal favorite tools- D.C. Tools. So there is a little of his past, a little of his future and as for the present he enjoys kids. He also plans on continuing to feed his endless addiction for molten glass.



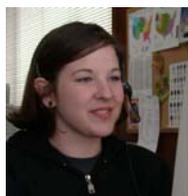
Insight into Northstar

Here at Northstar Glassworks we don't just manufacture glass, we create color. Colors to expand the borosilicate color palette require not only technical expertise but the insight that can only come from those who use the glass, the flameworkers. Our in-house staff includes four individuals who use their skills as flameworkers to create, test, and use new colors.

Meet Brian, Zara, Sanjaya, and James (from left to right in photo). These four flameworkers are each involved in different stages of the 'creation of a new color' process. Join us for a look at the creation of new colors, and more specifically, NS-80 Hyacinth.



Stage 1



Zara is one of our customer service representatives whose contact with the public often leads to the identification of gaps in the color palette. Requests, pleas, and even the occasional attempted bribe to create a specific color are all fielded by Zara. The repeated requests for a color between NS-55 Periwinkle and NS-57 Midnight and the requests for a purple were relayed by Zara to Sanjaya, our production manager. The fact that NS-55 Periwinkle and NS-57 Midnight were the closest we had to a purple inspired the goal to kill two birds with one stone.

Stage 2

Sanjaya took the suggestions under advisement and began to work on the new formula. With an experimental formula in hand, Sanjaya went to our batcher Lucas to begin the process of actually making the glass. As soon as the glass batching was underway, Sanjaya let James know.



Stage 3



James, our logistics manager, worked the test batch into the production schedule making sure he juggled our experienced team of workers in a way to allow Brian, one of the trainers, the time to help James. Experimental colors are usually chilled and pulled by James and Brian, allowing them to note characteristics of the new glass along the way so that any issues can be fixed for the next pull.

Stage 4

When the color is chilled and ready to test, the glass is brought up to the front office for visual inspection. The excitement of a new color draws everyone into a huddle to examine the rod. No matter what the glass looks like, Brian, James, Sanjaya, and Zara all take their turn at testing the experimental glass. The results can be dead on, surprising, or even frustrating. These experimental colors eventually lead to permanent additions to the Northstar Borocolour® palette, but the test batches are either kept for open house sales or sold to distributors. Colors that are not usable (cracking, COE issues, too many inclusions, etc.) are simply thrown away to ensure quality product is the only thing that makes it into the mainstream. NS-80 Hyacinth was a great triumph in creating a faux purple, and the test batches that weren't quite the right color were kept for sale at the open house.



Obviously the creation of a new color is more complicated than what we talk about here, but the basic system applies to each color. This dedicated group of artists put their effort into not just making the glass, but making the colored glass right.

As mentioned before, the glass that comes about from the experimental batches is often perfectly usable glass; it just isn't quite the color we were aiming for. These variations in color come from attempts to make new colors (Titan is an offshoot of the attempt to make NS-80 Hyacinth) or attempts to improve workability of current Northstar colors (Aztec Yellow and Rising Sun are offshoots of NS-63 Canary and NS-64 Lava). Anything we sell at the Northstar Social (see ad on back) has been tested to ensure it doesn't have COE problems and to identify the best uses for specific colors. At the moment we have twelve colors with more on the way. Our intrepid group has done some pre-testing for you and the results can be seen below:



LEFT: James made both of the reversal balls. The first showcases Aztec Yellow and Rising Sun. These colors work like regular cadmiums, but a bit smoother and less boily.



RIGHT: Titan and Tobasco both work well inside. Work Tobasco like a cadmium color.

RIGHT: Sanjaya made the fairy figure out of Gray Caramel, using Aztec Yellow and Rising Sun for the flames. Brian made the flower using Purple Sunset, Light Turbo, and some dichro. Zara made the stem out of Seafoam and Light Turbo.



Keeping an open mind

Here at Northstar, we endeavor to provide an excellent product to individuals exploring the workings of colored borosilicate glass. Feedback from individuals has sparked many changes. It has led to planned growth in color selection and improved working capabilities of the glass. Questions led us to see the need for a newsletter to provide basic information on working properties of colors and techniques to help you get the best out of your color. This simple step has blossomed, creating a great way to stimulate discussion and inspire new pieces and colors. This line of communication opened up new possibilities for promotion not only for Northstar, but for the artists. We like to promote resources such as books, videos, websites, etc., to assist the artist in their quest to master the challenges of borosilicate glass.

Your feedback definitely plays a role in Northstar continuing to be a truly effective player in the world of colored borosilicate glass. Recently, a number of entities who had not taken advantage of the full range of the Northstar color palette returned to effectively utilizing our colors. They found that by keeping an open mind and utilizing all the borosilicate glass at their disposal, their work, and ultimately the whole world of colored borosilicate glass art, was the better for it. Their willingness to keep an open mind led to feedback that helped us better serve the customer. By trying new colors and new techniques, together we can continue to expand the amazing possibilities of colored borosilicate. Share this newsletter. Expand your horizons. Remember, Northstar doesn't just manufacture glass; we are artists who create color for your use and our own.



What will be available at the **NORTHSTAR SOCIAL?** (aka the Open House)

\$20/lb – Quality experimental and one-time custom designed colors of mixed first and odd quality. It has all been tested by our in-house artists for usability!

\$5/10 – Standard Frits and Powders in 1 lb bottles

\$10 – Northstar T-shirts

\$8 – Northstar beanie caps

\$20 – Formed of Flame, the new Bandhu S. Dunham book

Dichroic Alchemy: Liberating Creativity in Glass Video

Milon Townsend Focus on Framework series, Volume 2 (Frit and Powder)

Essential Lampworking with Freeman Corbin

Saturday, June 21st

10AM to 3PM

at Northstar

Glassworks

Call for directions

866-684-6986

