



Northstar Glassworks, Inc.

Boro News Newsletter

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The Blues

Introduction

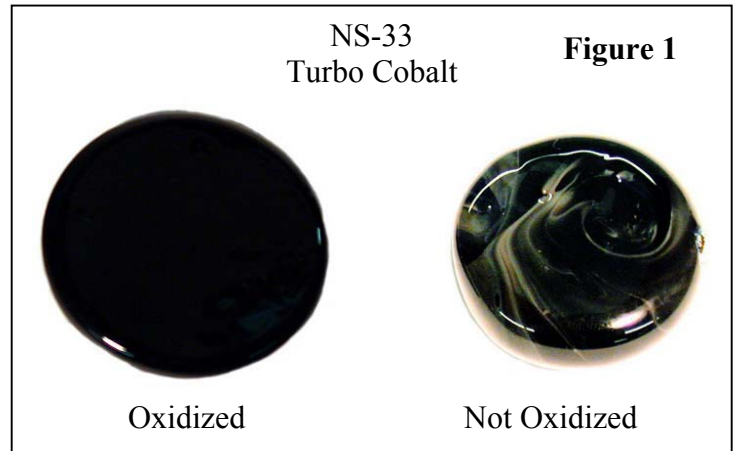
Welcome back to the Boro News Newsletter. We have a lot in store for you! In this issue we are going to explore some of the fundamental colors of the palette, the cobalt blues. Some of the first colors ever attempted in borosilicate glass were cobalt blues. By adding varying amounts of cobalt to glass an entire array of exciting blues, faux blacks and grays can be achieved. Northstar offers four different intensities of cobalt blue; NS-01 Cobalt, NS-19 Light Cobalt, NS-20 Dark Cobalt, and NS-33 Turbo Cobalt. To fully utilize these colors there are some basic working techniques that one should know. In addition to the fundamental working techniques we will explore some of the many applications for these colors, including applications for which they are well suited.

When designing a piece of art one must select the colors carefully to achieve the desired effect. One must keep in mind what type of flame the color will be exposed to, how long the piece will be worked, and the final thickness of the color. Each of the cobalt blues in the Northstar family has a unique application and is designed for a certain range of possibilities.

General Properties

With any cobalt blue, the higher chemically saturated the glass is, the darker it becomes and the more easily it is reduced. If too much chemical is added, the coefficient of expansion changes and it becomes unworkable. With the Northstar family the two lighter cobalt blues, NS-01 Cobalt and NS-19 Light Cobalt, are not affected by flame atmosphere. The darker two, NS-20 Dark Cobalt and NS-33 Turbo Cobalt, are affected by a reductive atmosphere. NS-20 Dark Cobalt can be worked in a neutral to oxidizing flame without the color changing. If worked in a heavily reductive flame there will be hints of graying

on the surface. This will make it appear to have a dull matte finish or film that clouds the glass. For NS-33 Turbo Cobalt, working in a heavily oxidizing flame is crucial to maintain the original color of the rod; a deep faux black. If worked in a neutral to reducing flame there will be streaks of gray that form on the surface. **See Fig. 1 below**



Application

As noted above, each color in the family has a unique application. In this section we will go color by color and give some specific application tips to help you in your color selection. An excellent way to test which cobalt is right for a specific job is to encase a tube with the cobalt, and then blow a thin bubble. By noting the thickness of the bubble one can observe the intensity of the color. With this information, one can then select the specific cobalt to yield the right blue for the job.

NS-01 Cobalt, ideal for all applications, is great for sculptural work and is intense enough to be blown relatively thin. It is a smooth clean color without bubbles or inclusions. It is also good for bit applications.

NS-19 Light Cobalt is the ultimate color for overlays. By casing opaque or striking colors with NS-19 Light Cobalt, a myriad of exciting new color variations can be produced. Take a look back at our newsletters at www.northstarglass.com and you will see some examples. My personal favorite is NS-19 Light Cobalt over NS-45 Blue Moon!

NS-20 Dark Cobalt is the ideal blue for thin blown work where a clean transparent deep blue is desired. It is also an excellent option for twist cane, where a medium blue is needed. Because of NS-20 Dark Cobalt's intensity it is a candidate for encasement with transparent colors. NS-09 Yellow over NS-20 Dark Cobalt is an excellent combination. In addition, try layering NS-13 Amber/Purple over NS-20 Dark Cobalt for some exciting effects. NS-20 Dark Cobalt also produces a wonderful effect when it is striped over NS-26 Double Amber/Purple. Try it!

NS-33 Turbo Cobalt, the most intense in the Northstar palette, is so intense that even when thinned it is a prime choice as a faux black (**See Fig. 2**). This color is ideal for stringer application and can be stretched extremely far without losing brilliance. If you are ever in a pinch for lighter cobalt, take some NS-33 Turbo Cobalt add some clear and dilute it.

Closing

We hope you are enjoying the newsletter and that it may inspire new artwork and exciting new possibilities. Here at Northstar we continue to work on the development of new colors and products to inspire the lampworker. We are happy to provide technical assistance and make an effort to educate the art community. Stay tuned for a future issue where we will explore dichroic glass and color.

Take care, Jesse!

Figure 2



Video Review

Essential Lampworking with Freeman Corbin

You have your torch all set up. You've got the basics down. So now what do you do? Watch *Essential Lampworking with Freeman Corbin*. This 150 minute film on lampworking covers a variety of techniques in a step by step demonstration. The clear photography, careful narration, and inserted diagrams make this an easy to follow instructional video for those with a basic knowledge of lampworking. This is a video that should be viewed in its entirety once, and then re-watched in sections depending on what technique one desires to focus on.

The Breakdown

The video opens with a number of interviews with lampworkers about what got them started, what keeps them going, and the important aspects of the emerging art form of lampworking with borosilicate glass. The interviews segue seamlessly into a brief overview of safety, set-up, and tools. This is a nice reminder for all on the characteristics of a safe shop set-up.

Actual lampworking demonstration begins with some basic key techniques required to successfully implement the more complex glass techniques demonstrated in the video. The importance of these techniques is highly emphasized, not only for their use in the film, but for their importance in any lampworking creation. Creating stringers, pulling a point, and tearing (removing unwanted glass) are carefully demonstrated on film, with inserted diagrams providing additional explanative support.

Now comes the part everyone is really interested in; how to apply the basic skills to create more complex patterns and pieces. These sections cover latticinos, ribbons, marbles, opposing spirals, reversals, sectional welding, tube work, fuming wraps, jars, vases, and even sculpture. Each section is carefully introduced, explained, and demonstrated from beginning to end. Freeman Corbin makes great use of the video by showing steps in fast forward to keep the pace of the video moving. Steps that are repeated between techniques are always noted, but either not shown or shown in fast forward while narration fills up any possible dead air.

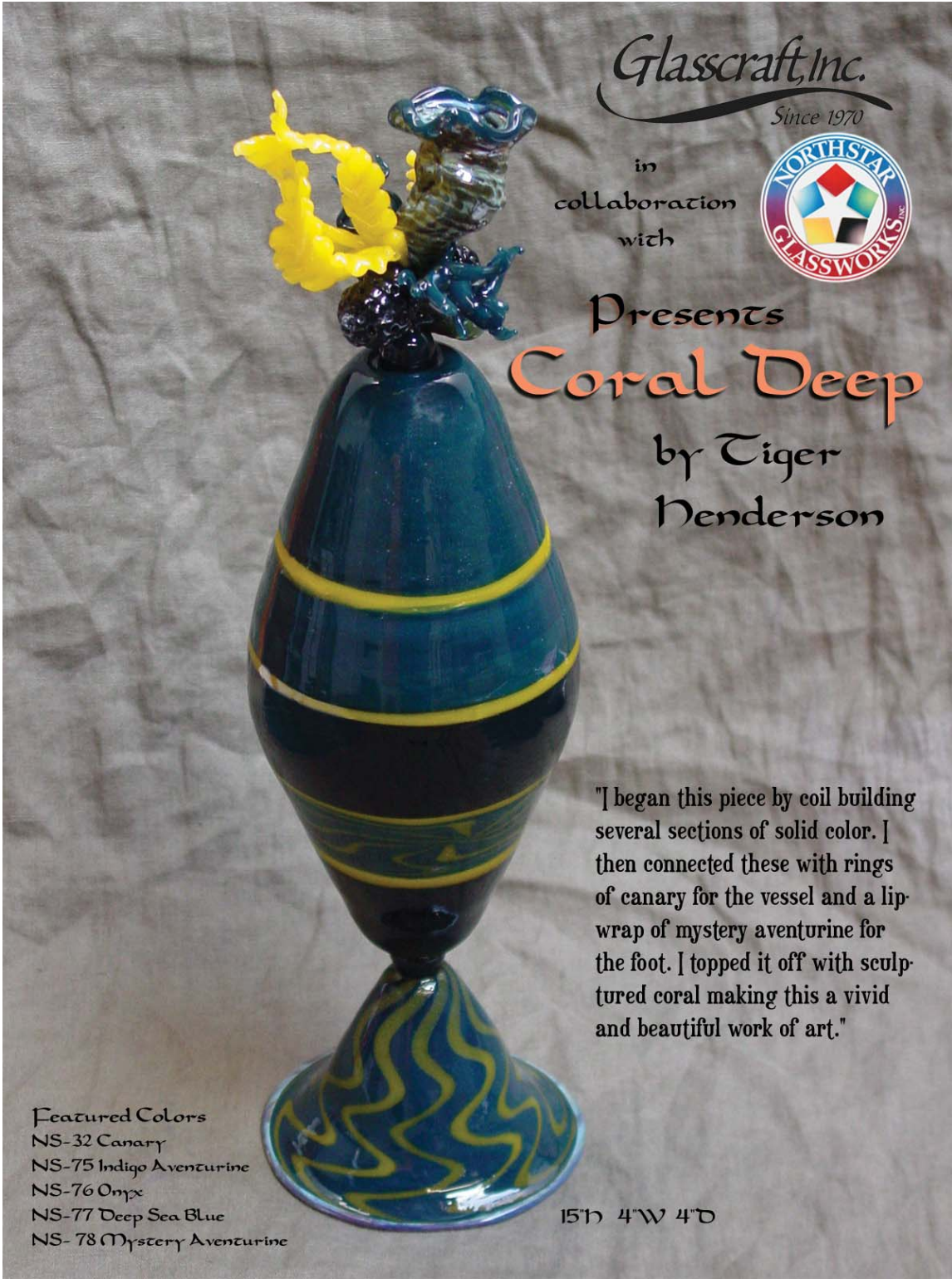
Overall, this is a great functional video for those who have a basic knowledge of lampworking. The techniques are carefully explained and shown in their entirety. Well narrated, clearly photographed and briskly paced, *Essential Lampworking* is a video that you will go back to again and again to improve your skills and expand your techniques. The video will soon be available at retail outlets, but at the moment, can be ordered from Northstar Glassworks for only \$29.95.



There is no better time than the holiday season to express our appreciation for you business and friendship. To that end, we thank you.

All the best,

The Gang at Northstar Glassworks



Glasscraft, Inc.
Since 1970

in
collaboration
with



Presents
Coral Deep
by Tiger
Henderson

"I began this piece by coil building several sections of solid color. I then connected these with rings of canary for the vessel and a lip-wrap of mystery aventurine for the foot. I topped it off with sculpted coral making this a vivid and beautiful work of art."

- Featured Colors
NS-32 Canary
NS-75 Indigo Aventurine
NS-76 Opax
NS-77 Deep Sea Blue
NS-78 Mystery Aventurine

15" H 4" W 4" D