

The Eugene Glass School's Project 33 2004

photographed by Scott Douglas & George Filgate

We are speaking with Marcel Braun about Project 33 at Eugene Glass School.

What is Project 33?

Project 33 is an ongoing program designed to demonstrate the capabilities of borosilicate glass as an artists' medium and provide an opportunity for artists to work with emerging technologies. The project goal is to research, fund and maintain a fully functional large scale boro shop at the Eugene Glass School. This year the school is investing in the incubator: a 36"x36"x84" tall bell kiln which is already available for rental to qualified renters. As the project matures and demand for these type of facilities increases, we will add a furnace and glory hole optimized for borosilicate work.

The Project session itself is a twelve day gathering of the most talented glassworkers available to push the limits of sanity with nearly unlimited supplies and cutting edge equipment. The goal is to create pieces for sale at the Eugene Glass School's annual auction and continue to fund 33 COE improvements at the Eugene Glass School.

Where did the name "Project 33" come from?

Project 33 refers to the coefficient of expansion of borosilicate glass which is approximately 33 times ten to the power of negative seven. Corning publishes the COE of 7740 (Pyrex) as 32.7 and I believe Northstar Glassworks markets their glass as 33 COE. I felt that Project 33 was a nice way to say project borosilicate.

How do you fund Project 33?

Project 33 is funded through donations of material and cash by far-sighted industry leaders.

Donors include (in order by contribution): Northstar Glassworks, AIM Manufacturing, Glass Alchemy Limited, Winship Designs, Coatings by Sandberg, Studio D Videoworks, Flow Magazine, Glass Torch Technology, Eugene Glass Alliance, Dichroic Alchemy, Generations Glass, Carlisle Machine Works, Glasscraft, Digity and Living Glass Works. All together we gathered over 16,000.00 worth of services, materials, and cash. These donations just cover the hard costs of the project which is an absolute requirement. When we sell the Project 33 work at our auction the proceeds will go towards the purchase of the Incubator (the monster kiln) and other renovations that will help to make a boro hot shop at the Eugene Glass School a reality. Donations to Project 33 are truly an invest-

ment in researching and developing studio technology while making it directly available to the artistic community.

What kind of energy and resources like gas, glass and manpower were used in Project 33?

Many people don't realize how physically large and demanding things like the incubator (the large kiln) can be. At twelve feet tall and over 2500 pounds, simply moving it or plugging it in are much more difficult than one would think at first glance. It cost nearly \$2,000.00 just to bring the 150 Amp Electrical service to the Kiln! I brought in 3 full pickup loads of my own and borrowed equipment including Draco: my boro glory hole, and a couple of brand new Living Glass Works kilns.

Our sponsors came up with huge amounts of supplies. Northstar and Glass Alchemy contributed over 100 pounds of color cane and powder, Coatings by Sandberg provided several sheets of dichroic glass as well as extensive custom coating of sculptural elements, and Winship contributed over 600 pounds of clear stock. When it was all over we had actually melted over three quarters of the total glass supplies.

Energy costs were also a major factor. We burned 700 gallons of propane and seven large liquid oxygen cylinders. I'm sure we spent hundreds on electricity as well.

The time involved is probably the most impressive statistic. Our production goals were so demanding that we worked 10 to 12 hour days all the way through a record setting heat wave in Eugene. At an average of ten hours per day that makes 1,440 person



hours that went into actual glasswork! If you add in planning, set up, finishing and tear down the total work approaches an even 2,000 hours. I was amazed and inspired by how dedicated the crew was to making sure we were successful.

Other in kind donations include videography (Studio D), graphic design (Flow, Eugene Glass Alliance) and advertising (Flow).

Who participated in Project 33 2004? How did they contribute?

The official Project 33 2004 roster is as follows: Hamm Brushland, Mike Conrad, Eric Edner, Cary Hollenberg, Charlie Lowry, Josh Powell, Julie Riggs, Jared Sandifer, John Vinson and Marcel Braun. Unofficially, I've added Deveron Musgrave, Joshua Carter and Craig Hamilton for their invaluable help finishing up after everyone else had to return to their busy lives. I'd also like to specifically thank Tracy Doyle, Matt Mosher, and Brent Baker for pulling a couple of all nighters to get the facility ready for us in time. Everyone on this list, and several people who are not, busted their tails like their lives depended on it. We were in the school from morning till...well morning, almost every night. On the last night we even camped out in the school to make sure we didn't waste any extra time sleeping in actual beds. Everyone brought a special energy to the project, without which our chances of success would have been diminished.



I was particularly thankful for the return of crewmembers from 2003; Mike Conrad, Cary Hollenberg, Hamm Brushland and Josh Powell. These folks were like a stabilizing gyro keeping all of us focused and on an even keel. Hearing the "Oh don't worry, you should have seen it last year" stories was one of my favorite parts. Mike Conrad, Cary and Eric held down the center-piece production, popping out a new vessel every time I turned around. Mike had the bowls clean, thin, and down to like twenty minutes by the end of the session. Cary also bit off a huge project, constructing two 19" diameter half circles of 1/2" lattice. Unfortunately they were not able to fit into the dichroic chamber and one broke in shipping to Coatings by Sandberg but you can see the one that survived is an awesome addition to the piece.

Don't think I wasn't impressed with the new people; Julie Riggs, Eric Edner, Charlie Lowry, Jared Sandifer and John Vinson (Vinnie). Julie, Eric, Josh and Vinnie helped to bring out a style of botanical rendering I am not so familiar with. It was great to see them teaching each other how to make the tiniest sunflower petals and, in Julie's case, the most realistic glass columbine I have ever seen! I learned a ton about putting together life like botanicals and it was an honor being

entrusted to assemble such delicate work. Jared was responsible for the geometric styles like the space frame, the faceting and the dodecahedron which fit together perfectly despite its obvious complexity. The space frame turned out to be the perfect thing to attach the botanicals to.

The most experimental part of the project was blowing the big thirty pound bubble. Charlie and I had a great conversation at the beginning of the process. I told him I wanted to gather three simax 44mm rods and blow them out into a veronese shape. He replied by saying he had no idea how we would get that much glass gathered and heated but that if I did that part he could handle the rest. I told him I wouldn't know where to start on a bubble



that size but that I could definitely handle heating the mass. Hamm started the process by sealing the three rods together and gathering them on the big twelve foot Litton lathe the school is so fortunate to possess. It was a long ride on the slow tractor but the end product was a piece of glass roughly the size and shape of a watermelon and a big pool of sweat on the floor.

We heated the mass in Draco and then maintained heat with the hand torches while the molten mass cooled into a controllable state for the next gloryhole heat. After five or six cycles like that (maybe 15 minutes) the mass was fully molten to the core. Next we plugged onto the mass with a huge collar made from a 16" chunk of 44mm rod on a large 1 5/16" blowpipe. We cracked the mass onto the pipe and Charlie took it to the hole to begin working the bubble.

At this point I stepped back from the process and let Charlie take charge. My role became mostly coordination, making sure everyone had shielding and that we had a good rotation of poleturners so no one got too tired and Charlie did not have to take all of the heats himself. Charlie took that bubble, spanked it on its ass, and HANDLED it. We were all amazed at how easily he seemed to handle such a large bubble. I guess working for Pino Signoretto pays off here and there. Big props to the team of lampworkers.

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Hamm Brushland
Mike Conrad
Eric Edner
Cary Hollenberg
Charlie Lowry
Josh Powell
Julie Riggs
Jared Sandifer
John Vinson
Marcel Braun



COATINGS BY SANDBERG, I
MANUFACTURER OF DICHROIC GLASS



56" h x
24" w x
20" d

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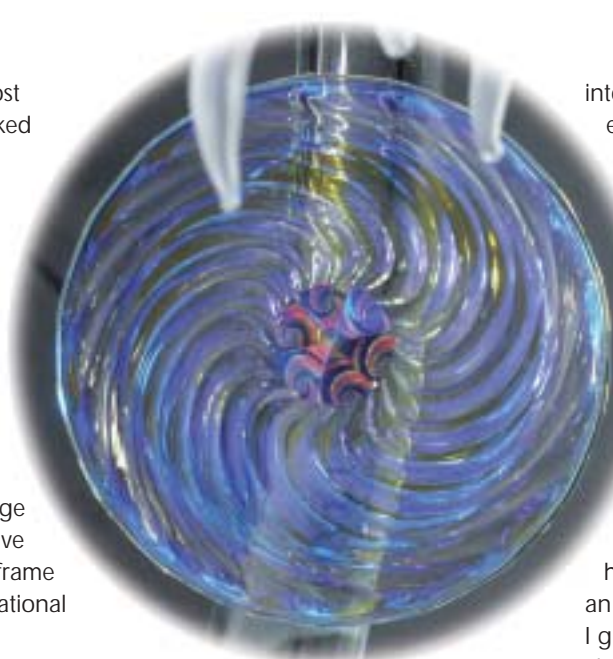
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Charlie told me we were one of the most focused group of assistants he has worked with. And some folks say lampworkers don't blow glass.

With so many artists under one roof, how hard was it to manage and focus so much energy? Or did it just flow?

This is where I spent the majority of my energy during the project. It is also the area where I intend to spend more energy next year. Keeping ten artists on task and supplied with materials is a huge job. When you factor in the need to have very specific parts made in a short timeframe it becomes a test worthy of the organizational Olympics.

I call the conditions we were working under "deep combat". The temperature in the shop was over 120 degrees more than half of the time. We worked at least 12 hour days every day for 12 days. The tasks we were trying to accomplish were ambitious by any measure, the added pressure of a time limit really forced people to focus. Despite the terrible heat and many setbacks we maintained an attitude of "Failure is not an option". I cannot even begin to express how proud I am of everyone and their ability to endure personal discomfort and travel outside of what is realistic or even sane. If you have the good fortune of meeting any Project 33 team



Custom Dichroic Coating by Coatings by Sandberg, Inc.

members please take the time to thank them for pushing the limits with 33 COE glassblowing. We are in their debt.

How did you develop your design process?

I usually start with an idea or concept. In this instance I wanted to show progress and evolution. The concept of "starship" means a lot to me. On the surface, I think of the science fiction I grew up with, Star Wars, Star Trek, even Battlestar Galactica. As we delve deeper

into life I start to think in terms of the mind's eye and more practical ideas of traveling into not just space but also through perceptions of reality. As we crafted the design for the sculpture we tried to parallel both physical, man made reality as well as the mysteries and power of a human mind. I also wanted to evoke the ancient human tradition of glassblowing and crafting in general which led me to the outer profile of the piece which is intended to evoke the veronese form. Coincidentally, I asked Cesare once for help with seeing that form properly and he suggested that I look at the side view of an egg to see the exact shape of the vase. So I guess what we are dealing with is an egg, a classic Italian form, an energy body, and a spaceship. Needless to say we had some awesome conversations about these subjects as we worked on the piece.

My favorite scenario involved the inner workings of the starship itself. We decided the ship was powered by pure life force energy generated within the dodecahedron by a crystalline entity and transferred to the propulsion system through the space frame. A side effect of this power source turned out to be the primordial ooze we depicted inside of the ship attached to the space frame. In fact we went so far as to hypothesize that the starship spread organic life through the universe as a

Sneak Preveiw of P33 Documentary



byproduct of its travels, stopping on barren planets to replenish its supply of crystal and rid itself of biomass accumulations.

What did you produce after everything was said and done?

Of course the main project was the starship. 56" tall, 24" wide and 20" deep. In my opinion this piece shows the properties of borosilicate that make it superior to soft glass in some applications. Specifically, it shows the ability to put insanely delicate elements that would wither inside of a glory hole right next to very heavy parts in a controlled fashion.

We also produced 22 first quality borosilicate vessels produced in the same fashion as their soft glass counterparts. In fact, if you are not familiar with boro color, they look exactly like soft glass. This demonstrates that "glass is glass" whether it is hard or soft. I've found that nearly every soft glass process we've tried has been possible in borosilicate with only minor adjustments.

We are also looking forward to the editing of the video footage shot during Project 33 2004. Hopefully this and the other documentation will help to open the doors of possibility to many more artists.

Given the difficulties of large scale borowork, were you able to make improvements in

structural integrity from the previous P33?

As with any process, there is always room for improvement. Although this year's piece was far more ambitious, it was also engineered to be more repairable. We almost lost last year's piece to a crack in a nearly unfixable location. This year I designed the armature to be more fixable in the case of any kind of cracking. It was a good thing because the design was subjected to a few crack tests and passed with flying colors.

Where did or does your inspiration come from?

My underlying assumption in marketing myself, my work, and my tools is that if I do what is best for the glass community, the glass community will do what is best for me. I think projects like this one are important for the borosilicate movement to build its identity within the glass landscape. I also just like to play with power tools and build stuff. Allowing technical design and engineering of equipment to be part of my artistic expression makes me feel like I am utilizing all of my talents in the work. The people I work with are also a constant inspiration. It sounds cheesy but working with a team makes me strive to be better than I am. They expect success; who am I to deny them?

What's in store for Project 33? Could we

expect to see you and Jesse James in a Monster Glass collab?

I can tell you that I certainly wouldn't back away from that sort of opportunity. Whether or not it is a possibility is currently unknown. Mostly, I'd like to see Project 33 become its own organism interacting with the glass landscape. Eventually it will be established to the point where I can step back and let the starship blast off, so to speak. Perhaps one day top artists will compete for the opportunity of designing a Project 33 piece. I could apply to be a crew member, or just watch it unfold.

How would an artist go about participating in Project 33 2005?

Although we have not formally started accepting applications for 2005, I would suggest sending an application as soon as possible. Simply send three or four images of your work along with a bio and a letter of intent to Eugene Glass School, c/o Project 33 2005, 575 Wilson St., Eugene OR. 97402. Applications will be put into a file until team selection begins.

Is there anything else you would like to say?

I just want to thank our sponsors again. Without the gas, glass, and facility Project 33 would be nothing more than a pipe dream.

Available at the Eugene Glass School
541-342-2959 www.eugeneglassschool.org

