

Cast the multiplex into epoxy resin

An Example of Use

A Customer Project: Casting Plywood in Epox R1

The task was to make three benches out of plywood and synthetic resin. I had no previous experience with resin, so I was more than curious.

After speaking with the technician from PHD-24, I was well advised and decided to use Epox R1 casting resin + H1 hardener, 4305 epoxy resin + 313 hardener as a primer, HS Ultra-Plus acrylic clear coat for the finish, and Formula Five release wax as a mold release agent.

I built the mold from melamine-coated plywood panels.

The dimensions of the benches are 190 cm x 36 cm x 6 cm, 135 cm x 36 cm x 6 cm, and 80 cm x 36 cm x 6 cm

I proceeded as follows during the casting process:

First, I poured a layer of resin approximately 5 mm thick over the entire bottom of the mold; immediately afterward, I pressed the wooden structure down using clamps (the wood had been primed with the resin described above).

Every 7–9 hours, I poured another layer, using a total of 3–4 liters of the mixture, which resulted in a layer thickness of about 1 cm (air bubbles were removed with hot air).

The final pour covered all the wood.

After 48 hours of curing, I removed the piece from the mold, which was surprisingly easy thanks to the release wax.



Since the surface was a bit uneven and there were also 2–3 visible air bubbles, I planed it with the router and then sanded it from 80-grit to 2000-grit.

As I discovered with the second bench, it's much easier and less labor-intensive to sand up to grit 320/400 and then apply clear coat. The sanding marks are completely invisible, and you save hours of work and sanding materials.

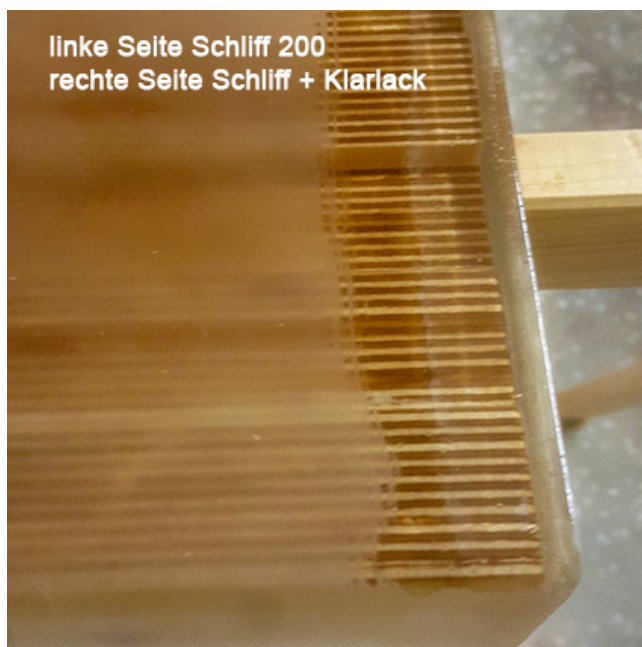
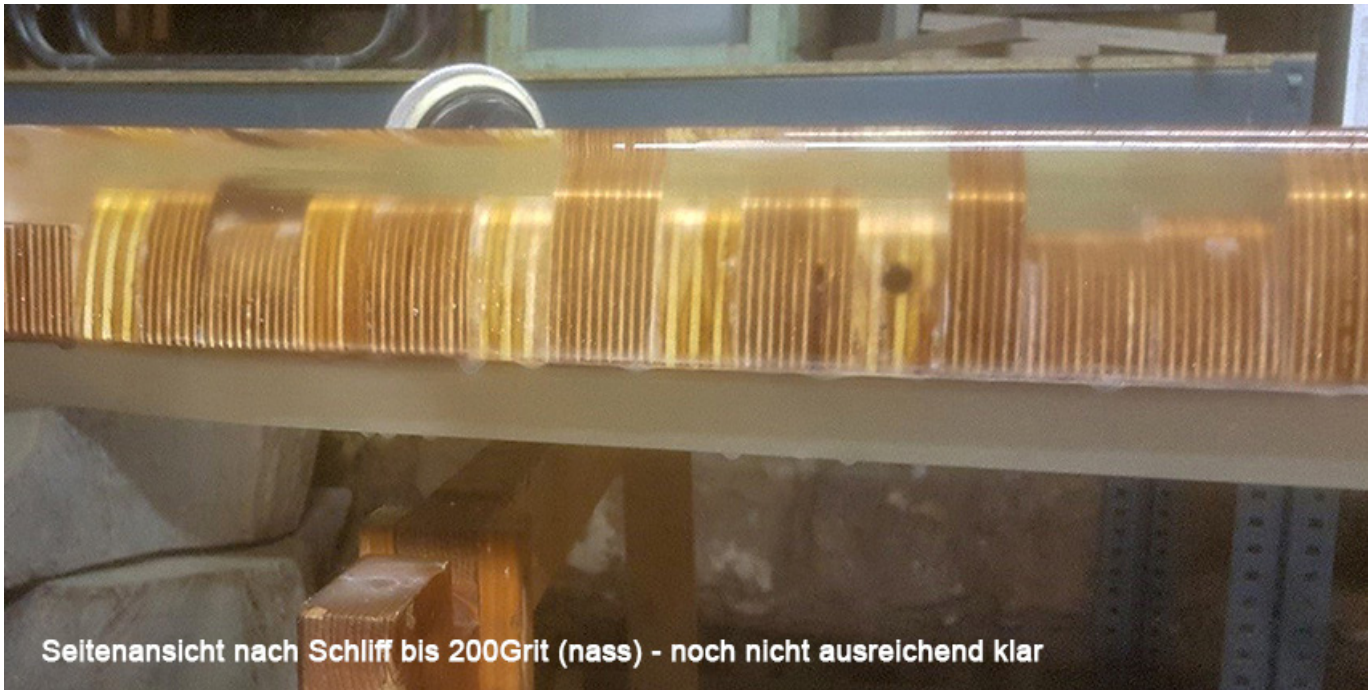
I'm very happy with the final result. After finishing, the resin is truly crystal clear.

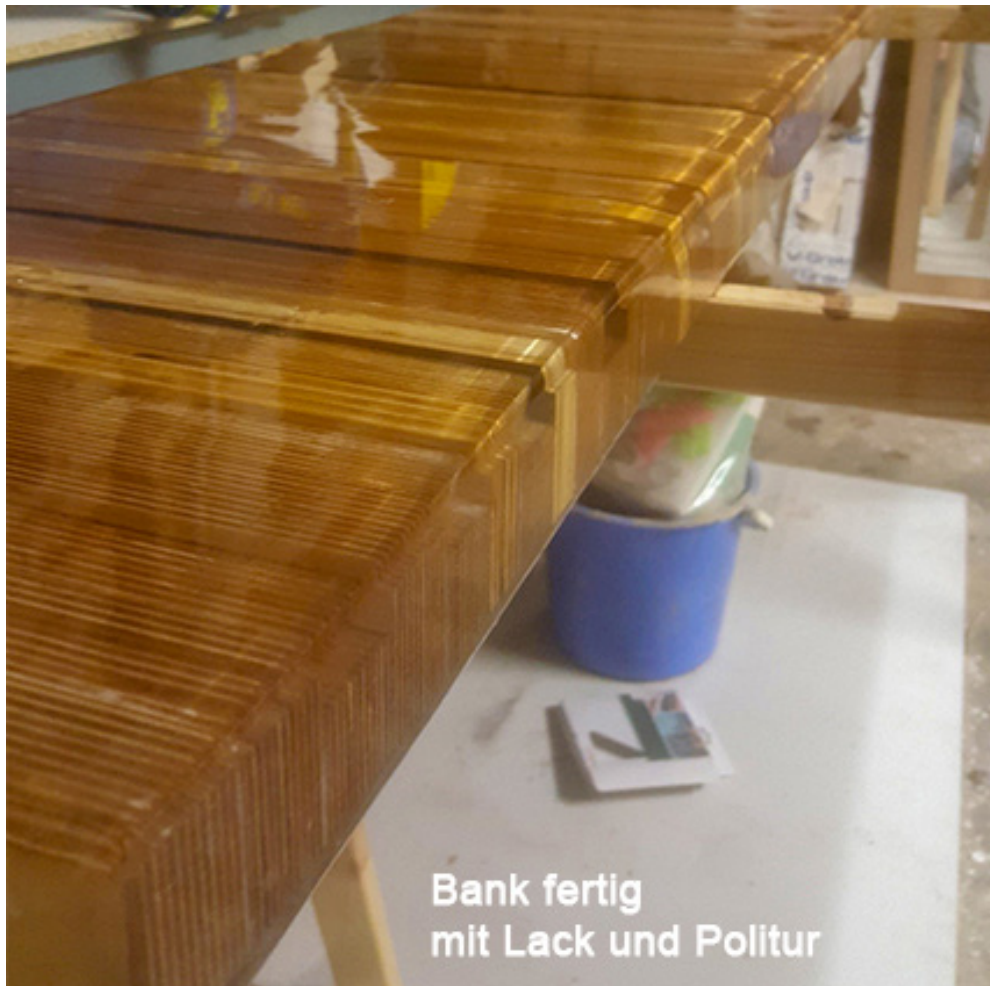


The Steps in Pictures









We would like to thank our customer, Mr. B., very much for the description and the great photos.

Your PHD-24 Team

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