

A view from the top...



On-site work is always a challenge, whether repairing switchgear in a stifling hot cubicle, replacing a pump up to your knees in some vile liquid concoction or motor work out in the elements. Recently, at the end of November, Longo was on site rebuilding two 1750 Hp, 4000 KV ID Fan motors for a major power company. The motors were located outside on the 12th floor of the power station just outside of Philadelphia. As you can see, the view was great, but the working conditions outside on the top floor of the building were less than ideal. Due to the required turnaround, our team was up there **24/7, night and day, bright sun and cold dark nights, for 13 days.**

Every company that does on-site work runs into the same problems of weather, cramped space, etc. One of the differences that Longo has exhibited over the years is the discipline and professionalism of our field service team. They know what has to be done, plan accordingly (even anticipating possible surprises) and have the patience to do the job right, not just rushing through it to get it done.

On this job, we had to strip, clean and wind the stator in place which meant building a "mini shop" on site. Once wound, the stator had to be heated to cure the new windings and the mini shop became a propane powered mini oven. In the shop, rewinds are completed by immersion in our VPI tank to completely saturate the windings and ties under pressure, forcing the protective epoxy deep into every spot of the winding. This is vital to protect the windings from the tremendous torque of these motors. Since there was no VPI tank on-site, plans had to be made from the very start of the project to utilize an alternative method to achieve the same results.

The innermost part of the winding process was addressed first. The pre-formed and insulated windings were supplied already epoxy coated. Since the epoxy coating does not allow for a lot of movement or adjustment, care also had to be taken to ensure the sizes and bends were right on the money. As each step of the rewind was completed, the material was saturated with the epoxy compound. The last step was to completely coat the winding with epoxy and cure it once again using our "mini bake oven."

The simple, quick way might be to do the windings and wrappings and then at the end apply a substantial epoxy coating. While that might be faster and cheaper, it will not afford this motor the long term protection it needs. Taking this assignment step by step and completing each process properly is part of what we call the **Longo Advantage.**

Reading this and our other case histories, you will see how the expertise of Longo's technicians and craftsmen is what often places Longo in a unique category. As you can see, our technicians are not at all in a very work friendly area, yet they will do what it takes to make sure each wrap is done right, the tension is just right and ensure the whole job is done right. It takes discipline, superior technical skills and the confidence to know they are



The on-site "blue mini-shop."



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some of the best in the business. Our customers have found that these attributes provide more than just a job well done, but a result that is void of a lot "extras" or costly unanticipated events. Performing interesting on-site repairs is noteworthy, but it is also our straight forward repairs, sales of new motors and equipment, and tapping into our substantial experience that are all part of the Longo Advantage.

