APPLICATION

GROSCHOPP

TRUST

X-ray Cooling Pump

Reputation for Quality, Expectation of the Best

The Challenge

Everything about this application is extreme – high operating temperatures, immersion in hot oil, operating voltage spikes and high starting torques. Combine these operating and environmental challenges with a tight installation space, and this is a truly demanding application.

The Solution

- AC Stator with custom winding and forming of the coils to meet dimensional requirements
- Durable wire varnish to protect winding in a hostile operating environment
- High temperature insulation materials for submersion into hot oil without contamination or compromised performance
- Rigorous testing for component qualification to extreme reliability specifications
- Integration into the customer's supply chain, with flexibility to deliver against their forecast

"There aren't many motor manufacturers who specialize in making stators for x-ray tubes, and those who do are dependent on a high-labor, manual process. We have been able to reliably automate this process and provide an exceptional product, superb delivery, and outstanding value to our customer."
Stan Spaulding, Product Manager & Application Engineer - Groschopp

This manufacturer is a premier independent supplier of X-ray tubes and flat panel detectors, serving the leading manufacturers of imaging equipment for medical diagnostics, as well as industrial inspection and security products.

"The customer has very high expectations and a demanding application, but they have to be this way to meet their customer's demands," described Spaulding. The motor parts that Groschopp supplies go into their diagnostic medical x-ray machines, and downtime or failures are simply not tolerated. The machines have to be working perfectly, always available for patient diagnostics. Add to that the revenue-generating expectations, and a failed motor is simply unacceptable.

"From an environmental aspect, this is an 'extreme' application," Spaulding added. "The stators are immersed in hot transformer oil, which is used for both cooling, and insulation from high voltage. There are also steep voltage spikes and a high starting torque, in addition to the hot operating environment. Add to that the tight dimensional requirements, and this makes for one challenging application!"

With dedicated engineering, prototyping and endless testing, Groschopp has successfully designed a stator with the wire varnish, insulation materials, and special coil configuration to meet the demands of this application. Meeting the customer's requirements goes beyond engineering design – to the manufacturing process which has been developed specifically for this product, to maintain consistently on-time deliveries and exceptional quality.

Customized AC Stator

Groschopp, Inc., 420 15th Street NE, Sioux Center, IA 51250-2100 USA
(712) 722-4135 Phone 1-800-829-4135 Toll-Free (712) 722-1445 FAX