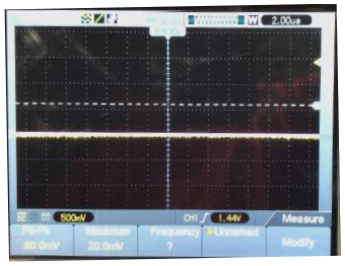
CoolBLUE cores reduce common mode current levels from 52 Amps to <2 Amps on a 1500Hp DC Drive installation

The Horner Industrial Field Service Team was recently called out to a Rubber Manufacturer to determine the cause of failure on their main mixer gearbox that was being powered by a 1500Hp DC Motor. This is the plant's main mixer that mixes all of the raw rubber material for the plant, whenever this mixer is down the plant is down.
After the gearbox was torn down it was determined that the Drive End bearing of the gearbox failed due to bearing fluting caused by common mode currents. The common mode currents had travelled down the DC motor shaft, through the coupling, along the gearbox shaft and discharged to the gearbox frame through the Drive End bearing. It was also noted that this wasn't the first time this had happened. Horner Industrial's Salesperson made the customer aware of the cause of the problem and spoke of the high probability of the bearing failing again in the future if something wasn't done to make corrections to the problem. He suggested the customer install CoolBLUE cores to alleviate any future failures of this kind.
Horner Industrial's CoolBLUE Field Technician visited the site to take measurements on the output of the 1500Hp drive to determine the level of CoolBLUE protection that would be needed to protect all of the bearings in the system. He was shocked to find that the DC Drive was producing a whopping 52 amps, (2.60V).
The reading taken after the installation of the CoolBLUE cores on the output of the drive were below 2 amps, (80mV). This is a reduction of 96% in common mode currents being transmitted to the motor by the drive.
Needless to say, Horner Industrial currently has one very happy customer that is now in the process of installing CoolBLUE cores throughout their multiple plants.

Before CoolBLUE



After CoolBLUE

For More Information Contact Us: 1.877.467.6372 www.HornerIndustrial.com