CASE STUDY | ENGINEERING



Customer : Steel manufacturer
Product group : Mechanical power
transmission

Market : Primary Industry/Steel

Application : Coater motors
Savings : £ 10,120

ERIKS' TECHNICAL KNOW-HOW SOLVES A PREMATURE MOTOR FAILURE PROBLEM

Solution results in extended motor life and significant savings



CHALLENGE

A large UK steel company had experienced an unexpected premature failure of 22kW DC Coater Motors, only 6 months after installation. The customer contacted ERIKS' specialists to assist in solving this problem.

SOLUTION

Following a thorough investigation ERIKS identified issues relating to premature bearing failures on the above motors. More specifically, the issues were related to significant bearing currents occasionally found in Inverter Driven Motors. In across-the-line driven motors, current-related bearing failures can occur due to a flow of current internally generated in a motor. The increased use of variable speed drives (VSDs) in industrial and commercial electric motor applications is also a source of bearing current flow.

Inverter-induced bearing currents and premature bearing failures occur in a relatively small percentage of installations and applications. The motors have been modified to accommodate new earthing rings and grease exit ways.

SAVINGS

■ £ 10.120

OTHER BENEFITS

- Reduced maintenance
- Minimised downtime
- Improved uptime
- Improved product life
- Technical know-how

FURTHER COMMENTS

The motors are still in use, with motor life currently extended to 12 months.