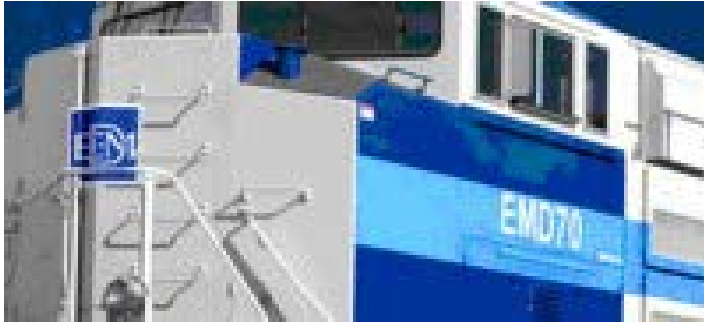


Newall Solves Scale Contamination Problem at Electro Motive



Electro Motive (EMD) is a global provider of diesel power engines for marine propulsion, offshore and land based oil well drilling rigs, and stationary power generation. Electro-Motive is the only diesel engine manufacturer of its size to have produced more than 70,000 engines. This success stems from product reliability, serviceability, load acceptance capability, low operating costs and ease of maintenance with standardized components.

FMS line to machine 20 cylinder crank cases that go into diesel engines they manufacture. The 286" (7M) travel X axis on these machines require linear encoders for position feedback to the Siemens 880 control, in order to maintain the required accuracy on these long travels.

The Kolb bridge mills, had incorporated Hedenhain LB optical linear tape encoders in the original design of these machines, for this purpose. Since these linear encoders need to be installed near the ball screw, contamination of the linear optical encoder from lubricant oil and coolant ingress became a constant problem.

The Newall representatives presented the attributes of Newall's electromagnetic inductive technology and the advantages vs. optical glass and tape technology. After the presentation, EDM quickly became a believer. "Inductive is the way to go for these machines". "If these (Newall SHG linear encoders) work the way I think they will, it will save us a tremendous amount of downtime. Tearing down these machines to clean glass scales puts the machine out of commission 3-5 days on average."

The first replacement Newall SHG-TT encoder was installed on the first Kolb bridge mill in the spring of 2011. EMD verified the positioning accuracy with a laser interferometer upon the completion of the installation to be within +/- .001" in the required 220" of travel, with .0002" repeatability, well within their requirements and the SHG-TT specifications. The SHG-TT has been running with no contamination issues since. EMD ordered another SHG-TT to



schedule replacement on the second Kolb machine, and intend to replace the third when available scheduled downtime (or downtime due to failure of the existing Heidenhain LB optical linear encoder) permits.

Mr. Docauer of EDM stated that with the success of this SHG-TT replacement program on these Kolb bridge mills, they intend to replace all linear optical scales on other machines in the plant as they fail.

Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates ("Sensata") are solely intended to assist third parties ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata datasheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Americas

Newall Electronics Inc.
1803 OBrien Rd
Columbus, OH 43228
Tel: +1 614 771 0213
sales@newall.com
newall.com

Rest of World:

Newall Measurement Systems, Ltd.
Business Park, Unit 1 Wharf Way
Glen Parva, Leicester LE2 9UT
United Kingdom
Tel: +44 (0) 116 264 2730
sales@newall.co.uk
newall.co.uk