

Liebherr presentation statements

Please use the statements below as the information that Liebherr presented at the SMART summit:

1) Liebherr Mining Equipment fully supports the efforts of SMART in order to create a format of data that could be used by most end users trying to monitor information from a variety of OEMs existing in the open pit mining industry.

2) Liebherr in the past has worked with 3rd party suppliers including Modular, Jigsaw, Matrikon, and others in order to provide data that could be transmitted off the truck for use by the mine office. This has been done through a Vehicle Gateway interface developed by Liebherr.

3) Recently, Liebherr has developed their own electrical drive system and motors for use on the T 282 C truck introduced at Bauma in Munich last April. This eliminates certain constraints that became apparent when trying to solve specific problems relating to applications in certain parts of the world. Included with this development is a new integrated diagnostic platform as part of the Litronic Plus control system. This new system offers a unique single point access to all the truck information including engine, drive system, and truck logic systems.

4) The data on the T 282 C is accessible via two methods: either CanOpen thru a 9-pin Sub D connector or Ethernet (OPC and FTP) thru an RJ45 connector. We believe most of the data obtainable thru this interface will be made available to end users thru 3rd party remote communications suppliers.

5) Once the format is determined by SMART, we Liebherr will provide the data that is accessible to end users thru our non-proprietary interface available on our truck.

Kind Regards / Mit freundlichen Grüßen

Frank G. Wickert, P.E.

General Manager

Product Management &

Marketing

Liebherr Mining Equipment Co.

4100 Chestnut Ave

Newport News, VA

23607, USA

Tel: +1 757 928 8736

Mobile: +1 757 806 9696

Fax: Liebherr presentation statements
+1 757 928 8755
E-Mail: frank.wickert@liebherr.com
Internet: <<http://www.liebherr.com/>> www.liebherr.com