U.S. Department of Labor

Mine Safety and Health Administration Approval and Certification Center 765 Technology Drive Triadelphia, West Virginia 26059



Intrinsic Safety Evaluation No. 18-ISA110003-0 A&CC PAR No. 97676

July 1, 2011

Measurement Technology, Ltd. (MTL) Attention: Mr. Peter Rigling Great Marlings Butterfield Luton, Beds L2 8DL, United Kingdom

Dear Mr. Rigling:

The review of your application, Company Code No. 969999, requesting an intrinsic safety evaluation of the following MTL 7700 Series Shunt Diode Safety Barrier Assemblies, is complete:

MTL7715+	MTL7715P+	MTL7755ac
MTL7760ac	MTL7761ac	MTL7765ac
MTL7766Pac	MTL7767+	MTL7787+/-

The design of these MTL 7700 Series Shunt Diode Safety Barrier Assemblies meet the applicable requirements of Title 30 Code of Federal Regulations, Part 18.68 (30 CFR Part 18.68). We assign Intrinsic Safety Evaluation No. 18-ISA110003-0 to this design.

The following apply to Intrinsic Safety Evaluation No. 18-ISA110003-0:

- You must build each MTL 7700 Series Shunt Diode Safety Barrier Assembly bearing this Intrinsic Safety Evaluation number according to the drawings and specifications on file at the MSHA Approval and Certification Center. A list of these drawings and specifications is enclosed.
- 2. The MTL 7700 Series Shunt Diode Safety Barrier Assembly shall be conspicuously labeled to show your company's name, model or type number, and the assigned MSHA Intrinsic Safety Evaluation number.
- You are not permitted to make changes to the design of this MTL 7700 Series Shunt Diode Safety Barrier Assembly without our approval.
- 4. We may require you to make changes to the design, or to modify the MTL 7700 Series Shunt Diode Safety Barrier Assembly in the field, in the interest of safety.
- 5. We have the right to revoke this Intrinsic Safety Evaluation, for cause, at any time.

- 6. This letter does not authorize you to advertise the MTL 7700 Series Shunt Diode Safety Barrier Assemblies as permissible for use in underground gassy mines or as being approved or certified by the Mine Safety and Health Administration (MSHA). This Model System must be evaluated and accepted as part of an MSHA approved permissible system or machine.
- 7. The following requirements apply to these MTL 7700 Series Shunt Diode Safety Barrier Assemblies:
 - a. The MTL 7700 Series Shunt Diode Safety Barrier Assemblies must be constructed and maintained in accordance with the drawings and specifications on file at the Mine Safety and Health Administration.
 - b. The installation shall preclude intermingling between intrinsically safe circuits, including their associated wires and cables, and all other circuits, wires, and cables.
 - c. The MTL 7700 Series Shunt Diode Safety Barrier Assemblies must be securely mounted within a suitable dust-tight enclosure in a fresh air area of the mine or an explosion-proof enclosure.
 - d. The MTL 7700 Series Shunt Diode Safety Barrier Assemblies must be grounded according to the manufacturers instructions.
 - e. The equipment connected to the input terminals of the barrier must not use or generate more than the maximum 120 Vrms.

You are required to inform your customers, distributors, and end users of these requirements.

You will receive an invoice for the cost to process your application.

If you have any comments or questions relative to this letter, please contact Gail L. Nicola at 304-547-2010.

Sincerely,

John P. Faini

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Chief, Approval and Certification Center

Enclosures