



## **Additional Warnings, Cautions and Notes for M600 MDot Mass Flow Installation Guide**

### **Warning: Possible bodily injury if procedures are not followed exactly**

Pressure Surges - The end user is cautioned to avoid pressure surges that exceed the meter's maximum pressure rating as stated on the meter name tag. Install suitable protection devices in the system where allowable pressure limits could be exceeded.

Water Hammer Effects - The layout of the process line should take into account avoiding water hammer that could damage the meter or cause leaks at the meter connections.

Explosion or Blast Damage - The meter is not a source for any pressure buildup. Install suitable protection devices in the system where allowable pressure limits could be exceeded.

### **Caution: Possible equipment damage if procedures are not followed correctly**

Fire/Flame Hazard - The meters are approved under the ATEX Directive as follows: Ex ia IIB T5, T4 or T2 Ga. The surface temperature of the meter will depend on the temperature of the process fluid and the ambient temperature.

Escape of Dangerous Fluids - Refer to Installation Guide M-600 for instructions on proper mounting of the meter. Check the installation for leaks prior to being put into service .

Damage to Equipment During Transport and Installation - Packing methods are used to prevent damage to the meters during shipping. Inspect the meters and associated equipment for damage before installing.

Operational Hazards, Misuse - Installation Guide warns against using the meter as a step, table or footstool. The end user is responsible for making provisions for isolating and draining the meter.

Vessel Contents - It is the end user's responsibility to make sure the process fluid is compatible with 316L stainless steel.

Commissioning - The end user should check the end connections for leaks when pressurizing the meter.

Lifting - The meter should be lifted so that undue strain is not placed on the meter structure. Note that if the meter is to be removed from its pipe line after being in operation in the standard horizontal position, flanges downward, there may be product remaining in the meter.

### **Note: A general rule for a procedure or of exceptions to such a rule.**

Material Compatibility - The wetted material used in Mdot meters is 316L stainless steel. It is the end user's responsibility to ensure that his process fluid and parameters are compatible with 316L.

Vessel Stability - The Installation Guide M-600, section 2, covers the mounting and installation of the meters.

Fails to Operate - The end user should contact the local Red Seal Measurement representative/factory if the meter does not work.

Leak at Connection to System - Check for leaks when the meter is installed and put into operation. See Installation Guide M-600 for information on mounting the meter and reducing vibration in the pipe line.

Environmental Ingress - When properly installed the meters are not susceptible to environmental ingress when operated within limits stated in the Installation Guide M-600.

Location and Installation - Proper mounting is covered in the Installation Guide and mentioned above. Care should be taken to keep the meter within the temperature limits specified.

