



Date 29/07/2015

File 15.10945

# FAC-SIMILE

Certificate no. 5476/M

**COMPLIANCE**  
With IEC 61508:2010

SGS Italia Spa  
hereby confirm that the:

**FLOW METERS**  
**TMG250, TMN250, TMO250, TMS**

**OFFICINE OROBICHE S.P.A**  
Via SERENA, 10  
24010 PONTERANICA (BG) - ITALY

Has been assessed per the requirements of:  
IEC 61508:2010 parts 1-7

And meets requirements providing a level of integrity to:

**SYSTEMATIC INTEGRITY : SC 2 - SIL 2 CAPABLE**  
**RANDOM INTEGRITY: TYPE A ELEMENT**

**SIL 2 @HFT=0; ROUTE 1<sub>H</sub>**  
**SIL 2 @HFT=0; ROUTE 2<sub>H</sub>**

**MEET THE SIL REQUIREMENTS DETAILED IN THE ANNEXED**  
**TABLE**

**CAN BE USED UP TO SIL2 FOR THE SAFETY FUNCTION:**  
**“correct switching on demand”**

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SGSPAPER  
15880506



# FAC-SIMILE

FOR PRODUCTS TYPE A  
 HIGH DEMAND MODE

Technical report: 15.500.0375 dtd. 29/07/2015  
 Reference standard: IEC 61508:2010, part 1 to 7 (where applicable)

## SUMMARY TABLE

E/E/PE Safety related system (sensor element)	Officine @robiche Spa
Family product	Flow meters (FM)
Safety Function definition	Correct operation of measure and transmission
MAX SIL allowable	SIL2
HFT	0(1001)
PFH [h <sup>-1</sup> ] – high demand mode	1,57E-07 h <sup>-1</sup>
SFF	90%
DC	80%
$\lambda_{DU}$	157 FIT
$\lambda_{DD}$	343 FIT
$\lambda_{SD}$	653 FIT
$\lambda_{SU}$	376 FIT
MTTR	8h
Useful Lifetime	10 years
Proof Test suggested	12 months

A safety Instrument Function (SIF) designed with this product must not be used at a SIL level higher than stated without “prior in use” justification by end user or diverse technology redundancy in the design.

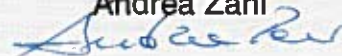
Milan, 29/07/2015

Valid until July 30th, 2018

SGS Italia S.p.A.

On behalf of Business Manager

Andrea Zani



This certificate is composed of 2 pages

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