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December 19, 2018

CUNG NGUYEN
N-CUBED ENGINEERING
8 MAIN ST EAST SUITE 409
HAMILTON ON L8N 1E8
CA

Service Request Type: BPV-Fitting Registration

Service Request No.: 2465762

Your Reference No.:

Registered to: METTLER TOLEDO AG, PROCESS ANALYTICS

Dear CUNG NGUYEN,

Technical Standards and Safety Authority (TSSA) is pleased to inform you that your submission has been reviewed and registered as follows:

CRN No.: 0F20944.5

Main Design No.: GPro 500 Series - Gas and Moisture Analyzers (see the attachment to the Statutory Declaration Form for the scope of registration).

Expiry Date: 19-Dec-2028

Please be advised that a valid quality control system must be maintained for the fitting registration to remain valid until the expiry date.

The stamped copy of the approved registration and the invoice are mailed separately. Should you have any questions or require further assistance, please contact a Customer Service Advisor at 1.877.682.TSSA (8772) or e-mail customerservices@tssa.org. We will be happy to assist you. When contacting TSSA regarding this file, please refer to the Service Request number provided above.

Yours truly,

Mark Valcic P. Eng.
Engineer Specialist BPV
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Technical Standards and Safety Authority
 345 Carlingview Drive
 Toronto, Ontario M9W 6N9
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Show facsimile of manufacturer's logo or trademark, as it will appear on the fitting, in the space below

METTLER TOLEDO

**STATUTORY DECLARATION
 Registration of Fittings**

I, Michael Rudolph Hunziker, head of PO Ingold
 (Name and Position, e.g. President, Plant Manager, Chief Engineer)

of Mettler-Toledo GmbH, Process Analytics
 (Name of Manufacturer)

Located at Im Hackacker 15, CH-8902 Urdorf +41 44 729 6211 +41 44 729 6636
 (Plant Address) (Telephone No.) (Fax No.)

do solemnly declare that the fittings listed hereunder, which are subject to the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, comply with all of the requirements of ASME B31.3-2016
 (Title of recognized North American Standard)

which specifies the dimensions, materials of construction, pressure/temperature ratings, identification marking the fittings and service;

or are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with _____ as supported by the attached data which identifies the dimensions, material of construction, pressure/temperature ratings and the basis for such ratings, the marking of the fitting for identification and service.

I further declare that the manufacture of these fittings is controlled by a quality system meeting the requirements of ISO9001 & ISO14001 which has been verified by the following authority, SQS, Bernstrasse 103, CH-3052 Zollikofen, Switzerland

The items covered by this declaration, for which I seek registration, are category F type fittings. In support of this application, the following information and/or test data are attached as follows:
GPRO 500 design calculation, proof test data and drawings

(drawings, calculations, test reports, etc.)

Declared before me at _____ in the _____ of _____

the _____ day of _____ AD 20 _____.

Commissioner for Oaths:

 (Printed name)

 (Signature)

Michael Hunziker
 (Signature of Declarer)

FOR OFFICE USE ONLY

To the best of my knowledge and belief, the application meets the requirements of the **Technical Standards and Safety Act**, Boilers and Pressure Vessels Regulation, and CSA Standard B51 and is accepted for registration in Category F.

CRN: OF20944.5

Registered by: MARK VALCIC, P. ENG.

Dated: DEC. 19, 2018

NOTE: This registration expires on: DEC. 19, 2018

Technical Standards and Safety Authority
 Boilers and Pressure Vessels Safety Program

REGISTERED

CRN: OF20944.5

Signed: Mark Valcic

Date: DEC 19, 2018

*Information provided in this application is releasable under the Freedom of Information and Privacy Protection Act and may be disclosed upon request.

PV 09553 (04/17)
NOTE: SEE THE ATTACHMENT FOR THE SCOPE OF REGISTRATION.
Mark Valcic
DEC 19 / 18

Design code: ASME B31.3-2016
Design pressure: 10 bar (145 psi)
Design temperature: 450°C (842°F) for material 1.4404 (equiv. SA-240/479-316L)
Design temperature: 600°C (1112°F) for material 1.4571 (equiv. SA-240/479-316Ti)
Design temperature: 600°C (1112°F) for material 2.4602 Hastelloy C22 (equiv. SB-564-N06022)
Glass materials: Borosilicate, quartz and sapphire

Table 1

Description	Asm. Dwg.	Reference Detail Dwg. (for pressure boundary)	Glass Window Detail Dwg.	Swagelok Fittings (note 3)	Design Report	Proof Test Report
Purge Probe WD=10cm OPL=20cm	00112497					
Purge Probe WD=10cm OPL=40cm	00112487					
Purge Probe WD=10cm OPL=80cm	00112498					
Purge Probe WD=20cm OPL=20cm	00112490	30256244				
Purge Probe WD=20cm OPL=40cm	00112489					
Purge Probe WD=30cm OPL=20cm	00112495		30256290			
Blow Back Probe WD=10cm OPL=20cm	00112553	30256226				
Blow Back Probe WD=10cm OPL=40cm	00112527	30256227				
Blow Back Probe WD=10cm OPL=80cm	00112558	30256229	30039875			
Blow Back Probe WD=20cm OPL=20cm	00112540	30298715	30039876	SS-6M0-6-4	DR-GPRO-1	Test Report
Blow Back Probe WD=20cm OPL=40cm	00112534	30298718	30039886	SS-6M0-6	Rev. 0	No. 1838en
Blow Back Probe WD=30cm OPL=20cm	00112548	30256245	30135260			
NP Probe WD=10cm OPL=20cm	00112600					
NP Probe WD=10cm OPL=40cm	00112574					
NP Probe WD=10cm OPL=80cm	00112606					
NP Probe WD=20cm OPL=20cm	00112585					
NP Probe WD=20cm OPL=40cm	00112579					
NP Probe WD=30cm OPL=20cm	00112593		30256290			

Notes for Table 1: 1) All probes ordered with either ANSI 2"-150# or ANSI 3"-150# raised face flange.
 2) All probes ordered in one of three metal alloys listed above with any glass material.
 3) Swagelok fittings shown on assembly drawings are not part of registration scope.

THIS IS PART OF
CRN 020944.5
 Technical Standards & Safety Authority
 Boilers & Pressure Vessels
 Safety Program
Wlan Dec 19/19

Table 2

Description	Asm. Dwg.	Reference Detail Dwg. (for pressure boundary)			Glass Window Detail Dwg.	Swagelok Fittings (note 2)	Design Report	Proof Test Report
Wafer RF DN50 PN16 - ANSI 2" 150LB	00191190	30399891						
Wafer RF DN50 PN16 - ANSI 2" 150LB	00189807	30399973		30256269				
DW Wafer RF DN80 PN16 - ANSI 3" 150LB	00192629	30399894	30399969					
Wafer RF DN80 PN16 - ANSI 3" 150LB	00191178	30399974	30399972	30256269	SS-10M0-6-4 SS-10M0-6-6M	DR-GPRO-2 Rev. 0	Test Report No. 1838en	
DW Wafer RF DN100 PN16 - ANSI 4" 150LB	00192630		30264964					
Wafer RF DN100 PN16 - ANSI 4" 150LB	00191187	30399897	30401849					
Wafer RF DN100 PN16 - ANSI 4" 150LB	00191185	30399975						
Wafer RF DN100 PN16 - ANSI 4" 150LB	00191179			30256269				

Notes for Table 2: 1) All probes ordered in one of three metal alloys listed above with any glass material.
2) Swagelok fittings shown on assembly drawings are not part of registration scope.

Table 3

Description	Asm. Dwg.	Reference Detail Dwg. (for pressure boundary)			Glass Window Detail Dwg.	Swagelok Fittings (note 2)	Design Report	Proof Test Report
Extractive Probe Dual Window OPL=1m	00114426	30264889						
Extractive Probe Dual Window OPL=80cm	00114419	30264888						
Extractive Probe Dual Window OPL=40cm	00112471	30306906						
Extractive Probe Dual Window OPL=1m C22	00135519	30406196						
Extractive Probe Dual Window OPL=1m C22	00136534	30406195						
Extractive Probe OPL=25cm	00128007	30256290						
Extractive Probe OPL=45cm	00128006	30256244						
Extractive Probe OPL=85cm	00128005	30264964						
Extractive Probe OPL=105cm	00128000	30401849	30256269					

Notes for Table 3: 1) All probes ordered in one of three metal alloys listed above with any glass material.
2) Swagelok fittings shown on assembly drawings are not part of registration scope.
3) For extractive probes the sanitary Tri-Clamp is part of the pressure boundary. Mettler purchased the sanitary Tri-Clamp from ITE Intertechnik Elze. Stainless 316L clamps size 2.5" were used in the proof test (see catalogue part #13MHMM).

THIS IS PART OF
CRN OF 209945
Mettler Toledo
Standards & Safety Authority
for Pressure Vessels
Boilers and Pressure Program
Safety Program

MEC 19/10
[Signature]