



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX KSCP 22.0001X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2022-01-21
Applicant: **HUMANENTEC**
#101, 93, Beoman-ro, Suseong-Gu,
Daegu, 42200
Korea, Republic of
Equipment: **Automatic Tank Gauge System HM900S Probe & HM900C Safety Barrier**
Optional accessory:
Type of Protection: **Intrinsic safety "ia"**
Marking: Ex ia IIA T4 Ga (HM900S)
[Ex ia Ga] IIA (HM900C)

Approved for issue on behalf of the IECEx
Certification Body:

Sang He Kim

Position:

President of the Board

Signature:
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

KSC POLAND Sp. z o.o.
Chorzowska 150 Street
Katowice 40-101
Poland





IECEX Certificate of Conformity

Certificate No.: **IECEX KSCP 22.0001X**

Page 2 of 3

Date of issue: 2022-01-21

Issue No: 0

Manufacturer: **HUMANENTEC**
#101, 93, Beoman-ro, Suseong-Gu,
Daegu, 42200
Korea, Republic of

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[PL/KSCP/ExTR22.0001/00](#)

Quality Assessment Report:

[PL/KSCP/QAR22.0002/00](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX KSCP 22.0001X**

Page 3 of 3

Date of issue: 2022-01-21

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Automatic Tank Gauge (ATG) is constructed of two main parts: Probe model HM900S & Safety barrier model HM900C.

The Probe model HM900S is magnetostrictive sensor to measure oil and water levels and oil temperature in storage tank. It can calculate the level of oil and water by Sensor-Coil detecting the Pulse from reflection of the magnetic Floaters. The oil temperature is checked from three Temperature Sensors located inside probe shaft.

The Probe sensor consists of Magnetostrictive Sensor, Main Housing (STS), Connector and magnetic Floater (NBR). Magnetostrictive Sensor includes its Control PCB and Wave-Guide (STS), and they are protected inside Main Housing. Up to two magnetic Floaters can be fitted to the probe shaft.

Power for the Probe model HM900S is separately provided with the designated Safety-Barrier model HM900C installed at non-hazardous area.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- Installation must be as per control drawing EX-HMS-HM900S-016.
- Under certain extreme circumstances, the exposed non-metallic part of the equipment may store an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on the enclosure surface. In addition, the equipment shall only be cleaned with a damp cloth.
- The safety barrier HM900C shall only be installed and powered in a non-hazardous area using an approved / certified source of supply with maximum output parameters of 12V and 3A.

Annex:

[IECEX KSCP 22.0001X_Addendum.pdf](#)