



OIML Certificate

OIML Member State
The Netherlands

Number R117/2007-A-NL1-25.06 revision 0
Project number 3996158
Page 1 of 3

Issuing authority NMI Certin B.V.
Person responsible: M.Ph.D. Schmidt

Applicant and Manufacturer Total Control Systems, A Division of Murray Equipment, Inc.
2515 Charleston Place,
Fort Wayne, IN 46808,
United States of America

Identification of the certified type A **gas extractor**
Type: TCS-740-xx, TCS-745-xx, TCS-748-xx and TCS-749-xx

Characteristics See following page(s)

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 117-1: 2007 "Dynamic measuring systems for liquids other than water"

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above.
This Certificate does not bestow any form of legal international approval.

This certificate and supporting reports comply with the requirements of OIML-CS-PD-07 clause 6.2.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

Issuing Authority **NMI Certin B.V., OIML Issuing Authority NL1**
14 August 2025

Certification Board

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This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMI Certin B.V. as Issuing Authority can be verified at www.oiml.org

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The conformity was established by the results of tests and examinations provided in the associated report(s):

- No. NMI-1901787-01 dated 04 October 2018 that includes 20 pages;
- No. NMI-3570402-01 dated 31 August 2023 that includes 26 pages.

Characteristics of the gas extractor

In Table 1 the general characteristics of the gas extractor are presented.
The construction of the measuring instrument is recorded in the Documentation folder no. TC8875-4.

Table 1 General characteristics

Maximum pressure	10,5 bar(g)
Intended for the measurement of	Low viscosity mineral oils with a maximum viscosity of 5 mPa·s

In Table 2 and 3, the characteristics of the family of instruments are presented.

Table 2 Flow characteristics of mechanical model of the gas extractor

Type	Qmax [L/min]	Diameter In-/Outlet [mm]	Effective volume [L]	Remarks
TCS-740-20	568	20	3,7	
TCS-740-30	1136	30	4,3	
TCS-740-40	2271	40	8,3	
TCS-745-20	568	20	9,8	
TCS-745-30	1136	30	9,8	

Table 3 Flow characteristics of electronic model of the gas extractor

Type	Qmax [L/min]	Diameter In-/Outlet [mm]	Effective volume [L]	Remarks
TCS-748-20	568	20	3,7	(1)
TCS-748-30	1136	30	4,3	(1)
TCS-748-40	2271	40	8,3	(1)

(1) Also intended for road tankers.



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Number R117/2007-A-NL1-25.06 revision 0
Project number 3996158
Page 3 of 3

Type	Qmax [L/min]	Diameter In-/Outlet [mm]	Effective volume [L]	Remarks
TCS-749-20	568	20	9,8	(1)
TCS-749-30	1136	30	9,8	(1)

Certificate history:

Revision	Date	Description of the modification
Initial	14 August 2025	Initial issue.