



Lloyd's
Register

Type Approval Certificate Extension

This is to certify that Certificate No. 15/ 00083 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Protea Limited
PLACE OF PRODUCTION	Unit 2 Venture Park Stirling Way Bretton Peterborough PE3 8YD UK
DESCRIPTION	Continuous Emission Monitoring Process Analyser (Infra-Red), designed to provide in-situ analysis of up to six gas-phase emission components
TYPE	P2000
APPLICATION	Marine/ Offshore applications (ENV2)
STANDARD	LR Rules and Regulations for the Classification of Ships (July 2014), LR Test Spec No.1 (2015) IMO Resolution MEPC.184(59) – 2009 Guidelines for Exhaust Gas Cleaning Systems, IMO NOx Technical Code (2008) - Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines
RATINGS	Power supply: 115V/ 230V, 50/ 60Hz, 100W, Operating temperature range: -25C to +55C, Sample temperature: up to +350C, Enclosure: Aluminium alloy casting, IP65, Ranges: NO 0-2000 ppm, NO2 0-200 ppm, CO2 0-10%, 0-16%, SO2 0-100 ppm, 0-1750 ppm

Certificate No.	15/ 00083(E1)
Issue Date	31 July 2018
Expiry Date	15 September 2020
Sheet	1 of 2



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Marine Technology & Engineering Services, London or Southampton
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**OPERATIONAL
LIMITATIONS**

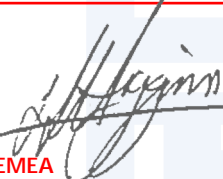

The P2000 operates using an infrared radiation measurement technique. According to appendix 8, paragraph 2.1.1 of the NOx Technical Code the P2000 is subjected to the approval of the Administration as alternative analyser for Nitrogen Oxides (NOx) analysis.

"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 15/ 00083(E1) and its supplementary Type Approval Terms and Conditions form part of this Certificate

All other details remain as the previous Certificate No. 15/ 00083 to which this extension should be attached.

Certificate No. 15/ 00083(E1)
Issue Date 31 July 2018
Expiry Date 15 September 2020
Sheet 2 of 2


Matthew Higgins
Sothampton Office
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LR031.1.2016.06

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