Lloyd's Register EMEA (Southampton)

Marine & Offshore UK&I

Lloyd's Register Global Technology Centre, Southampte Boldrewood Innovation Campus, Burgess Road, Southampton, SO16 7QF

Telephone +4**3**30 414 1000

Email tass@lr.org

Page 1 of 1 Document number 13/00036(E2) Issue number 1

DESIGN APPRAISAL DOCUMENT

Date	Quote this reference on all future communications
06 December 2018	SOUTSO/ENG/TA/ MR/ WP33242171

LLOYD'S REGISTER TYPE APPROVAL SYSTEM, 20 17.

Issued to: COBALT BLUE LTD

for: FLEXIBLE HOSES FOR CO2 FIRE FIGHTING SYSTEMS TYPE APPROVAL CERTIFICATE No. 13/00036 (E2)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System, 2017 and this Design Appraisal Document forms part of the Certificate.

1. APPROVAL DOCUMENTATION

Application Checklist	30-May-2018
Production Quality Assessment Form; PRJ11078953/1	10-Jul-2018

2. TEST REPORTS

Burst test report ½ inch 2SN	08-02-2013
DNV Type Approval Certificate P -13373	11-03-2010
Alfagoma certificate of authorisation AUT 07/2012	20-11-2012
DNV Authorisation as hose assembler	17-12-2012
Alfagoma hose guidelines	01-04-2008
LR Type Approval C ertificate no. 07/00065(E2)	18-09-2012

3. CONDITION OF APPROVAL ;

- 3.1. Hoses are manufactured by ALFAGOMMA Hydraulic SPA.
- 3.2 End fittings m aterial of construction certificate should be 3.1 approved type.
- 3.3. It is the responsibility of the man ufacturer to maintain the applicable latest tests standard/code of the flexible hoses.

4. PERIODIC ASSESSMENT;

4.1. Production Quality Assessment (PQA) will require to be conducted on or around 30 months from the date of issue stated on the certificate.

Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not meanly carpiproval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the Lloyd's Register Type Approval System Procedure.

M.H.M.Rila,

Senior Specialist, Piping and Pressure Systems Engineering Systems UK&I Technical Support Office, Marine & Offshore Lloyd's Register EMEA

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevaloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.