DNV·GL

Certificate No:
TAF00000SY

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Jet Fire Protection

with type designation(s)
Jet Fire Pro XP Enclosure

Issued to
ADVANCED INDUSTRIAL SOLUTIONS LIMITED
North Shields, United Kingdom

is found to comply with
DNV GL offshore standards

Application :

Approved for use as jet fire protection of valves and flanges.

Issued at **Høvik** on **2018-02-23**
This Certificate is valid until **2023-02-22**.
DNV GL local station: **Newcastle-upon-Tyne**

Approval Engineer: **Helge Bjørnarå**

for **DNV GL**

Mårten Schei-Nilsson
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description
Jet Fire Pro XP Enclosure
A valve or flange protection box consisting of two halves held together with 5 latches on either side with max intervals 150 mm. The box is made of 1 mm perforated stainless steel sheet. The box may be cuboidial or cylindrical (400 mm wide and 400 mm deep).

The box is to be insulated with at least 5 mm Pitt-Char XP on the inside and 15 mm Pitt-Char XP on the outside. The outside layer is reinforced mid-depth with Pitt-Char FM mesh with 150 mm overlap.

Application/Limitation
Approved for use as jet fire protection of valves and flanges:
[Type of fire / Type of application / Critical temperature rise (°C) / Period of resistance (minutes)]

Filling ratio "Volume of valve or flange" / "Volume of box" not to exceed 22 %.
Ratio "Surface area of box" / "Mass of valve or flange" to be minimum 0,087 m^2/kg.

The effect of unprotected valve spindles penetration the protection box is not accounted for and must be evaluated case-by-case.

Any project specific design solutions, arrived at on basis of this certificate, are to be further validated by the project specific approvals, carried out by the appointed verifying authority for each project, in each case at the detailed engineering stage.

The intumescent coating is not defined as non-combustible. The protection box should not be used in accommodation or in enclosed areas.

The approval refers only to the fire resistance properties of the system.

Each product shall be supplied with its manual for application and maintenance.

Type Approval documentation
Certification in accordance with Class Programme DNVGL-CP-0338, October 2017.

Test report No. 16678, Rev.3 dated 25 June 2015 from DNVGL Spadeadam, UK.

Tests carried out
Tested according to ISO 22899-1.

Marking of product
The product or packing shall be marked with the name of the manufacturer, type designation and fire technical rating, as applicable.

Periodical assessment
DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.