

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMT0000058
Revision No:
1

This is to certify:

That the Manufacturer
Chief Fluid Systems Pty Ltd.
Sydney NSW, Australia

is approved for the
Assembling of type approved hoses and couplings

The approval is granted on condition that
DNV GL class programme DNVGL-CP-0183 – Type approval – Flexible hoses

are complied with in all respect

Hose	Size
1SN & 2SN	DN 5, 6, 8, 10, 12, 16, 19, 25, 31, 38 & 51
4SP	DN 10, 12, 16, 19, 25 & 31
4SH	DN 19, 25, 31, 38 & 51
R13	DN 31, 38 & 51

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

Issued at **Høvik** on **2017-10-25**

for **DNV GL**

This Certificate is valid until **2020-04-26**.

DNV GL local station: **Sydney**

Approval Engineer: **Maheshraja Venkatesan**

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Marianne Spæren Marveng
Head of Section



Job Id: **263.11-007122-2**
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Approval Scope

Chief Fluid Systems Pty Ltd is approved as a hose assembling company to deliver type approved hose assemblies (hose & coupling types as described in this certificate) to DNV GL vessels.

Products

Holder of this certificate is authorized to assemble hoses and end fittings as specified in below type approval certificates (TAC):

Nominal size (DN)	Maximum allowable working pressure (bar)				
	TAC P-14991 valid until 2018-06-30		TAC P-14992 valid until 2018-06-30		
	1 SN	2SN	4SP	4SH	R13
5	250	415	-	-	-
6	225	400	-	-	-
8	215	350	-	-	-
10	180	330	445	-	-
12	160	275	415	-	-
16	130	250	350	-	-
19	105	215	350	420	-
25	88	165	280	380	-
31	63	125	210	325	345
38	50	90	-	290	345
51	40	80	-	250	345

Limitation

The approval is valid by considering all conditions in relevant type approval certificates during the validity of current certificate as well as the relevant type approval certificates & authorization letter.

Each hose assembly is to be hydraulic pressure tested to 1.5 times the maximum working pressure before delivery and to be delivered from the certificate holder with pressure test report with reference to the type approval certificate and this certificate.

Approval documentation

- Authorization letter from PH Industrie-Hydraulik GmbH & Co. KG. dated 2016-07-25
- Quality system (ISO 9001:2008) certificate 2015-3247 valid till 2018-02-19
- Crimp chart from PH Industrie-Hydraulik GmbH & Co. KG, Edition February 2013
- Description about Hose crimping machine used
- Chief Training Modules matrix, list of Personnel & designated person responsible for the hose assembling (along with qualification records)
- Description/ flowchart showing production/ testing process of Chief Fluid Systems
- Description of hose pressure test bench Model SM2000
- Reference to testing procedure & testing instructions as referenced in 'CHIEF testing standards'
- Burst test report witnessed by DNV GL dated 2017-01-24 & 2017-02-21
- Burst test report reviewed by DNV GL dated 2017-04-13
- Burst test report witnessed by DNV GL dated 2017-08-18

Certificate Retention Survey

For retention of the certificate, a DNV GL surveyor shall perform a survey before the expiry date of this certificate to verify that the conditions of approval are complied with. Any alteration to the approved condition during the period of validity, e.g. method of manufacture, maximum dimensions or conditions of supply, is to be reported to the Society. In addition, burst tests on every 3rd size of each type shall be witnessed by DNV GL surveyor.