

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:****That the Manufacturer****DIM Industrieservice Nord GmbH  
Stralsund Mecklenburg-Vorpommern, Germany**is approved for the  
**Assembling of type approved hoses and couplings**The approval is granted on condition that  
**DNV GL rules for classification – Ships  
DNV GL class programme DNVGL-CP-0183 – Type approval – Flexible hoses**

are complied with in all respect

<b>Hose</b>	<b>Non-metallic flame resistant hydraulic hose assemblies</b>
<b>Type</b>	<b>Refer to page 2 of this certificate</b>
<b>Size</b>	<b>DN 6 - 51</b>
<b>Standard</b>	<b>Reference is made to the applicable Type Approval Certificate TAP000002W</b>

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

This Certificate is valid until **2019-10-18**.Issued at **Hamburg** on **2016-10-19**DNV GL local station: **Rostock**Approval Engineer: **Martin Zeller**for **DNV GL**

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**Olaf Drews**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in production facilities and methods may render this Certificate invalid.

## Approval basis

The hose assemblies of type 'ALFAGOMMA' are type approved according to the specifications/technical data mentioned in Type Approval Certificates:

TAP000002W, TAP000000R

The selection of the hose assemblies for the corresponding application and the right installation are to be in accordance with the specifications of the manufacturer.

## Description

Reference is made to the applicable Type Approval Certificates as listed above.

Hose type:	Flexor 1SN/1AT-HF	(Dunlop Hiflex: Greenline Plus 122)
	Flexor 2SN/2AT-HF	(Dunlop Hiflex: Greenline Plus 222)
	1SN MINETUFF	(Dunlop Hiflex: 1SN H1-TUFF)
	2SN MINETUFF	(Dunlop Hiflex: 2SN H1-TUFF)
	1 SN HF	(Dunlop Hiflex: Greenline Plus 122)
	Flexor 4SH MSHA	(Dunlop Hiflex: POWERTRAK 790)
	AT6K/R15	(Dunlop Hiflex: POWERTRAK 420)

Nominal Size: DN 6 up to DN 51

## Documents

- Audit report no.: A0328847 dated on 2016-09-14
- Checklist for renewal of approved manufacturers 20.96a dated on 2016-09-07

## Marking

For identification purposes, each hose assembly, hose and fitting respectively shall be at least marked with:  
- Manufacturer's name or trade mark – DN – PN – ID No. –

## Production testing

Each manufactured hose assembly is to be subjected to a hydraulic pressure test in accordance to the purchaser specifications, at least in accordance with the respective DNV GL Rules as follows:

DNV GL	1.5 x Maximum Allowable Working Pressure (MAWP)
DNV	1.5 x MAWP
GL	2.0 x MAWP

## Remark

For determination of the maximum working pressure of the hose assembly both, the maximum operating pressures of the hose end fitting and hose type, as specified in the Alfagomma catalogue, is be considered.

## Product certification

In case of orders according to GL Rules, a DNV GL-product certificate of the manufactured and pressure tested hose assemblies issued by DNV GL is mandatory.

## Certificate Retention Survey

The approval is valid for three years. To maintain the approved status, the manufacturer must be reinspected every three years. Application for renewal should be made not later than three months before the expiry date of the certificate.

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.  
A re-inspection and / or re-testing may be required when deemed necessary by the Society.