DNV·GL

Certificate No:
TAK00001HH

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Synthetic Fibre Ropes

with type designation(s)
AmSteel®-Blue

Issued to
Samson Rope Technologies, Inc.
FERNDALE, WA, USA

is found to comply with
DNV GL class programme DNVGL-CP-0100 – Type approval – Synthetic fibre ropes for towing, mooring and anchoring
DNV GL rules for classification – Ships
DNV GL rules for classification – High speed and light craft

Application :

Mooring and Towing of Ships and HSLCs.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2019-02-07**
This Certificate is valid until **2024-02-06**.
DNV GL local station: **Seattle**

Approval Engineer: **Gisle Hersvik**

for **DNV GL**

Rikard Törnqvist
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.

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

AmSteel®-Blue; 12-strand braided HMPE rope with Samthane coating.
- Fibre: Dyneema® SK78 high-modulus polyethylene fibre [DSM Dyneema]
- Specific gravity : 0,98 (floats in seawater)

ROPE CHARACTERISTICS				
Diameter, mm	**Nominal Linear Mass, kg/100m**	**g/m**	**Minimum Breaking Load (MBL), kg**	**kN**
5	1.5	15	2,400	24
6	2.4	24	3,900	38
8	4.0	40	6,200	61
9	5.4	54	8,900	87
11	6.7	67	10,800	106
12	9.5	95	15,400	151
14	11.8	118	18,400	181
16	15.2	152	23,900	235
18	19.8	198	29,200	286
20	25.3	253	37,200	365
22	29.2	292	41,200	404
24	32.4	324	49,400	485
26	40.9	409	59,400	583
28	47.5	475	67,100	658
30	53.9	539	74,800	734
32	62.2	622	83,500	819
34	67.0	670	93,000	912
36	76.9	769	103,000	1,010
38	85.7	857	115,000	1,128
40	97.0	970	128,000	1,256
42	106.0	1,060	139,000	1,363
44	117.0	1,170	152,000	1,491
48	129.0	1,290	173,000	1,697
50	141.0	1,410	190,000	1,863
52	162.0	1,620	207,000	2,031
56	173.0	1,730	244,000	2,394
60	220.0	2,200	267,000	2,619
64	248.0	2,480	300,000	2,943
68	278.0	2,780	333,000	3,267
72	307.0	3,070	377,000	3,698
76	339.0	3,390	417,000	4,089
80	357.0	3,570	457,000	4,482
82	394.0	3,940	508,000	4,982
86	439.0	4,390	531,000	5,207

Fibre ropes are to be delivered with a linear mass within ± 5 % of the nominal linear mass given in the table.

Application/Limitation

The approval covers ropes with diameter from 5 mm to and including 86 mm.

Scope of assessment is limited to evaluation of net mass per metre, type of lay and static strength.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**, and according to:

- ISO 2307:2010

Marking of product

Product shall be marked with *manufacturer's name*; **Samson Rope Technologies, Inc., Ferndale, USA**, *type designation, weight* and *length*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Approval Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment to be performed after 2 and 3.5 years (Certificate Retention) and at renewal after 5 years (Certificate Renewal).

The main elements of the Periodical Assessment are to:

- Ensure that **Type Approval documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Approval documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Approval Certificate.

END OF CERTIFICATE