

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Lifting Gear / Rope Sheave**with type designation(s)
1050/920/180x136

Issued to

Röchling Industrial Xanten GmbH
Xanten, Nordrhein-Westfalen, Germany

is found to comply with

DNV GL standard DNVGL-ST-0377 – Standard for shipboard lifting appliances**DNV GL standard DNVGL-ST-0378 – Standard for offshore and platform lifting appliances****Application :****This Type Approval entitles the manufacturer to issue Works Certificates for the individual products.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Hamburg** on **2019-09-16**This Certificate is valid until **2024-09-15**.for **DNV GL**DNV GL local station: **Essen**Approval Engineer: **Heiko Herrmann**

Jörg Kallies
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.



Job Id: **262.1-032194-1**
Certificate No: **TAS000027X**

Product description

Wire rope sheaves made from cast polyamide (PA6c)

Type no.	Dimensions	Liebherr ID No.	RIX-article code	Drawing No.
1	1050/920/180x136	13137964 rev.01	S061110322	SR130-024

Application/Limitation

Basic Data:

Type no.	Nominal diameter	Maximum line pull	Rope diameter	Wrap angle	Maximum deflection	Design temperature
[-]	[mm]	[kN]	[mm]	[°]	[°]	[°C]
1	920	385	42	180	5	-20 to 45

Material: 'Lamigamid 310' acc. to DNVGL Approval of Manufacturer (AoM) no. AMMM00002CN

Working Conditions: Superposition of worst case conditions cannot be assessed in this context. The operator shall observe impairing effects according to manufacturer recommendations, e.g. humidity, deflection, temperature or rope speed.

Maintenance: Instructions for inspection and maintenance of plastic rope sheaves as well as removal criteria shall be provided by the manufacturer.

Bushing/bearing: Outer dimensions are evaluated for undersize, bearings are checked for plausibility. Sufficient monitoring and maintenance shall be provided.

Pitch Diameter: Various crane types place demands on the diameter ratio of sheave to rope. These shall be taken into account during crane design and approval.

Type Approval documentation

Marking of product

Each sheave shall be permanently marked with a unique serial number and DNVGL Type Approval ID. If sufficient traceability is provided by the documentation on board the vessel, TA ID may be waived.

Periodical assessment

A production site with valid Approval of Manufacturer (AoM) certificate for material in question is exempted from the obligation concerning retention and renewal assessments.

End of Certificate