



08/2014

Marine Division of

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SERVICE CENTER HAMBURG**

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Worldwide Marine Service

Qualified by more than 400 years of experience

The roots of our ropemaking tradition in Memmingen can be traced back to the year 1579; since this time PFEIFER has remained faithful to rope. A solid trade has been passed down from generation to generation. With Gerhard Pfeifer, the twelfth generation of the family leads the company. Under his leadership the company developed into an international company group with numerous subsidiaries worldwide. Today, a modern appreciation of management marks the way that the company is run. What has remained are the traditional values as cornerstones of entrepreneurial actions.

Certified quality

The quality management system of the PFEIFER headquarters in Memmingen and of their subsidiaries is certified acc. to DIN EN ISO 9001 and is subject to a matrix certification.

Since December 2011 we in the headquarters in Memmingen have been certified acc. to OHSAS 18001. Thus, permanent and constant work and health protection of all staff is ensured.

The effectiveness of both management systems and the conformity to the regulations is checked in regular periods by the TÜV Management Service GmbH.



Gerhard Pfeifer,
President of PFEIFER group



The PFEIFER group is one of the leading companies for wire rope, lifting and construction equipment in Europe. The headquarters are located in Memmingen, Germany and distributes through several service centres and subsidiaries in Europe, North America and Asia.

Our strength is your advantage



+ Experience

Ropes have been our business for generations. Leading crane and elevator manufacturers, the shipping, construction and automobile industry, port and terminal operators as well as rope users from many other industries are our customers. They all trust our world-wide excellent reputation in fast and efficient service, reliability, quality and experience.

+ Product range

Hoisting and securing is our business! We offer high performance steel wire ropes, grommets, chains, shackles, slings and chain hoists up to highest capacities.

+ Product availability

We keep a maximum of high performance wire ropes, lashing and lifting equipment in stock, ready for immediate dispatch to meet your most demanding requirements. And in order to bring our German high performance wire ropes for marine application closer to your cranes we opened a storage location in Singapore.

+ Service

World wide sales network consisting of qualified sales personnel assisted by highly competent application engineers. 24 hours rigging and maintenance service.

Content

Hoist Ropes – General information	4
Hoist Ropes for Container Deck Cranes	5–7
Hoist Ropes for Heavy-Lift Deck Cranes	8–10
Hoist Ropes for Bulker Deck Cranes	11
Luffing Ropes for Ship Deck Cranes	12–15
Hoist Ropes for Rescueboat and Lifeboat	16–17
Rope end terminations	18
Grommets and Shackles	19
Approved wire rope quality	20
Measurement devices	21
Rope care – Lubrication	22
Customer consultancy and after sales service	23

Hoist Ropes – General information

Wire Rope Design

Standard construction

6 x 36 IWRC

Warning: Never use a swivel!
Failure may cause serious injury or death!

1



Rotation Resistant

Warning: Never use a swivel!
Failure may cause serious injury or death!

2



High performance rotation resistant

Regular Lay

3



Lang's Lay

4



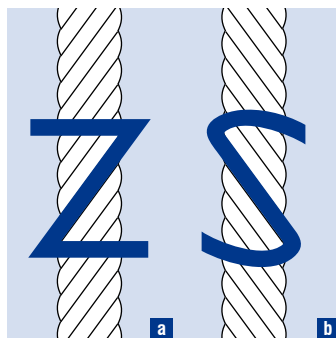
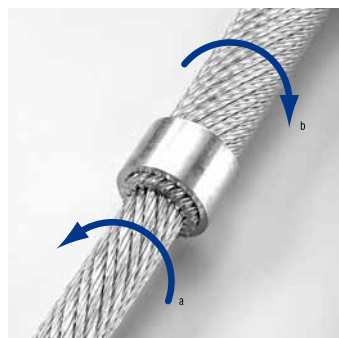
Plastic Coated Core

5



Rotational properties

Direction of lay



- Different levels of torque and rotation when loaded, depending on the crane requirements:
- Rotation resistant: 2
- Suitable for standard spooling applications
- High performance rotation resistant: 3 4 5
- when the lowest level of torque is required – on request with plastic coated core 5

- "Z" or "S" referring to the direction of the helix of the outer strands
- "Right hand" a for left drum
- "Left hand" b for right drum

Type of lay

1. Regular/cross: more resistant to pressure and deformation 2 3
2. Lang's lay: improved abrasion resistant properties on multiple rope spooling 4 5



Container Deck Cranes



Heavy-Lift Deck Cranes



Bulker Deck Cranes



Ship Deck Cranes



Rescueboat and Lifeboat

Product safety – Protect yourself and others!

Please consult us on product safety matters – working with wires requires special cause!



Always inspect wire rope before use:

- wear
- damages
- deformations
- corrosion



Never use wire rope which is:

- damaged
- worn-out
- deformed
- improperly maintained
- not suitable



WARNING!

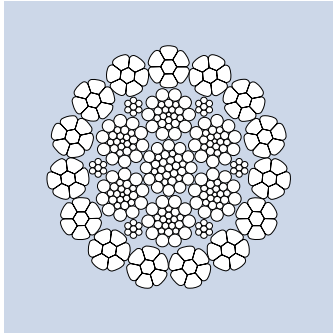
Wire rope will fail if worn-out, shock loaded, over-loaded, misused, damaged, improperly maintained or abused.



If in doubt about the wire rope, the wire rope application, the wire rope end termination or anything else regarding the wire rope, please contact us or the machine manufacturer.



Hoist Ropes for Container Deck Cranes



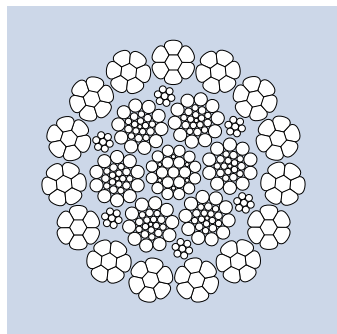
Hoist rope, high performance rotation resistant PD B 50

average fill factor	0,7145
average spinning loss factor 1770 N/mm ²	0,8350
average spinning loss factor 1960 N/mm ²	0,8350
average spinning loss factor 2160 N/mm ²	0,8150
core	steel core (IWRC or WSC)
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	105
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
25	301,0	512,0	569,0	611,0
26	325,0	554,0	616,0	661,0
28	383,0	652,0	725,0	778,0
30	434,0	740,0	822,0	883,0
32	495,0	844,0	937,0	1006,0
34	559,0	952,0	1058,0	1136,0
36	629,0	1072,0	1191,0	1279,0
38	701,0	1194,0	1327,0	1425,0
40	777,0	1323,0	1471,0	1579,0
42	856,0	1459,0	1621,0	1741,0

Other rope diameters and constructions on enquiry.

Hoist Ropes for Container Deck Cranes



Hoist rope, high performance rotation resistant PD B 55

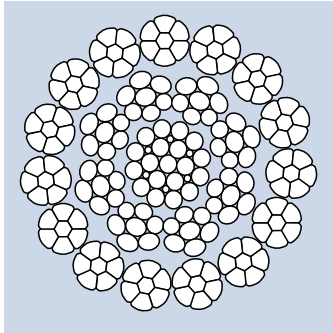
average fill factor	0,7145
average spinning loss factor 1770 N/mm ²	0,8350
average spinning loss factor 1960 N/mm ²	0,8350
average spinning loss factor 2160 N/mm ²	0,8150
core	steel core (IWRC or WSC)
lay type	langs lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	105
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
25	301,0	512,0	569,0	611,0
26	325,0	554,0	616,0	661,0
27	350,0	596,0	662,0	711,0
28	383,0	652,0	725,0	778,0
29	406,0	692,0	769,0	825,0
30	434,0	740,0	822,0	883,0
31	461,0	786,0	874,0	938,0
32	495,0	844,0	937,0	1006,0
33	525,0	895,0	995,0	1068,0
34	559,0	952,0	1058,0	1136,0
35	595,0	1013,0	1126,0	1209,0
36	629,0	1072,0	1191,0	1279,0
37	665,0	1132,0	1258,0	1351,0
38	701,0	1194,0	1327,0	1425,0
39	738,0	1258,0	1398,0	1501,0
40	777,0	1323,0	1471,0	1579,0
41	816,0	1390,0	1545,0	1659,0
42	856,0	1459,0	1621,0	1741,0

Other rope diameters and constructions on enquiry.



Hoist Ropes for Container Deck Cranes



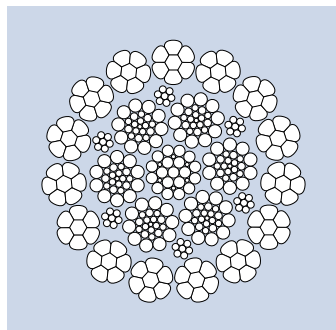
Hoist rope, high performance rotation resistant PD C55

average fill factor	0,7145
average spinning loss factor	0,8350
core	steel core compacted
lay type	langs lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
number of load bearing wires within the outer strands	105
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F_{min} kN	
		1770 N/mm ²	1960 N/mm ²
34	538,0	859,0	1058,0
36	635,0	1072,0	1191,0
40	783,0	1323,0	1471,0

Other rope diameters and constructions on enquiry.

Hoist Ropes for Heavy-Lift Deck Cranes



Hoist rope, high performance rotation resistant PD B 55

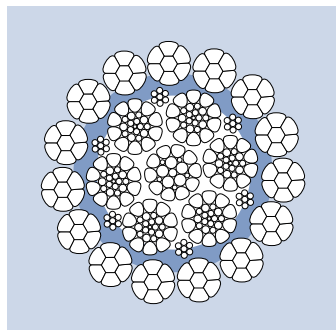
average fill factor	0,7145
average spinning loss factor 1770 N/mm ²	0,8350
average spinning loss factor 1960 N/mm ²	0,8350
average spinning loss factor 2160 N/mm ²	0,8150
core	steel core (IWRC or WSC)
lay type	langs lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	105
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
40	777,0	1323,0	1471,0	1579,0
42	856,0	1459,0	1621,0	1741,0
44	940,0	1601,0	1780,0	1910,0
48	1118,0	1906,0	2117,0	2273,0
54	1415,0	2412,0	2681,0	2878,0
60	1747,0	2986,0	3307,0	3557,0
66	2114,0	3613,0	4000,0	4303,0
70	2379,0	4064,0	4500,0	4840,0
72	2516,0	4299,0	4761,0	
76	2804,0	4790,0	5305,0	

Other rope diameters and constructions on enquiry.



Hoist Ropes for Heavy-Lift Deck Cranes



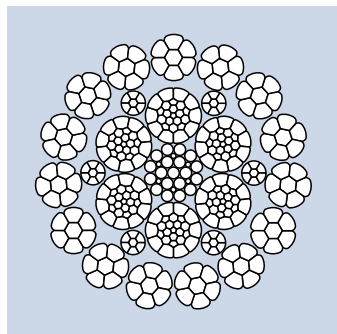
Hoist rope, high performance rotation resistant PD B63

average fill factor	0,7357
average spinning loss factor 1770 N/mm ²	0,8450
average spinning loss factor 1960 N/mm ²	0,8450
average spinning loss factor 2160 N/mm ²	0,8250
core	full plastic impregnation of the compacted steel core to further extend fatigue life, improve structural stability
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	up to 49 mm 105
rope category number RCN	from 49mm 255
	up to 49mm 23-2
	from 49mm 27

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
40	799,0	1377,0	1530,0	1643,0
42	880,0	1518,0	1687,0	1812,0
44	966,0	1666,0	1851,0	1989,0
48	1149,0	1983,0	2203,0	2366,0
54	1455,0	2510,0	2788,0	2995,0
60	1796,0	3106,0	3440,0	3701,0
66	2173,0	3759,0	4162,0	4478,0
70	2446,0	4228,0	4681,0	5037,0

Other rope diameters and constructions on enquiry.

Hoist Ropes for Heavy-Lift Deck Cranes



Hoist rope, high performance rotation resistant PD B 65

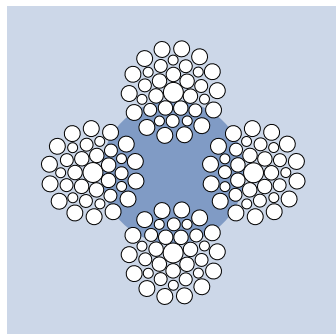
average fill factor	0,7357
average spinning loss factor 1770 N/mm ²	0,8450
average spinning loss factor 1960 N/mm ²	0,8450
average spinning loss factor 2160 N/mm ²	0,8250
core	steel core compacted
lay type	langs lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	up to 49 mm 105
rope category number RCN	from 49mm 255
	up to 49mm 23-2
	from 49mm 27

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
40	799,0	1377,0	1530,0	1643,0
42	880,0	1518,0	1687,0	1812,0
44	966,0	1666,0	1851,0	1989,0
48	1149,0	1983,0	2203,0	2366,0
54	1455,0	2510,0	2788,0	2995,0
60	1796,0	3106,0	3440,0	3701,0
66	2173,0	3759,0	4162,0	4478,0
70	2446,0	4228,0	4681,0	5037,0

Other rope diameters and constructions on enquiry.



Hoist Ropes for Bulker Deck Cranes

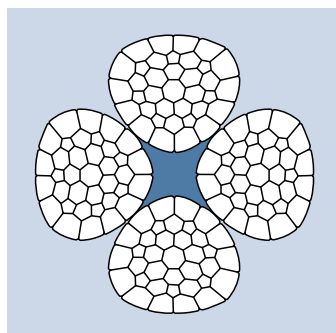


Hoist rope – rotation resistant P 1104

average fill factor	0,540
average spinning loss factor	0,840
core	fibre core (NFC or SFC)
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	not compacted
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	144
rope category number RCN	06

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F_{min} kN 1960 N/mm ²
32	396,0	723,0
34	429,0	805,0

Other rope diameters and constructions on enquiry.



Hoist rope – rotation resistant PD Super 4

average fill factor	0,7208
average spinning loss factor 1770 N/mm ²	0,8400
average spinning loss factor 1960 N/mm ²	0,8400
average spinning loss factor 2160 N/mm ²	0,8200
core	fibre core (NFC or SFC)
lay type	ordinary lay
lay direction	right hand
compacting	strands and rope compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	144
rope category number RCN	22

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F_{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
30	442,0	762,0	847,0	909,0
32	498,0	859,0	955,0	1026,0

Other rope diameters and constructions on enquiry.

The pictures of the cross section of the rope are as seen and show the basic construction of the rope

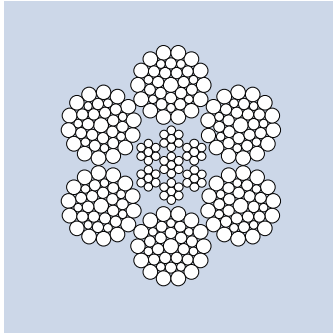
Characteristics of the construction may vary by diameter

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Luffing Ropes for Ship Deck Cranes

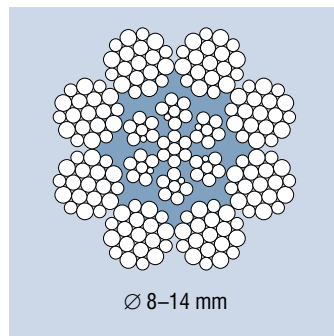
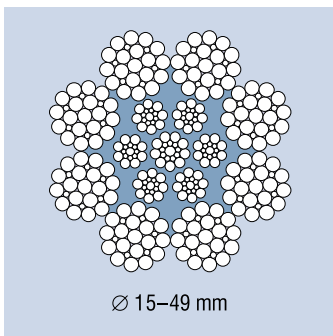


Round strand rope 6 x 36 Warrington-Seale WC

average fill factor	0,586
core	steel core (IWRC or WSC)
lay type	ordinary lay
lay direction	right hand
compacting	not compacted
finish	choice of bright or galvanised
number of load bearing wires within the outer strands	216
rope category number RCN	09

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min}		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
24	236,0	363,0	402,0	443,0
26	276,0	426,0	472,0	520,0
28	321,0	494,0	547,0	603,0
32	419,0	645,0	715,0	787,0
36	530,0	817,0	904,0	997,0

Other rope diameters and constructions on enquiry.



High Performance Rope PD X43

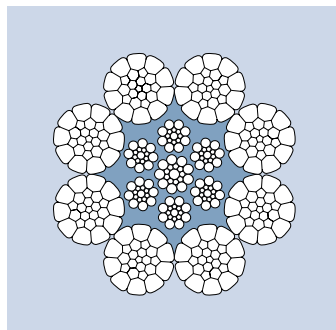
average fill factor	0,6226
average spinning loss factor	0,8450
core	full plastic impregnation of the steel core to further extend fatigue life, improve structural stability
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	not compacted
finish	choice of bright or galvanised
rope diameter tolerance	0/+ 4,5%
number of load bearing wires within the outer strands	152
rope category number RCN	06

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min}	
		1770 N/mm ²	1960 N/mm ²
24	261,0	422,0	469,0
26	307,0	497,0	552,0
28	358,0	580,0	645,0
30	409,0	663,0	736,0
32	459,0	745,0	827,0
34	528,0	855,0	951,0
36	588,0	953,0	1058,0
38	660,0	1069,0	1188,0
40	728,0	1180,0	1311,0

Other rope diameters and constructions on enquiry.



Luffing Ropes for Ship Deck Cranes



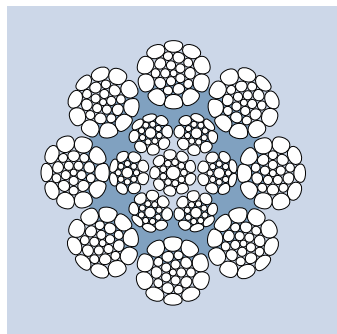
High Performance Rope PD X53

average fill factor	0,675
average spinning loss factor 1770 N/mm ²	0,850
average spinning loss factor 1960 N/mm ²	0,850
average spinning loss factor 2160 N/mm ²	0,840
core	full plastic impregnation of the steel core to further extend fatigue life, improve structural stability
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0 / + 4,5%
number of load bearing wires within the outer strands	up to 13 mm 152
rope category number RCN	from 14 mm 208
	up to 14 mm 152
	from 9 mm 200

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
24	272,0	459,0	509,0	554,0
26	319,0	539,0	597,0	650,0
28	370,0	626,0	693,0	754,0
30	425,0	718,0	795,0	866,0
32	487,0	823,0	911,0	992,0
34	549,0	929,0	1030,0	1121,0
36	616,0	1041,0	1153,0	1256,0
38	686,0	1168,0	1298,0	1413,0
40	761,0	1285,0	1424,0	1551,0
42	838,0	1418,0	1574,0	1713,0

Other rope diameters and constructions on enquiry.

Luffing Ropes for Ship Deck Cranes



High Performance Rope P 929

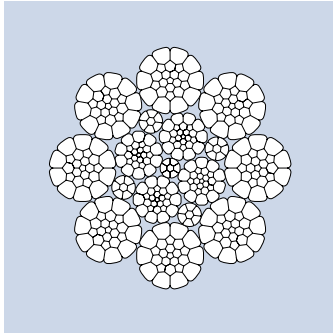
average fill factor	0,660
average spinning loss factor	0,852
core	full plastic impregnation of the steel core to further extend fatigue life, improve structural stability
lay type	choice of regular/ordinary lay or lang's lay
lay direction	choice of right hand or left hand
compacting	compacted – excellent resistance to crushing and abrasion
finish	choice of bright or galvanised
rope diameter tolerance	+2%/+4%
number of load bearing wires within the outer strands	208
rope category number RCN	09

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min} kN	
		1960 N/mm ²	2160 N/mm ²
24	269,0	516,0	560,0
26	315,0	606,0	657,0
28	365,0	701,0	761,0
30	412,0	805,0	874,0
32	472,0	917,0	995,0
34	532,0	1035,0	1124,0
36	597,0	1161,0	1260,0
38	665,0	1293,0	1403,0
40	737,0	1433,0	1555,0
42	813,0	1580,0	1715,0

Other rope diameters and constructions on enquiry.



Luffing Ropes for Ship Deck Cranes



High Performance Rope PD H 40

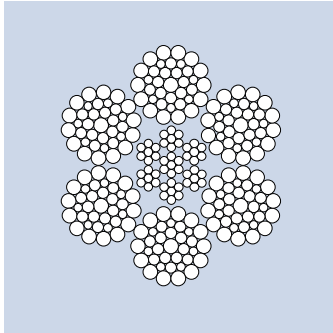
average fill factor	0,7403
average spinning loss factor	0,8400
core	steel core compacted
lay type	ordinary lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	0/+4%
number of load bearing wires within the outer strands	up to 15 mm 152
rope category number RCN	from 6 mm 152
	up to 6 mm 02
	from 6 mm 04

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F_{min} kN		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
24	287,0	496,0	550,0	606,0
25	310,0	534,0	593,0	653,0
26	333,0	574,0	638,0	701,0
27	362,0	624,0	694,0	763,0
28	390,0	672,0	747,0	822,0
29	426,0	735,0	816,0	898,0
30	449,0	774,0	860,0	946,0
31	482,0	832,0	925,0	1017,0
32	511,0	881,0	979,0	1078,0
33	545,0	940,0	1045,0	1149,0
34	582,0	1004,0	1116,0	1227,0
35	609,0	1050,0	1167,0	1284,0
36	650,0	1121,0	1246,0	1371,0
37	693,0	1194,0	1327,0	1460,0
38	738,0	1273,0	1415,0	1556,0
39	767,0	1322,0	1469,0	1616,0
40	797,0	1374,0	1527,0	1680,0
41	841,0	1453,0	1609,0	1773,0
42	893,0	1540,0	1711,0	1882,0

Other rope diameters and constructions on enquiry.



Hoist Ropes for Rescueboat and Lifeboat

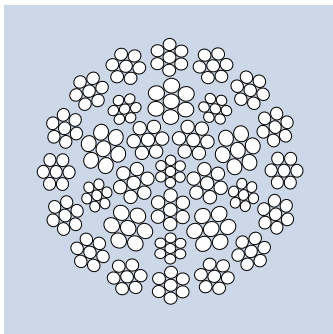


Round strand rope 6 x 36 Warrington-Seale WC

average fill factor	0,586
core	steel core (IWRC or WSC)
lay type	ordinary lay
lay direction	right hand
compacting	not compacted
finish	choice of bright or galvanised
number of load bearing wires within the outer strands	216
rope category number RCN	09

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min}		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
10	40,9	63,0	69,8	76,9
12	58,9	90,7	100,0	111,0
13	69,1	106,0	118,0	130,0
14	80,2	124,0	137,0	151,0
16	105,0	161,0	179,0	197,0
18	133,0	204,0	226,0	249,0

Other rope diameters and constructions on enquiry.



Hoist rope, high performance rotation resistant P 803

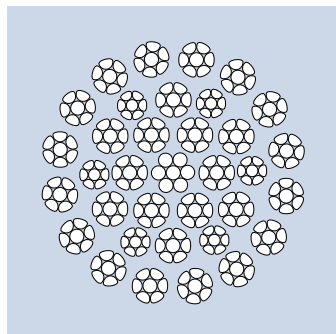
average fill factor	0,615
average spinning loss factor	0,780
core	steel core (IWRC or WSC)
lay type	choice of regular/ordinary lay or lang's lay
lay direction	choice of right hand or left hand
compacting	not compacted
finish	choice of bright or galvanised
rope diameter tolerance	0/+5%
number of load bearing wires within the outer strands	112
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F _{min}		
		1770 N/mm ²	1960 N/mm ²	2160 N/mm ²
10	44,0	69,0	77,0	84,0
12	62,0	98,0	109,0	120,0
14	83,0	132,0	146,0	161,0
16	109,0	174,0	193,0	213,0
18	136,0	216,0	239,0	263,0

Other rope diameters and constructions on enquiry.



Hoist Ropes for Rescueboat and Lifeboat



Hoist rope, high performance rotation resistant P 1160

core	steel core compacted
lay type	choice of regular/ordinary lay or langs lay
lay direction	choice of right hand or left hand
compacting	strands compacted – thereby extra wear resistant
finish	choice of bright or galvanised
rope diameter tolerance	+1/+4%
number of load bearing wires within the outer strands	112
rope category number RCN	23-2

Nominal rope Ø mm	Weight approx. kg/100 m	Minimum breaking force F_{min}		
		1770 N/mm ²	kN 1960 N/mm ²	2160 N/mm ²
14	95,9	163,0	180,0	195,0
16	127,0	214,0	237,0	256,0

Other rope diameters and constructions on enquiry.

Rope end terminations – standard or tailor-made

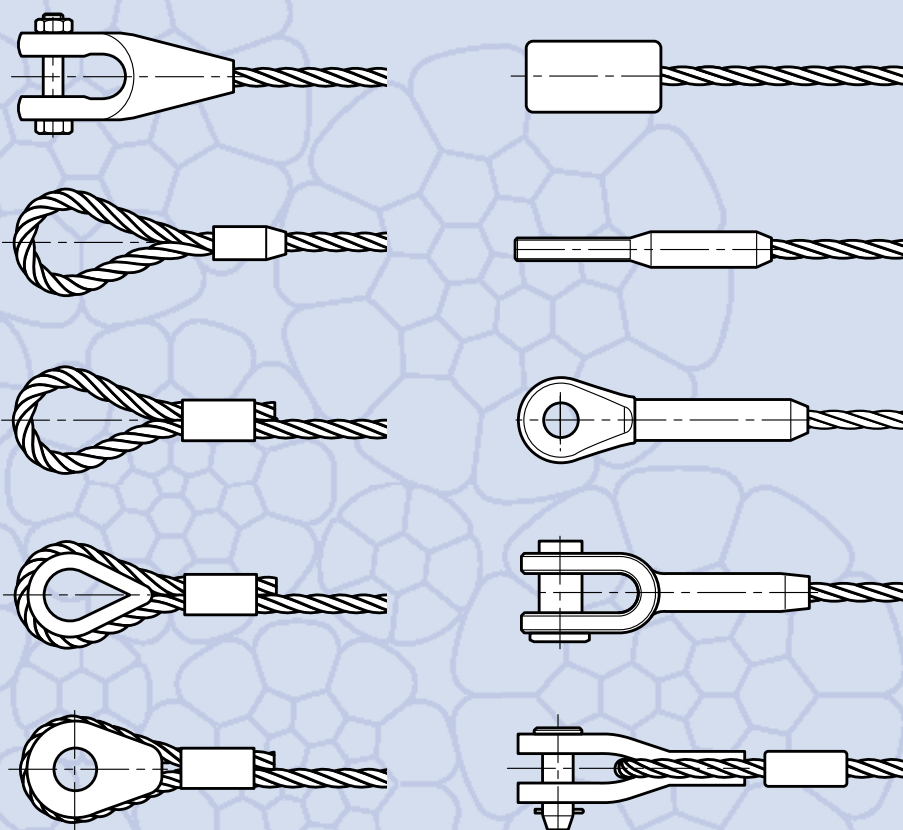


Please note

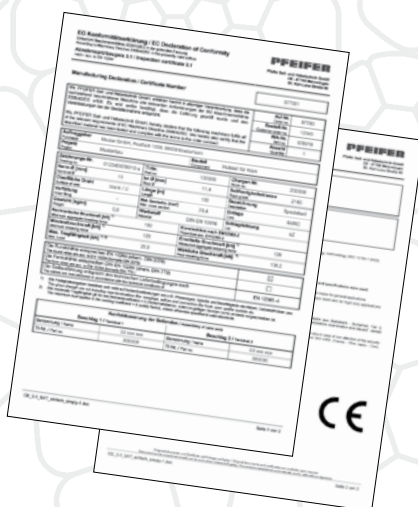
Most rope terminations cause the minimum breaking force of the rope to be reduced. If the remaining minimum breaking force is taken into account you can calculate the necessary rope diameter for your application.

We will be only too pleased to advise you!

- We match the rope to your applications with special fittings
- Here are the most commonly used rope end terminations:



On request we can issue certificates, e.g. work, German Lloyd or manufacturer certificates.



Grommets

- **Maximum lifting capacity and highest reliability** in the rigging and transport industry, loads up to 2000t are possible by using grommets.
- Notable is the ease of use because of the flexibility, even when dealing with large diameters (up to 240mm)
- **We can deliver various constructions:**
 - endless
 - spliced eye
 - depending on your needs – fiber or steel core (fiber core for higher flexibility or steel core for higher lifting capacity)
 - with loop or grommets, also if needed with hook or rings



Load capacities

- **up to 2000 tons vertical rated**
- By combining several grommets, e.g. capacities can be increased by combining several grommets or by other than vertical rating (basket configuration)



Shackles

- **The powerful connection to your heavy loads –** Shackles are, worldwide, indispensable for the professional heavy lift application not only in the Offshore Industry, but also for Marine, Crane and machine manufacturing industry.
- Customers have come to appreciate our high quality and reliability.
- Each of our heavy duty shackles has the Working Load Limit (WLL), CE and the Manufacturer Identification forged into the bow.

Load capacities

- **Up to 85 tons**
High strength standard shackles in rounded or straight form with eye bolt
- **120 to 1500 tons**
High strength heavy load shackles. rounded with eye bolt
- **55 to 2000 tons**
High strength sling shackles with broad bow provide a better supporting surface for your lashing equipment



Approved wire rope quality

- PFEIFER analyses with extensive tests in the central Rope and Material Test Centre all properties of wire ropes and applied materials at the headquarters in Memmingen as well as at further machines at PFEIFER DRAKO in Mülheim/Ruhr. Also necessary tests can be done locally in our global subsidiaries.
- Aware that not only the usual catalog values such as weight per meter and minimum breaking force decide on the performance of wire ropes, all properties of the ropes are determined at PFEIFER in extensive tests.
- Equipped with this knowledge, we will choose the right wire rope for your application and so we optimize the lifetime of your equipment.



Test Facility for Determining Bending Fatigue



Spectral Analysis



Magnaflex Test



Rope Efficiency Test Facility

Further Offers:

Test Facility for Lateral Pressure Resistance

Coat Thickness Measuring

Ultrasonic

Torsion Test Facility

Microscopic Analysis

Elongation and Pull Test Facility

Hardness Test

Notch Impact Test

Dye Penetrate Test

Pull Test Facility
800 kN



Multi Layer Spooling Test Tower

Tension Fatigue Test Facility



Pull Test Facility
6000 kN

*PFEIFER-measurement devices:
by pros – for pros!*



Measurement devices

Based on our long-term practical experience of rope drive inspection, we created the following measurement devices kit. These measurement devices are used by our rope experts for each inspection and thereby approved for general use.



Measurement equipment case 75

Content:

- Rope caliper 75 made of galvanized steel with attached wide jaws
- Recommended for the frequent measuring of ropes in the most common diameters

Rope diameter

5–28 mm, 12–45 mm,
21–60 mm, 5–60 mm
Further combinations of the 5 different groove gauges kits on request

Product advantages

Stellen Sie sich Ihren Messmittelkoffer nach Ihren Bedürfnissen zusammen!



Measurement equipment case 150

Content:

- Rope caliper 150
- Groove gauges „Bolt“ with 5 kits (see picture measurement equipment case 75)

Rope diameter

5–60 mm

Product advantages

The complete measurement equipment case for the frequent professional groove inspection!



Rope caliper 40

- With attached wide jaws

Product advantages

- Recommended for frequent measurement of ropes with the most common diameters up to 40 mm
- Enables quick and easy check – wide jaws reduce measuring faults



Rope caliper 150

- With attached extra wide jaws and adapter plates for big rope diameters

Product advantages

- Recommended for frequent measurement of ropes with diameters up to 150 mm
- Enables quick and easy check – wide jaws reduce measuring faults



Propeller

- Stainless steel

Rope diameter

15 mm, 20 mm, 24 mm
Further sizes on request

Product advantages

Recommended for the frequent check of rope drives with a specific diameter



Ring

- Stainless steel

Rope diameter

5–20 mm, 20–40 mm,
40–60 mm, 60–75 mm

Product advantages

Recommended for the frequent check of rope drives with the most common rope diameters



Rope service – starter kit

Content:

- 2x PFEIFER RL-S Wire rope lubrication Spray can
- 1x Groove-gauge-Kit Worker
- 1x Pair gloves
- 1x Rope caliper 40
- 1x Yard stick
- 1x Steel wire brush

Product advantages

Allows quick and easy control as well as professional care of your wire ropes

Worldwide Marine Service 08/2014

Rope care – Lubrication

When should ropes be relubricated?

Dependent on external influences like climate, operation, dirt etc. the rope has to be relubricated in regular intervals. The condition of the rope has to be checked in order to determine the right period. It is recommended to relubricate the rope before the crane starts with a long term job.

Amount of grease

The amount of grease is dependant upon the rope construction and diameter, but generally less grease in shorter periods is of advantage.

General recommendation:

$$\text{Amount [oz]} = \frac{0.2 \text{ [oz]} \cdot \text{rope length [ft]} \cdot \text{rope diameter [mm]}}{300 \text{ [ft]} \cdot 10 \text{ [mm]}}$$

Drying time

The evaporation of the solvent has to be considered, which depends of the ambient temperature.

What criteria determines the right relubricant?

Tolerance and compatibility with:

- Original lubricants
- Material of sheave blocks

Specifications:

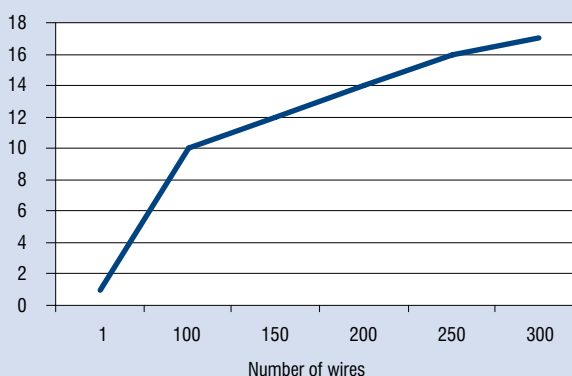
- Penetration
- Applicability
- Flame point
- Viscosity

Does relubrication help prevent corrosion?

Due to the high number of wires and strands the surfaces of a wire rope is much bigger compared to a single rod with the same diameter. The bigger surface makes ropes up to 15 times more vulnerable to corrosion than solid material!

When the grease between the strands gets lost, water can penetrate into the rope and may stay inside. Wind dries the rope externally and the rope can look uncorroded despite internal corrosion, which is not visible from outside. This could potentially cause internal wire breaks and therefore dangerous conditions.

Surface areas multiplication factor



Therefore, we recommend:



PFEIFER Lubricant for wire ropes

Type	Size	Part-Number
RL-S	12 x 600 ml spray can	245066
RL-B	10 l bucket	212406
RL-B	30 l bucket	212405

*Improved lubrication
→ Less friction, higher efficiency,
elongated lifetime*

Customer consultancy and after sales service – rope and spooling analyzation

Rope supply and after sales service from one source

To achieve the best possible performance and product life in your application, the selection of the correct type of rope for the job is a must.

The members of our rope application team in our subsidiaries provide this expertise and are routinely trained in our headquarters in Memmingen. PFEIFER defines a stringent test curriculum for our products. The results of which are stored in our central database. Test data and information about crane specific requirements are provided to our teams around the world seamlessly.

For difficult application problems or short-term trouble shooting our specialist around the world are ready to keep downtimes as short as possible.

We are there for our clients should any problem arise in their application. Inspection and troubleshooting of spooling problems, possible reduction of wear and damage effects as well as improvement of rope lifetime are just some of the benefits our clients gain by working with us.

We do that job on a daily basis – worldwide.



Inspection of a crane hoists by our specialists.



Typical structural damages on ropes in crossover sections of multi-layer winches.

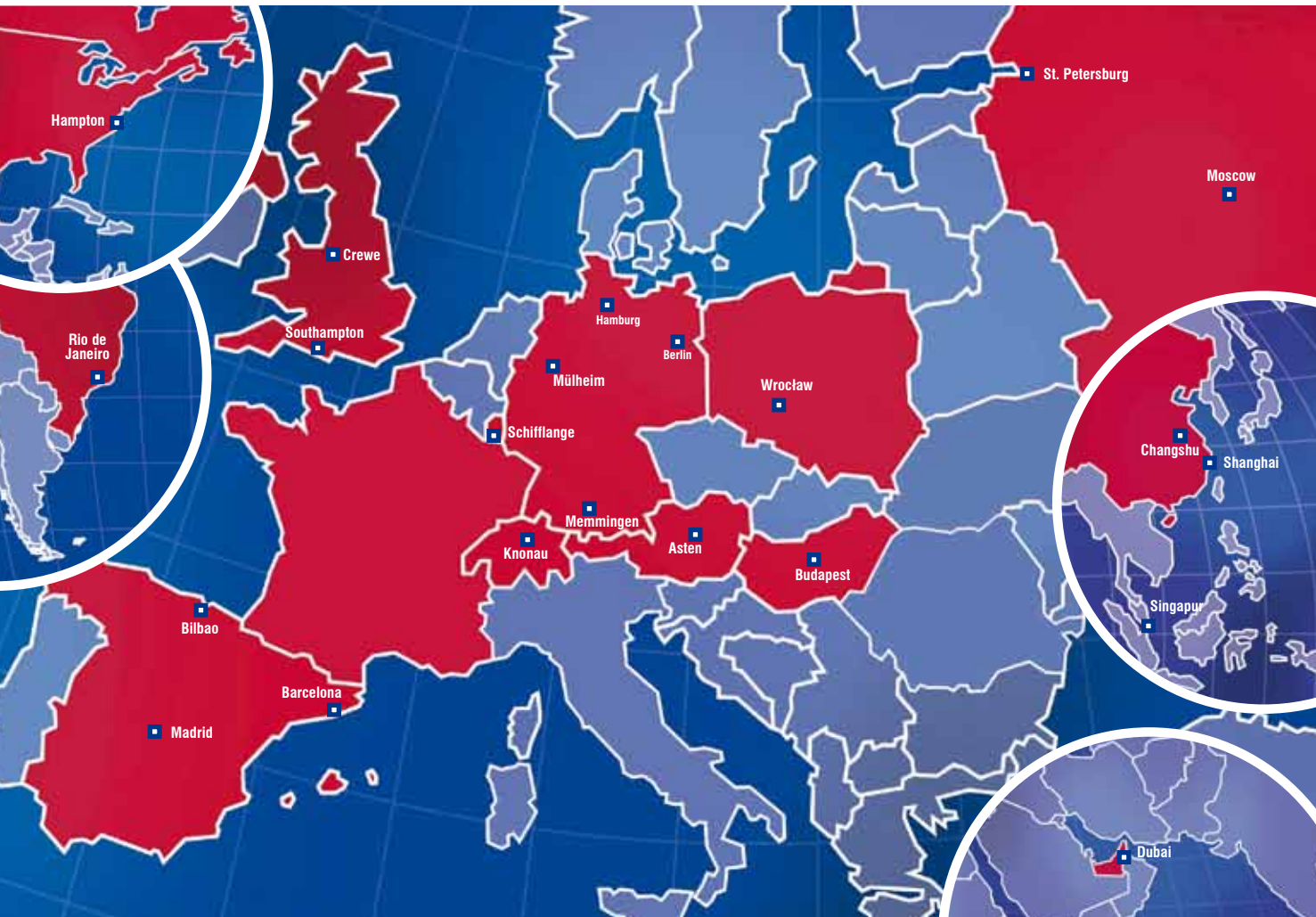


Damaged ropes are analysed in order to find out the reason for the damages.



Incorrect spooling can reduce the lifetime of the rope considerably! Improvement of spooling behaviour is possible and achievable – with our support.

Our PFEIFER Locations Worldwide



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