



jBOP Program for Rope Design
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List of data

Nominal diameter: 22,00
 Rope class: 6 x 19 IWRC
 Rope construction: 1 - 6 / 6
 Order no.: test rope
 Customer: capix technology GmbH
 Remark: round strand rope class 6 x 19 with IWRC usage for example as elevator rope

Rope - Construction

Style: Standard 2 Core: Steel Cover lay: none
 Diameter (mm): 21,98 Loss of diam. (%): 0,0 Calc. diameter (mm): 21,98

Construction: 1 – 6 / 6

Metallic area (mm ²):	221,031	Outer wires (%):	48,72
Metallic mass (kg/m):	1,8800	Metallic fill factor:	0,5825
Tensile grade (N/mm ²):	1770	Calc. breaking load (kN):	391,225
Force (kN):	0	Torque (Nm):	0,00
Length (m):	1450		

No.	Diam.	Lay-Ø	Spool-length	weight	Tens.	s/z	length	Lay-angle	factor	Gap	Coat
1	2,67		1450,00	49,42	1770						0,00
6	2,48	7,63	1500,19	44,18	1770	Z	61,04	14,85°	8,00*	0,029	0,00
6	7,17	21,98	1499,87	401,93	1770	Z	175,84	14,82°	8,00*	0,038	0,00

Core strand - Construction

Style:	Standard 1	Core:	Steel	Cover lay:	none
Diameter (mm):	2,67	Loss of diam. (%):	0,0	Calc. diameter (mm):	2,67

Construction: 1 – 6

Metallic area (mm ²):	4,194	Outer wires (%):	83,10
Metallic mass (kg/m):	0,0341	Metallic fill factor:	0,7491
Tensile grade (N/mm ²):	1770	Calc. breaking load (kN):	7,424
Force (kN):	0	Torque (Nm):	0,00
Length (m):	1450		

No.	Diam.	Lay-Ø	Spool-length	Spool-weight	Tens.	s/z	length	Lay-angle	factor	Gap	Coat
1	0,95		1450,00	8,06	1770						0,00
6	0,86	2,67	1511,34	6,89	1770	z	19,36	16,37°	7,25*	0,016	0,00

Strand 1 - Construction

Style:	Standard 1	Core:	Steel	Cover lay:	none
Diameter (mm):	2,48	Loss of diam. (%):	0,0	Calc. diameter (mm):	2,48

Construction: 1 – 6

Metallic area (mm ²):	3,624	Outer wires (%):	83,22
Metallic mass (kg/m):	0,0294	Metallic fill factor:	0,7503
Tensile grade (N/mm ²):	1770	Calc. breaking load (kN):	6,415
Force (kN):	0	Torque (Nm):	0,00
Length (m):	1500		

No.	Diam.	Lay-Ø	Spool-length	Spool-weight	Tens.	s/z	length	Lay-angle	factor	Gap	Coat
1	0,88		1500,19	7,16	1770						0,00
6	0,80	2,48	1563,65	6,17	1770	z	17,98	16,36°	7,25*	0,014	0,00

Strand 2 - Construction

Style:	Filler	Core:	Steel	Cover lay:	none
Diameter (mm):	7,17	Loss of diam. (%):	0,0	Calc. diameter (mm):	7,17

Construction: 1 – 6 – 6F – 12

Metallic area (mm ²):	32,515	Outer wires (%):	55,20
Metallic mass (kg/m):	0,2680	Metallic fill factor:	0,8042
Tensile grade (N/mm ²):	1770	Calc. breaking load (kN):	57,552
Force (kN):	0	Torque (Nm):	0,00
Length (m):	1500		

No.	Diam.	Lay-Ø	Spool- length	weight	Tens.	s/z	Lay- length	angle	factor	Gap	Coat
1	1,60		1499,87	23,67	1770						0,00
6	1,51	4,62	1532,38	21,54	1770	z	46,64	11,83°	10,09*	0,020	
6	0,62	4,83	1558,97	3,69	1770	z	46,64	15,84°	9,65*		
12	1,38	7,17	1609,95	18,90	1770	z	46,64	21,32°	6,50*	0,027 0,019	0,00