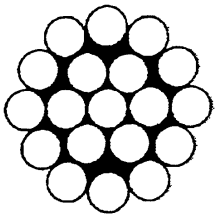
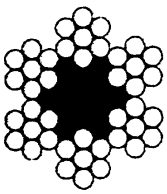
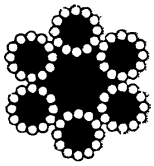
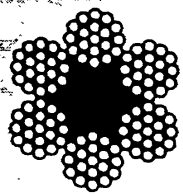
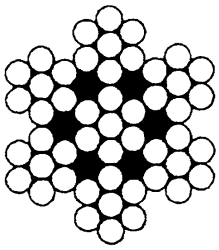
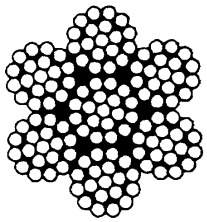
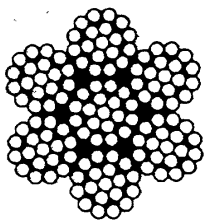
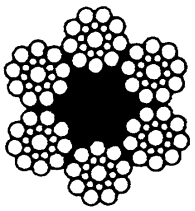
GALVANISED STEEL WIRE ROPES

These ropes are in accordance with BS302 1987	Size nominal diameter mm	Approx Weight Kg/100m	1770 tensile grade	
			Minimum Breaking Load tonnes	Minimum Breaking Force KN
1 x 19 	1.5	1.13	0.22	2.00
	2	1.95	0.33	3.10
	2.5	3.05	0.51	4.90
	3	4.39	0.73	7.10
	4	7.81	1.29	12.60
	5	12.20	2.01	19.60
	6	17.60	2.88	28.30
	7	23.90	3.56	34.90
	8	31.20	4.65	45.60
6 x 7 (6/1) FIBRE CORE 	2	1.38	0.24	2.35
	3	3.11	0.54	5.29
	4	3.54	0.96	9.40
	5	8.65	1.50	14.70
	6	12.50	2.16	21.20
	7	17.00	2.94	28.80
	8	22.10	3.83	37.60
6 x 12 (12 + 7 Fc) FIBRE CORE 	3	2.26	0.34	3.33
	4	4.02	0.60	5.92
	5	6.28	0.94	9.25
	6	9.04	1.36	13.30
	7	12.30	1.85	18.10
	8	15.60	1.94	19.00
6 x 19 (12/6/1) FIBRE CORE 	3	3.11	0.50	4.89
	4	5.54	0.89	8.69
	5	8.65	1.39	13.60
	6	12.50	2.00	19.60
	7	17.70	2.95	28.60
	8	21.50	3.54	34.80
	9	27.20	4.48	43.90
	10	33.60	5.53	54.20
	11	40.60	6.69	65.60
	12	48.40	7.97	78.10
	13	56.80	9.35	91.70
	14	65.80	10.80	105.80
	16	86.00	14.20	139.20

GALVANISED STEEL WIRE ROPES

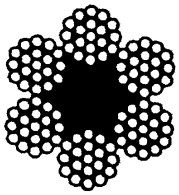
These ropes are in accordance with BS302 1987	Size nominal diameter mm	Approx Weight Kg/100m	1770 tensile grade	
			Minimum Breaking Load	Minimum Breaking Force
			tonnes	kN
7 x 7 (6/1) 	1.5	0.88	0.18	1.76
	1.8	1.26	0.24	2.36
	2	1.52	0.26	2.54
	2.5	2.20	0.36	3.53
	3	3.43	0.58	5.72
	4	6.10	1.04	10.20
	5	9.53	1.62	15.90
	6	13.70	2.33	22.90
	7	18.70	3.17	31.10
	8	24.40	4.15	40.70
7 x 19 (12/6/1) 	3	3.34	0.58	5.77
	4	5.95	1.04	10.20
	5	9.29	1.63	16.00
	6	13.40	2.35	23.10
	7	18.20	3.20	31.40
	8	23.65	3.82	37.50
	9	29.92	4.83	47.60
	10	36.96	5.97	58.70
	12	53.24	8.61	84.40
	13	62.48	10.10	99.00
	16	94.60	15.34	150.30
19 x 7 IWRC  1960 TENSILE GRADE	4	6.40	1.04	10.20
	5	10.00	1.63	16.00
	6	14.40	2.35	23.10
	7	19.60	3.21	31.50
	8	25.70	4.20	41.20
	9	31.60	5.30	52.00
	10	40.10	6.56	64.30
	11	48.60	7.93	77.80
	12	57.90	9.43	92.50
	13	67.90	11.07	108.60
	14	78.80	12.84	126.00
	16	103.00	16.82	165.00
	18	130.00	21.20	208.00
	19	145.00	23.65	232.00

GENERAL ENGINEERING/EXCAVATOR ROPES



6 x 19S (9/9/1)
FIBRE CORE

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	23.1	3.81	37.4
9	29.2	4.82	47.3
10	36.1	5.95	58.4
11	43.7	7.21	70.7
12	52.0	8.57	84.1
13	61.0	10.10	98.7
14	70.8	11.60	114
16	92.4	15.30	150
18	117	19.30	189
19	130	21.50	211
20	144	23.90	234
22	175	28.80	283
24	208	34.30	336
26	244	40.30	395
28	283	46.70	458
32	370	61.00	598
35	442	73.00	716
36	468	77.20	757
38	521	85.90	843

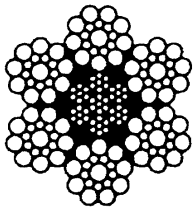


6 x 19 (12/6+6F/1)
FIBRE CORE.

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	23.1	3.81	37.4
9	29.2	4.82	47.3
10	36.1	5.95	58.4
11	43.7	7.21	70.7
12	52.0	8.57	84.1
13	61.0	10.10	98.7
14	70.8	11.60	114
16	92.4	15.30	150
18	117	19.30	189
19	130	21.50	211
20	144	23.90	234
22	175	28.80	283
24	208	34.30	336
26	244	40.30	395
28	283	46.70	458
32	370	61.00	598
35	442	73.00	716
36	468	77.20	757
38	521	85.90	843

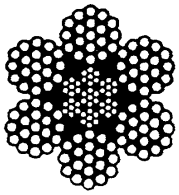
To calculate Aggregate Breaking Load: x 1.163
These ropes are in accordance with BS302 : 1987

GENERAL ENGINEERING/EXCAVATOR ROPES



6 x 19S (9/9/1)
STEEL CORE

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	25.5	4.11	40.3
9	32.2	5.20	51.0
10	39.8	6.42	63.0
11	48.2	7.77	76.2
12	57.3	9.25	90.7
13	67.3	10.80	106
14	78.0	12.60	124
16	102	16.40	161
18	129	20.80	204
19	144	23.10	227
20	159	25.70	252
22	193	31.10	305
24	229	37.00	363
26	269	43.40	426
28	312	50.40	494
32	408	65.70	645
35	488	78.70	772
36	516	83.30	817
38	575	92.80	910

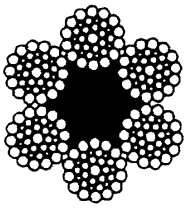


6 x 19 (12/6+6F/1)
STEEL CORE.

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	25.5	4.11	40.3
9	32.2	5.20	51.0
10	39.8	6.42	63.0
11	48.2	7.77	76.2
12	57.3	9.25	90.7
13	67.3	10.80	106
14	78.0	12.60	124
16	102	16.40	161
18	129	20.80	204
19	144	23.10	227
20	159	25.70	252
22	193	31.10	305
24	229	37.00	363
26	269	43.40	426
28	312	50.40	494
32	408	65.70	645
35	488	78.70	772
36	516	83.30	817
38	575	92.80	910

To calculate Aggregate Breaking Load: x 1.270
These ropes are in accordance with BS302 : 1987

GENERAL ENGINEERING/EXCAVATOR ROPES

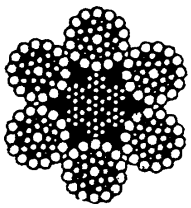


6 x 36 (14/7+7/7/1) FIBRE CORE.

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	23.1	3.81	37.4
9	29.2	4.82	47.3
10	36.1	5.95	58.4
11	43.7	7.21	70.7
12	52.0	8.57	84.1
13	61.0	10.10	98.7
14	70.8	11.60	114
16	92.4	15.30	150
18	117	19.30	189
19	130	21.50	211
20	144	23.90	234
22	175	28.80	283
24	208	34.30	336
26	244	40.30	395
28	283	46.70	458
32	370	61.00	598
35	442	73.00	716
36	468	77.20	757
38	521	85.90	843
40	578	95.30	935
44	699	115.00	1128
48	832	137.00	1344
52	976	161.00	1580
54	1053	174.00	1704
56	1132	187.00	1837
60	1300	214.00	2100

To calculate Aggregate Breaking Load: x 1.191
These ropes are in accordance with BS302 : 1987

GENERAL ENGINEERING/EXCAVATOR ROPES

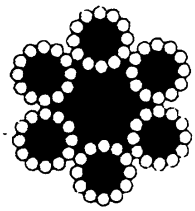


6 x 36 (14/7+7/7/1) STEEL CORE.

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	25.5	4.11	40.3
9	32.2	5.20	51.0
10	39.8	6.42	63.0
11	48.2	7.77	76.2
12	57.3	9.25	90.7
13	67.3	10.80	106
14	78.0	12.60	124
16	102	16.40	161
18	129	20.80	204
19	144	23.10	227
20	159	25.70	252
22	193	31.10	305
24	229	37.00	363
26	269	43.40	426
28	312	50.40	494
32	408	65.70	645
35	488	78.70	773
36	516	83.30	817
38	575	92.80	910
40	637	103.00	1008
44	771	124.00	1220
48	917	148.00	1452
52	1076	174.00	1704
54	1161	187.00	1837
56	1248	201.00	1976
60	1433	231.00	2268
64	1700	262.00	2570

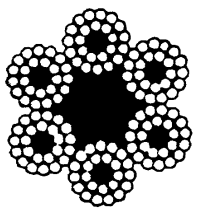
To calculate Aggregate Breaking Load: x 1.285
These ropes are in accordance with BS302 : 1987

MARINE ROPES



6 x 12 + 7
FIBRE CORES

Size		Approx Weight		1420 tensile grade	
Nom dia mm	Approx circ in	kg/100m	kg/220m	Min Breaking Load tonnes (t)	Min Breaking Force kN
8	1	15.6	34.0	1.94	19.0
9	1 1/8	19.7	43.0	2.45	24.0
10	1 1/4	24.3	53.0	3.02	29.6
12	1 1/2	35.0	77.0	4.35	42.7
14	1 3/4	47.7	105	5.93	58.2
16	2	62.3	137	7.74	75.9

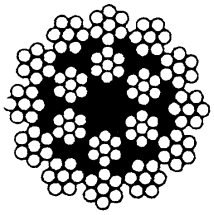


6 x 24 + 7
FIBRE CORES

Size		Approx Weight		1420 tensile grade	
Nom dia mm	Approx circ in	kg/100m	kg/220m	Min Breaking Load tonnes (t)	Min Breaking Force kN
8	1	19.8	44.0	2.60	25.5
10	1 1/4	30.9	68.0	4.06	39.8
12	1 1/2	44.5	98.0	5.85	57.4
14	1 3/4	60.6	133.0	7.96	78.1
16	2	79.1	174	10.4	102
18	2 1/4	100	220	13.2	129
20	2 1/2	124	273	16.2	159
21	2 5/8	136	300	17.9	176
22	2 3/4	150	330	19.7	193
24	3	178	392	23.4	230
26	3 1/4	209	460	27.5	270
28	3 1/2	242	532	31.8	312
30	3 3/4	278	612	36.6	359
32	4	317	697	41.6	408
36	4 1/2	401	882	52.6	516

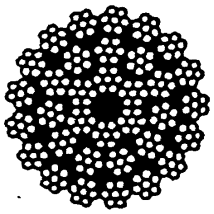
These ropes are in accordance with BS 302 : 1987

NON ROTATING WIRE ROPES



18 x 7 FIBRE CORE
AND
19 x 7 STEEL CORE

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	25.0	3.79	37.2
9	31.6	4.79	47.0
10	39.0	5.92	58.1
11	47.2	7.16	70.2
12	56.2	8.52	83.6
13	65.9	10.00	98.1
14	76.4	11.60	114
16	99.8	15.20	149
18	126	19.20	188
19	141	21.40	210
20	156	23.60	232
22	189	28.60	281
24	225	34.00	334
26	264	40.00	392



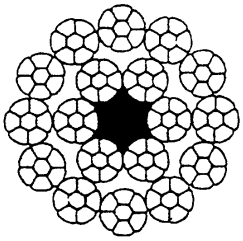
34 x 7 FIBRE CORE
AND
35 x 7 STEEL CORE

Nominal Diameter mm	Approx Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm²	
		tonnes	kN
8	25.0	3.67	36.0
9	31.6	4.65	45.6
10	39.0	5.74	56.2
11	47.2	6.95	68.2
12	56.1	8.26	81.0
13	65.9	9.70	95.1
14	76.4	11.20	110
16	99.8	14.70	144
18	126	18.60	182
19	141	20.70	203
20	156	22.90	225
22	189	27.70	272
24	225	33.00	324
26	264	38.70	380
28	306	45.00	441
32	399	58.70	576
35	478	70.30	690

To calculate Aggregate Breaking Load: x 1.334
These ropes are in accordance with BS302 : 1987

COMPACTED WIRE ROPES

Compak® 187

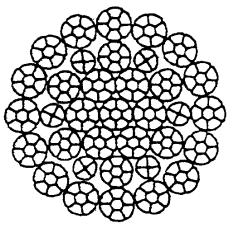


18 x 7

With steel core
• unit weight increased by 5%
Construction of the steel core 1 x 7

Diameter mm	Weight kg/100m	Breaking Load 1770N/mm2	
		Fibre Core Tonnes	Steel Core Tonnes
14	92	17.84	18.91
16	121	23.55	24.96
18	143	27.93	29.60
20	182	34.96	37.06
22	223	42.92	45.50
25	284	54.64	57.92
28	369	71.46	75.75
30	405	78.70	83.42
32	446	86.44	91.63
34	531	102.85	109.02
36	576	111.62	118.32

Compak® 35



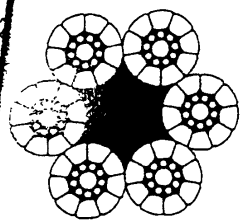
Non Rotating

Diameter mm	Weight kg/100m	Minimum Breaking Load/Force at 1770N/mm2	
		Tonnes	kN
12	61	13.25	130
14	77	16.62	163
16	98	21.10	207
18	131	28.44	279
20	160	34.76	341
22	193	41.79	410
25	246	53.31	523
28	316	68.50	672
30	385	83.49	819
32	420	91.13	894
34	487	105.50	1035
36	543	117.43	1152
38	583	126.40	1240
40	644	139.45	1368

COMPACTED WIRE ROPES

Breaking Load 17 Fibre Core Tonnes	S
17.84	
23.55	
27.93	
34.96	
42.92	
54.64	
1.46	
3.70	
44	
85	
52	

Compak® 619

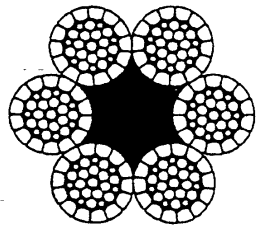


6 x 19S

Diameter mm	Weight kg/100m	Breaking Load 1770N/mm2	
		Fibre Core Tonnes	Steel Core Tonnes
10	42	8.27	9.51
11	55	10.43	12.00
12	61	11.81	13.58
14	88	16.69	19.19
16	105	20.49	23.56
18	131	25.49	29.31
20	174	33.88	38.96
22	194	37.52	43.15
24	245	47.45	54.57
26	265	51.23	58.92
28	315	60.44	69.51
30	370	70.37	80.93

m Breaking at 1770N/mm kN
130
163
207
279
341
410
523
672
819
394
035
52
40
8

Compak® 636



6 x 36WS

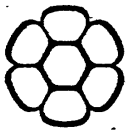
Diameter mm	Weight kg/100m	Breaking Load 1770N/mm2	
		Fibre Core Tonnes	Steel Core Tonnes
14	101	19.12	21.99
16	120	22.73	26.14
18	147	27.96	32.15
20	177	33.56	38.59
22	221	42.04	48.35
24	260	49.43	56.85
26	313	59.36	68.26
28	356	67.66	77.81
30	402	76.32	87.77

With steel core unit weight increased by 9%
Construction of steel core 7 x 7

COMPAK® STAINLESS STEEL STRAND AISI 316

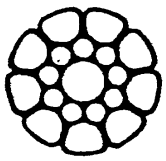
* **COMPACTED STRANDS**
* **HIGH BREAK LOAD**
* **LOW STRETCH**
* **BRIGHT POLISHED**

1 x 7



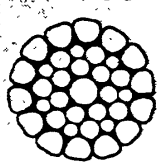
Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
2.5	3.4	6.77	690
3	4.9	9.81	1000
3.5	6.7	13.24	1350
4	8.8	17.46	1780

1 x 19



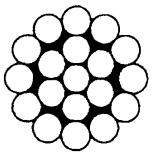
Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
4	8.4	17.60	1800
5	13.5	24.03	2450
6	19.4	35.32	3600
7	26.0	49.05	5000
8	34.5	60.82	6200
10	54.0	98.10	10000
12	80.7	144.21	14700

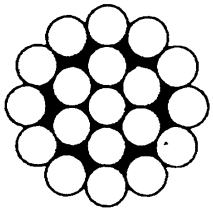
1 x 36

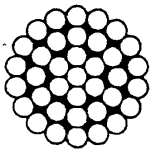


Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
14	117	191.3	19500
16	149	255.0	26000

STAINLESS STEEL STRAND AISI 316

Construction	Diameter (mm)	Weight kg/1000m	Min Breaking Load (kg) AISI 304	AISI 316
1 x 19 Mini Cable 	0.25	0.30	7.0	5.5
	0.30	0.43	10.0	8.0
	0.35	0.58	14.0	11.0
	0.40	0.76	18.0	14.0
	0.50	1.19	28.0	22.0
	0.85	3.42	81.0	65.0

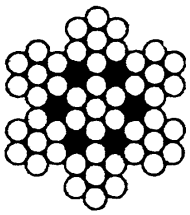
Construction	Diameter (mm)	Weight kg/100m	Min Breaking Load kN	kg
1 x 19 (12/6/1) 	1	0.5	0.82	84
	1.5	1.1	1.80	189
	2	2	3.14	320
	2.5	3.1	4.90	500
	3	4.6	7.06	720
	4	7.8	12.60	1280
	5	12.9	19.60	2000
	6	17.9	28.20	2880
	7	24.6	34.80	3550
	8	31.5	45.50	4640
	9	40.1	57.60	5870
	10	50.3	71.10	7250
	11	59.7	86.00	8770
	12	72.9	102.00	10400
	14	95.7	139.00	14180
	16	1250	182.00	18560
	19	176.0	211.80	21620
	22	236.0	284.30	29000
	26	330.0	398.00	40600

Construction	Diameter (mm)	Weight kg/100m	Min Breaking Load kN	kg
1 x 37 	28	381	516	52615
	30	449	595	60650
	32	504	679	69200

STAINLESS STEEL WIRE ROPES AISI 316

Construction

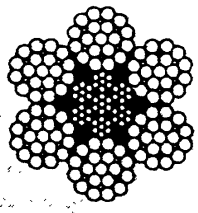
7 x 7
(6/1)



Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
1	0.40	0.59	60
1.5	0.96	1.30	136
2	1.7	2.37	242
2.5	2.7	3.71	364
3	3.7	5.34	545
3.5	4.9	7.60	780
4	6.5	9.49	968
5	10.3	14.80	1510
6	14.3	21.40	2180
7	19.1	29.10	2970
8	25.4	38.00	3870
9	30.8	51.30	5230
10	37.5	59.30	6050
11	48.8	76.70	7820
12	53.8	85.40	8710
14	74.1	117.00	11920
16	96.8	149.00	15180
19	137.0	209.00	21300

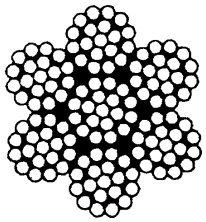
Construction

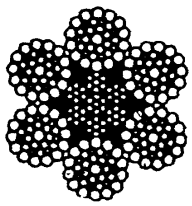
6 x 25
IWRC



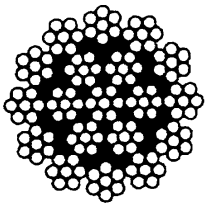
Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
10	41	56	5700
12	59	81	8210
14	80	110	11200
16	105	143	14600
18	133	181	18500
20	164	224	22800
22	198	271	27600
24	236	322	32800
26	276	354	36100
28	321	410	41800
30	368	471	48000
32	441	525	53500

STAINLESS STEEL WIRE ROPES AISI 316

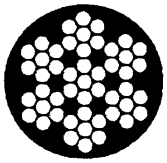
Construction	Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
7 x 19 (12/6/1) 	2	1.8	2.20	230
	2.5	2.6	3.40	350
	3	3.8	5.00	510
	3.5	5.0	7.00	720
	4	6.8	8.89	970
	4.5	7.7	11.70	1200
	5	10.3	13.90	1420
	6	14.6	20.00	2040
	7	20.6	2730	2780
	8	25.6	35.60	3630
	9	33.1	47.40	4840
	10	40.6	55.60	5670
	11	48.8	70.90	7230
	12	57.9	80.00	8160
	14	77.1	109.00	11100
	16	95.5	133.00	13600
	19	135.0	198.00	20180

Construction	Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
6 x 36 IWRC 	10	41	56	5700
	12	59	81	8210
	14	80	110	11200
	16	105	143	14600
	18	133	181	18500
	20	164	224	22800
	22	198	271	27600
	24	236	322	32800
	26	276	354	36100
	28	321	410	41800
	30	368	471	48000
	32	441	525	53500

STAINLESS STEEL WIRE ROPES AISI 316

Construction	Diameter (mm)	Weight kg/100m	Min Breaking Load kN	Min Breaking Load kg
18 x 7 IWRC 	4	6.4	8.5	867
	5	10.0	12.9	1320
	6	14.4	18.5	1880
	7	19.6	25.2	2550
	8	25.7	33.0	3360
	9	32.5	41.7	4250
	10	40.1	51.5	5250
	11	48.5	62.3	6350
	12	57.7	74.2	7560
	13	71.8	87.1	8870
	14	83.3	101.1	10300
	16	109.0	131.5	13400
	18	138.0	166.8	17000
	19	153.0	185.5	18900
	20	170.0	206.1	21000
	22	213.0	249.3	25400

WHITE PVC COVERED GUARD RAIL

Construction	Rope Diameter (mm)	Outside Diameter (mm)	Min Breaking Load Construction	Min Breaking Load kg
PVC COVERED 	4	6	7 x 7	968
	4	6	1 x 19	1280
	5	7	1 x 19	2000
	5	8	1 x 19	2000
	5	9	1 x 19	2000

STAINLESS STEEL CHEMICAL COMPOSITION

AISI	Approx Composition (%) Max.								Corresponds to		
Standard	C	Si	Mn	P	S	Cr	Ni	Mo	Werkstaff	BS	JIS
302	0.12	0.60	2.00	0.035	0.015	18-19	8-9	0.06	1.4300	302 S 25	SUS 302
304	0.08	0.80	1.50	0.035	0.015	18-19	8-9		14301	304 S 15	SUS 304
305	0.05	0.60	1.50	0.040	0.015	17-19	11-13		1.4303		SUS 305
306	0.07	1.00	2.00	0.040	0.015	16-18	10-13	2-3	14401	316 S 16	SUS 316
316MO	0.06	1.00	2.00	0.040	0.015	16-18	10-13	2.5-3			

DENWIRE LIMITED

STEEL WIRE ROPES AND CABLES

BS EN ISO 9002: 1994
APPROVED BY BVQI

NATIONAL ACCREDITATION OF CERTIFICATION BODIES

WIRE ROPE SLINGS AND ASSEMBLIES

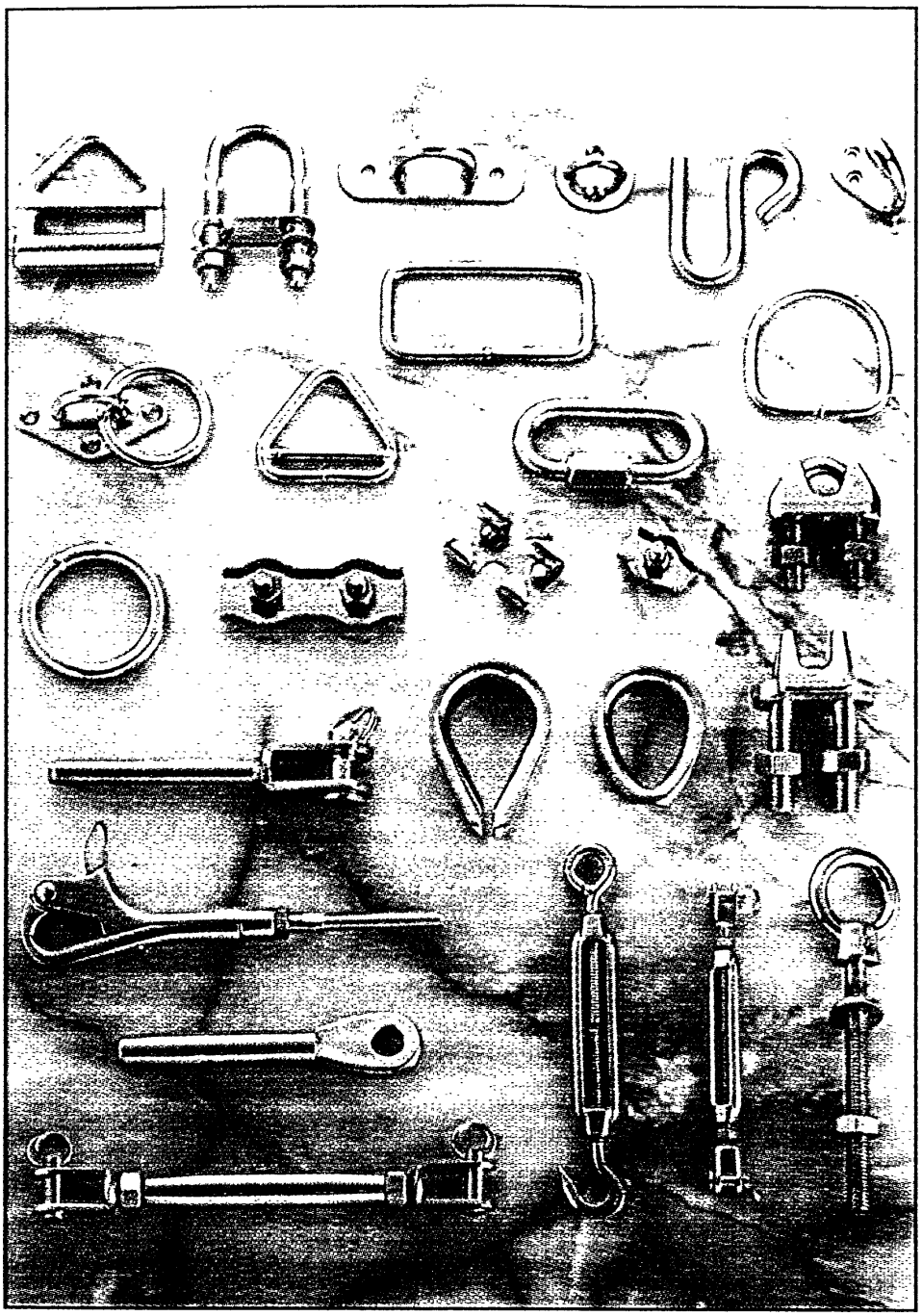
Denwire Limited was established in 1986 with a commitment to supply wire ropes of the highest quality, and as a result is now internationally recognised for reliability, durability and ultimately, cost-effectiveness. The company operates a quality management system which has been assessed to the quality system standard BS EN ISO 9002.

Denwire stocks an extensive range of galvanised and stainless steel wire ropes from 1 to 64mm dia, and manufactures slings and assemblies to specific requirements. All types of wire rope fittings and terminals are also available.

Denwire ropes are produced for virtually every application and industry and are manufactured to meet the ever-increasing and diverse needs of users throughout the world.

CRACKLEY WAY, PEARTREE LANE, DUDLEY,
WEST MIDLANDS, DY2 0UW. ENGLAND
TEL:- 01384 455423
FAX:- 01384 455303

DENWIRE LIMITED



BVQi
ISO 9002

CRACKLEY WAY, PEARTREE LANE, DUDLEY,
WEST MIDLANDS, DY2 0UW, ENGLAND.
Telephone: +44(0) 1384 455423
Facsimile: +44(0) 1384 455303/456948