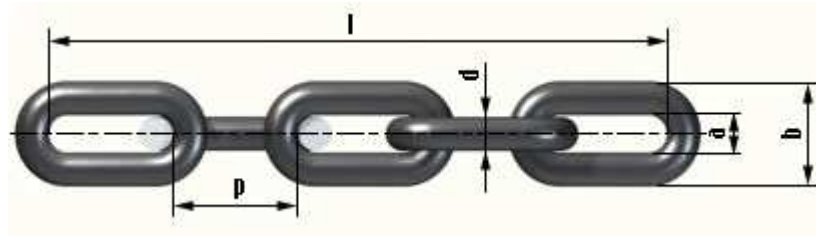


RANGE OF CHAINS – MADE IN EUROPE -

Chains for lifting mechanisms

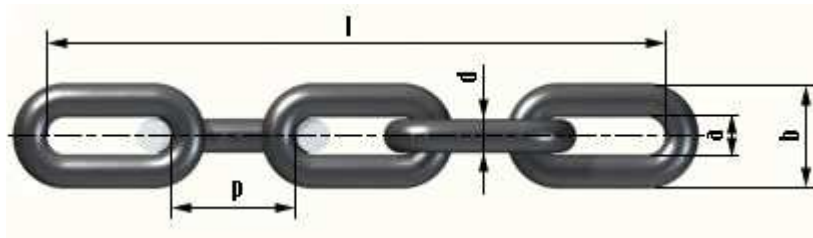
Round short link chains of strength class 8.4 for lifting mechanisms DIN 818-2, DIN 818-3



Chains are produced: according to Ukrainian standards and conform to International standards DIN 818-2, 818-3.
Chains of class strength 4 and 8 are made of carbon, alloy and high alloy steel grades depending on class of chain quality.
Application: in chain slings and other lifting mechanisms.

Size dx P	Class 4 (load)			Class 8 (load)			Weight of 1m of chain
	Working	Proof	Breaking, not less	Working	Proof	Breaking, not less	
mm	t	kN		t	kN		kg
4 x 12	0,25	5,3	10,1	-	-	-	0,35
5x15	0,4 0	9,8	15,7	-	-	-	0,5
6x18	0,56	14,2	22,6	-	-	-	0,8
7x21	0,75	19,3	30,8	-	-	-	1,1
8x24	1,00	25,2	40,2	-	-	-	1,4
10x30	1,60	39,8	63,0	-	-	-	2 , 2
13x39	2,65	53,1	106	-	-	212	3,8
16x48	4,00	80,4	161	8,0	201	322	5,7
18x54	5,00	102	204	10,0	254	407	7,3
19x57	5,60	113	227	11,2	284	454	8,1
20x60	6,30	126	251	12,5	314	503	9,0
22x66	7,50	152	304	15,0	380	608	10,9
23x69	8,00	166	332	16,0	415	665	12,0
25x75	10,00	196	393	20,0	491	785	14,0
26x78	10,60	212	425	21,2	531	849	15,2
28x84	12,50	246	493	25,0	616	985	17,6
32x96	16,00	322	643	31,5	804	1290	23,0
36x108	20,00	407	814	-	-	-	29,0

Anchor studless chains

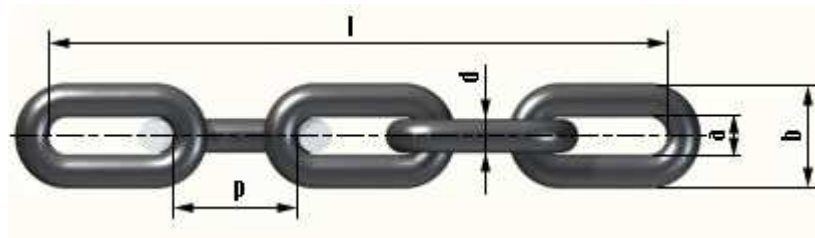


Anchor studless chains are produced according to DSTU 3074-95 (GOST 228-95), ISO 1704-91 and according to agreed customer drawings. They are made of carbon and alloy steel of 1, 2 and 3 strength class.

They are designed for operation in any climatic conditions; in anchor and other ship and floating devices.

Size, mm .d	Pitch, mm.	Width, not more than, mm. b.	Strength class						Theoretical weight of 1 m.kg.
			1		2		3		
			load, kN		load, kN		load, kN		
			proof	breaking	proof	breaking	proof	breaking	
12	48	43	26	53	-	-	-	-	3
12,5	50	45	30	60	46	66	-	-	3,3
14	56	50	36	72	57	82	82	115	4
16	64	58	47	94	75	106	106	150	5,2
17,5	70	63	55	110	89	127	127	179	6,3
18	72	65	60	120	93	133	133	186	6,7
19	76	68	68	136	105	150	150	210	7,4
20	80	72	75	150	120	175	175	245	8,2
22	88	79	90	180	140	200	200	280	10
24	96	86	110	215	166	237	237	332	11,09
26	104	94	125	250	194	277	277	389	13,9
28	112	101	145	290	225	320	320	450	16,1
30	120	108	170	335	257	367	367	515	18,5
32	128	115	190	380	290	416	416	582	21,1
34	136	122	215	430	328	468	468	655	24

Hardened chains (for fishing industry)

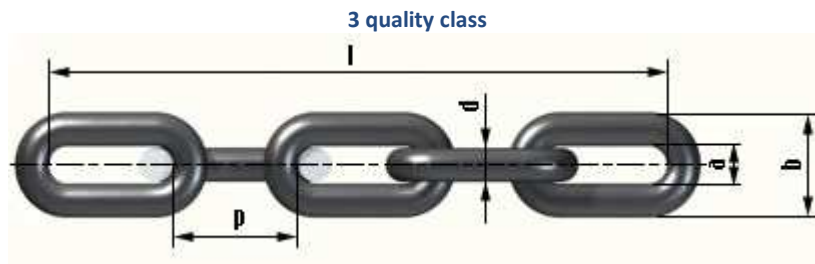


They are produced according to customer requirements from alloy steel by means of heat treatment.

They are applied as ballast for fishing trawl or in other devices with high requirement to surface hardness of chains.

Size, mm. d	Pitch, mm. P	Inside width, a not less, mm	Outside width, b, not more , mm	Hardness, HB, not less	Theoretical weight 1 m. kg
14	50	17	48	375	4,0
18	64	21	60	375	6,7
19	64,5	22	63	375	7,6
19,5	64	22	63	375	7,6
22	86	26	73	375	9,5
23	64	27,6	83	375	12,5
23	86	26	73	375	10,4
26	73	31,2	94	375	15,5
26	92	30	85	375	13,7

Round link chains for continuous conveyors



Chains are produced according to drawings. They conform to DIN 764.

Size range is between 10 – 33mm. Chains are made of carbon and alloy steels.

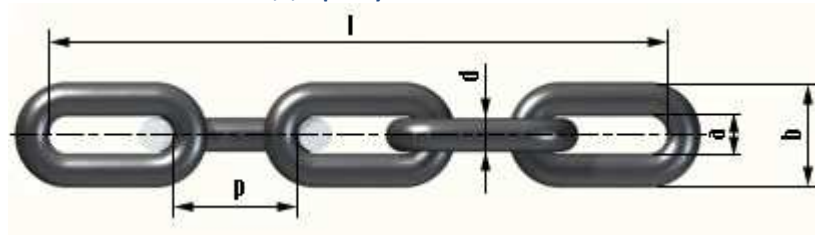
They are used for different types of conveyors and traction mechanisms of different branches of industry.

Size, d x P., mm	Inside width, a, min, mm	Outside width, b, max, mm	Load, kN		Elongation min, %	Weight of 1 m, kg
			proof	breaking		
10x35	14	36	32	50	15	2,0
13x45	18	47	53	85	15	3,5
16x56	22	58	80	125	15	5,2
18x63	24	65	100	160	15	6,5
20x70	27	72	125	200	15	8,2

23x80	31	83	170	265	15	11,0
26x91	35	94	212	340	15	14,0
28x98	36	101	250	400	15	16,5
30x105	39	108	280	450	15	19,0
33x115	43	119	335	530	15	22,5

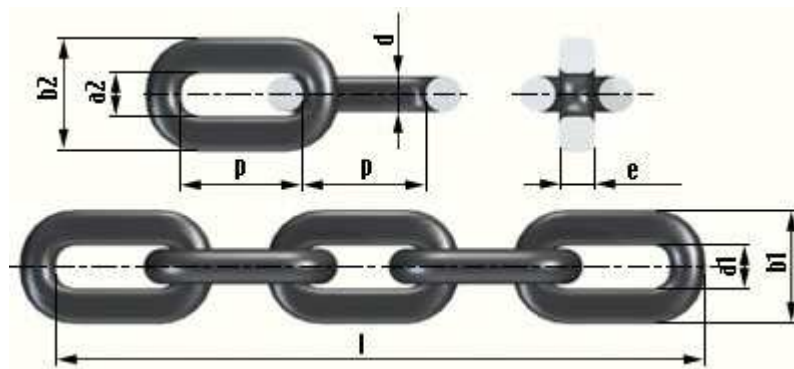
Round link chains for hoisting machines

5,6,8 quality class. DIN EN 5684



Size d x P, mm	Load, kN						Weight of 1m, kg
	Proof			Breaking, not less			
	Strength class						
	5	6	8	5	6	8	
13x36	67	85	106	125	170	212	3,8
14x41	80	100	120	170	200	250	4,4
16x45	100	125	160	200	250	320	5,7
18x50	125	160	200	250	320	400	7,3
20x60	-	-	250	-	-	500	8,8
22x66	-	-	320	-	-	630	10,7

Round link chains with reduced outside width of vertical links



Strength class C

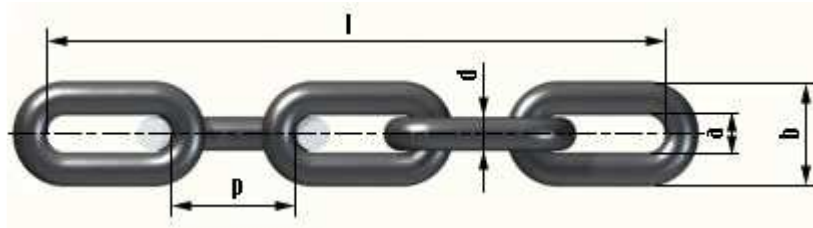
Made of alloy steel grades

Used in mining equipment as heavy-duty traction mechanism. It's not necessary to change conveyor pans when you change 18 x 64 for 24x86H chain, i.e. reduced width of vertical links provides placing of chain in pan. 26x92H instead of 24 x 86, 30x108H instead of 26 x 92, 34 x 126 instead of 30 x 108.

Chains are produced according to drawings as a part of traction mechanism SP 26U, other mining machines.

Size of chain d x P , mm	d, mm	e, mm	p, mm	Weight 1 m. k,				load, kN		Weight 1 m, kg
				Inside, min		Outside , ax		Proof	Breaking, min	
				a1	a2	b1	b2			
24x86	24±0,8	29,8	86±0,9	31	28	82	64	500	720	11,6
26x92	26±0,8	30	92±0,9	30,1	30	87	75	637	850	13,7
30x108	30±0,9	34	108±1,1	34,1	34	99	87	848	1130	18
34x126	34±1,0	38	126±1,3	38,1	38	111	99	1080	1450	22,7

Round link high strength chains for mining equipment



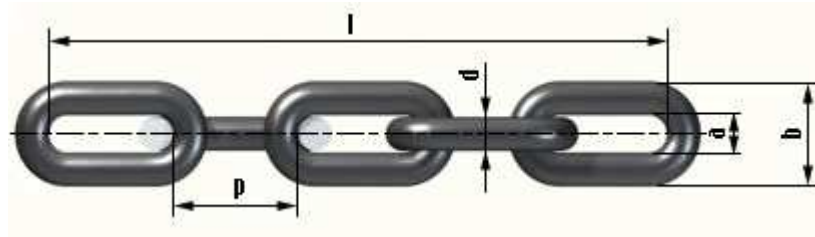
Chains are produced according to TU U 12.44.10.015-94 of strength classes “8” and “C”. They meet basic requirements of DIN 22252 of classes “1” and “2” (table 2), 14-34mm sizes made of alloy and high-alloy steel grades with heat treatment. Technology and manufacturing equipment provides guaranteed strength properties and high accuracy of geometrics.

They are applied as traction mechanism of coal-plough machines, underground conveyors and in other mechanisms with high requirements to operating characteristics of devices.

Size d x t, mm	Inside width b1, min, mm	Outside width, b2, max, mm	Proof load, kN	Breaking load, min, kN	Elongation under proof load, max, %	Elongation under breaking load min, %	Theor. weight of 1m of chains, kg
14x50	17	48	200	250	1,6 (1,9)	14 (10)	4,0
18x64	21	60	330	410	1,6 (1,9)	14 (10)	6,6
18x80	22	63	330	410	1,6 (1,9)	14 (10)	6,0
19x64,5	21	60	360	450	1,6 (1,9)	14 (10)	7,6
20x80	23	66	400	500	1,6 (1,9)	14 (10)	7,7
22x86	26	73	490	610	1,6 (1,9)	14 (10)	9,5
24x86	28	79	580	720	1,6 (1,9)	14 (10)	11,6
26x92	30	85	680	850	1,6 (1,9)	14 (10)	13,7
28x100	33	93	785	980	1,6 (1,9)	14 (10)	15,8
30x108	34	97	910	1300	1,6 (1,9)	14 (10)	18,0
32x114	37	106	1030	1285	1,6 (1,9)	14 (10)	20,6
34x126	38	109	1080	1450	1,6 (1,9)	14 (10)	22,7

Round link high-strength chains for mining equipment

Strength class B,C,D. DSTU GOST 25996-2002 (ISO 610-90)



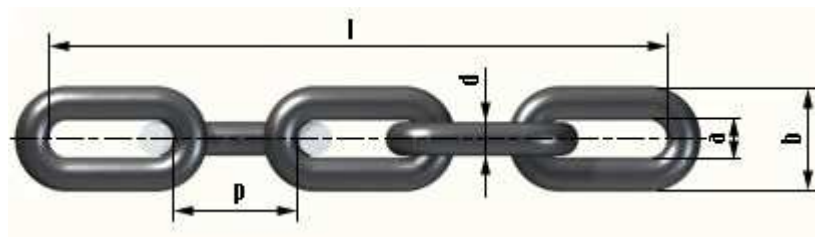
Used for machines and equipment of mining industry, including:

- In curved and stiff chain conveyors, two-three chains conveyors including conveyors with central double position of chains
- In coal-plough machines
- In similar type of mining machines

Size d x P, mm	Breaking load, kN not less	Proof load, kN	Breaking load, kN not less	Proof load, kN	Breaking load, kN not less	Proof load, kN	Weight of 1 m, kg
	For strength class B		For strength class C		For strength class D		
14x50	190	150	250	200	310	250	4,0
18x64	320	260	410	330	510	410	6,6
22x86	480	380	610	490	760	610	9,5
24x86	570	460	720	580	900	720	11,6
24x87,5	570	460	720	580	900	720	11,5
26x92	670	540	850	680	1060	850	13,7
30x108	890	710	1130	900	1410	1130	18,0

Round long link chains

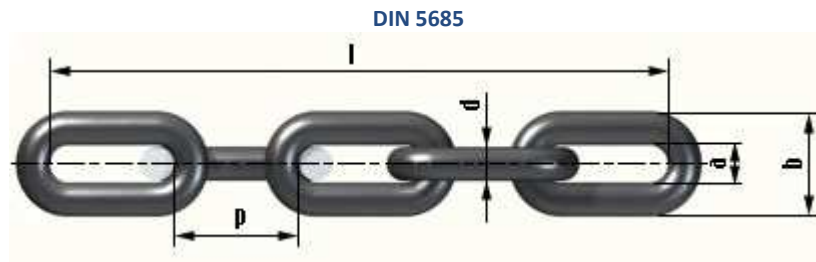
DIN 763



Size, d	Pitch, P	Width		Load			Weight of 1 m of chain kg
		Inside, a, not less mm	Outside, b, not more mm	Proof kg	Breaking, not less kN	Working kN	
4	32	7,2	16,8	100	2,5	6,3	0,27
5	35	9,0	21,0	160	4,0	10,0	0,43
6	42	10,8	25,2	200	5,0	12,5	0,63
7	49	12,6	29,4	300	7,5	19,0	0,86

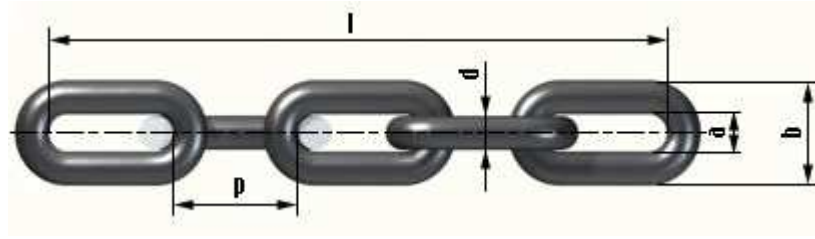
8	52	14,4	33,6	400	10,0	25,0	1,10
10	65	18,0	42,0	630	16,0	40,0	1,75
13	82	23,4	54,6	1000	25,0	63,0	2,95
16	100	28,8	67,2	1600	40,0	100,0	4,45

Round medium and long link chains



Size,	Pitch, P	Inside width. a, not less	Proof load	Weight of 100 m ~
		mm	kN	kg
4	19	7,2	0,8	30
	32			27
4,5	20	8,1	1	39,5
	34			35
5	21	9,0	1,25	50
	35			43
6	24	10,8	1,6	73
	42			63
7	28	12,6	2,5	100
	49			86
8	32	14,4	3,2	130
	52			110
10	40	18,0	5	205
	65			175
12	48	21,6	7,1	290
	78			255

Special-purpose round link chains produced according to agreed drawings

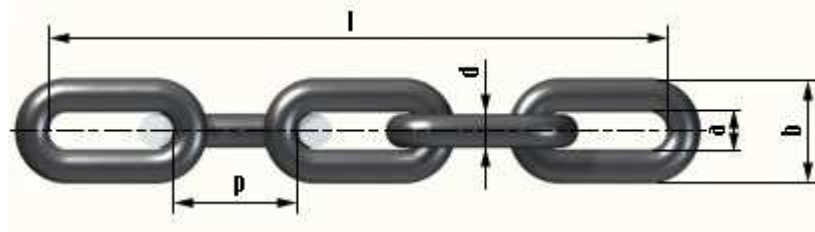


Size, mm	Load, kN				Total elongation under breaking load, not less, %		Theoretical weight of 1 m of chains +_5%, kg
	proof		breaking, not less				
	Strength class				Strength class		
	3	6	3	6	3	6	
13x52x16	50	140	80	170	14	10	3,3
13x60x22	50	100	80	170	14	10	3,2
14x50x17	63	140	100	200	14	10	3,9
14x80x17	63	150	100	200	14	10	3,4
16x55x20	80	180	125	550	14	10	4,0
16x64x29	80	150	125	250	14	10	5,0
16x65x29	80	200	125	250	14	10	5,2
16x80x24	80	200	125	250	14	10	4,6
16x90x26	80	200	125	250	14	10	4,6
18x64x21	100	250	160	320	14	10	6,6
18x80x21	100	260	160	320	14	10	6,2
18x90x26	100	260	160	320	14	10	6,2
19x64,5x21	110	300	180	360	14	10	7,4
19x75x29	110	260	180	360	14	10	7,3
19x100x28	110	260	180	360	14	10	6,6
20x60x26	125	300	200	400	14	10	9,0
20x70x23	125	300	200	400	14	10	7,8
20x80x23	125	300	200	400	14	10	8,1
20x100x28	125	300	200	400	14	10	7,3
22x88x30	140	320	225	470	14	10	9,6
22x110x32	140	320	225	470	14	10	9,1
22x120x32	140	320	225	470	14	10	8,7
22x132x32	140	320	225	470	14	10	8,4
23x64x27	160	340	250	500	14	10	12,0
23x80x28	160	340	250	500	14	10	11,3
24x73x34	180	460	285	550	14	10	12,0

24x86x28	180	460	285	550	14	10	12,1
26x73x30	200	520	320	650	14	10	15,1
26x75x30	200	520	320	650	14	10	15,1
26x92x30	200	520	320	650	14	10	13,8
26x125x37	200	420	320	650	14	10	12,9
28x168x38	250	450	400	750	14	10	13,6
30x90x39	280	600	450	870	14	10	20,0
30x108x34	280	600	450	890	14	10	18,0
32x192x42	320	700	500	890	14	10	17,6
34x126x38	350	750	620	1000	14	10	22,7

Tested calibrated round link chains

Chains are produced according to drawings and they conform to DIN 766



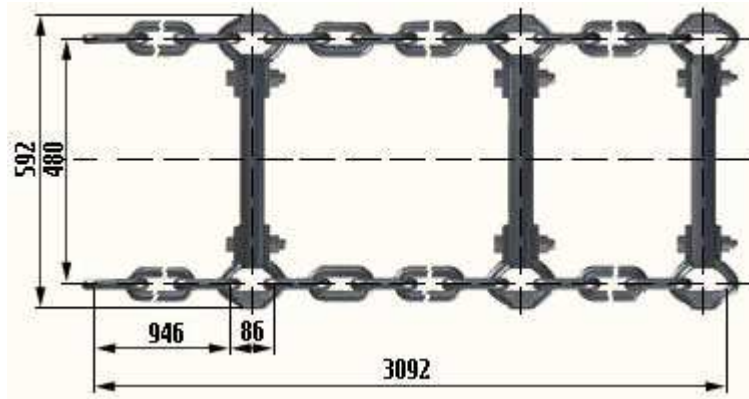
Range of chain sizes is between 5 and 32mm. They are made of carbon and alloy steels.

Chains are applied for conveying plant of different types and traction mechanism in many fields of industry.

Size, d x P , mm	Inside width. a, min, mm	Outside width., b , max, mm	Load, kN			Elongation , min , %	Weight of 1 m, kg
			proof	working	breaking , min		
5x18,5	6,0	17,0	3,2	8	12,5	15	0,5
6x18 ,5	7,2	20,4	4,0	10	16	15	0,8
7x22	8,4	23,5	6,3	16	25	15	1,1
8x24	9,6	27,5	8,0	20	32	15	1,4
9x27	10,8	30,6	10,0	25	40	15	1,8
10x28	12,0	36,0	12,5	32	50	15	2,3
11x31	13,0	40,0	16,0	40	63	15	2,7
13x36	15,6	47	20,0	50	80	15	3,9
14x41	16,8	50	25,0	63	100	15	4,4
16x45	19,0	58	32,0	80	125	15	5,8
18x50	21,6	65	40,0	100	160	15	7,4
23x64	27,6	83	63,0	160	250	15	12,0

26x73	31,2	94	80,0	200	320	15	15,0
28x78	33,6	101	100,0	250	400	15	18,0
30x84	36	108	112,0	280	450	15	20,0
32x90	38,4	115	125,0	320	500	15	23,0

Traction mechanism for mining equipment (scraper chains) based on chain 24x86H-C-11x2



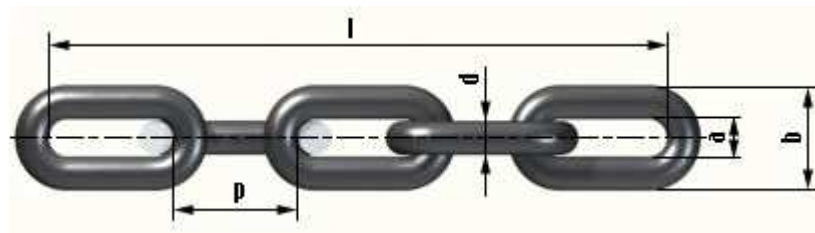
It is produced according to drawing SP 26.U.21.000.SB

It is applied instead of scraper chain SP 202, SP 63 etc., assembled on round link high strength chain 18x64-C-15x2 for mining equipment.

Traction mechanism is equipped with round link chains 24x86H-C-11x2 (drawing 10.19-1380), special connecting links, scrapers, screws and nuts. Outside width of chain vertical links is reduced.

Replacement of pans is not necessary in case of replacement of traction mechanism equipped with chain 18x64 for traction mechanism equipped with chain 24x86N.

Trawl chains (for fishing industry)

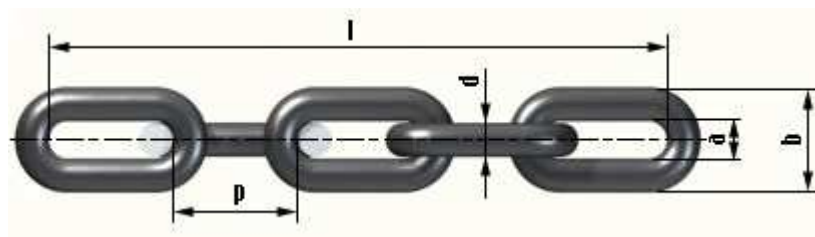


Round link chains, not calibrated are produced from alloy steel by means of heat treatment.

They are applied as a traction mechanism in lifting trawl devices and in some other devices with high strength chains.

Size,d,mm	Pitch ,t,mm	Inside width, b1 not less than,mm	Proof load, kN	Working load, kN	Breaking load, kN	Theoretical weight of 1m, kg
13	52	19,5	46	125	200	3,34
16	64	22	57	260	330	5,0
19	76	28	68	360	450	6,9

Welded round link chains for cement industry



Chains made of carbon and high-temperature steels according to TU 22-4772-80 and special drawings

They are applied as hinged chains in rotary cement furnace.

There are two types of chains:

- CON – used at gas flow temperature not more than 500°C
- COG – used at gas flow temperature not more than 800°

Type of chain	Size, mm,d	Pitch,mm,t	Proof load, not less kN.	Working temperature, not higher ,C	Theoretical weight of 1 m, kg
ЦОН	22	120	92	500	9,6
ЦОН	25	120	116	500	12,3
ЦОЖ	22	120	92	800	9,5
ЦОЖ	25	120	116	800	12,3