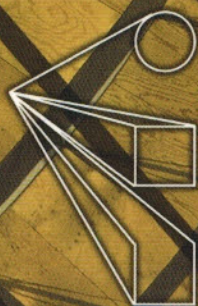


PRONTUARIO PESI TEORICI PRODOTTI SIDERURGICI

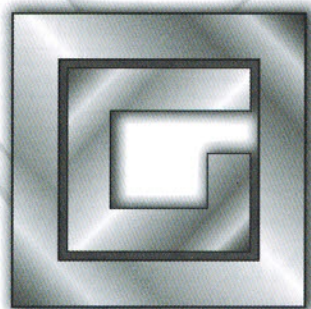


ORLANDO

PRODOTTI SIDERURGICI - LEGNAME - FERRO BATTUTO
LAMIERE GREGATE E COIBENTATE

Torremaggiore (Fg) - Tel. e Fax. 0882.382528

PRONTUARIO PESI TEORICI PRODOTTI SIDERURGICI



ORLANDO

**PRODOTTI SIDERURGICI
LEGNAME
FERRO BATTUTO
LAMIERE GREGATE
E COIBENTATE**

ACCIAIO DI USO GENERALE E DA COSTRUZIONE

caratteristiche meccaniche e composizione chimica UNI 7070-72

Tipo di acciaio		trazione su provetta trasversale							
		Rm	Rs min per spessori in mm				A min per spessori in mm		
			≤ 16	> 16÷40	> 40÷63	> 63÷100	≤ 40	> 40÷63	> 63÷100
			kg/mm ²				%		
Fe 33		33÷52					17		
Fe 37	A	37÷47	24	23	22	21	25	24	23
	B						26	25	24
	C								
	D								
Fe 42	A	42÷52	26	25	24	23	22	21	20
	B						24	23	22
	C								
	D								
Fe 44	A	44÷54	28	27	26	25	21	20	19
	B						23	22	21
	C								
	D								
Fe 52	A	52÷62	36	35	34		21	20	
	B								
	C								
	D								
Fe 50		50÷62	30	29	28		19	18	
Fe 60		60÷72	34	33	32		15	14	
Fe 70		70÷85	37	36	35		10	9	
Fe 00									

tipo di acciaio		piega		resilienza		composizione chimica di colata						
				temperat.	KVL media di 3 prove	C max	Mn max	P max	S max	Al min	N max	
		α	D	°C	kgm	%						
Fe 33		180°	3 a					0.06	0.06			
Fe 37	A	180°	1.5 a					0.05	0.06			
	B		a	+ 20				0.045	0.045		0.009	
	C			0	2.8	0.20	0.60	0.04	0.045		0.009	
	D			-20				0.04	0.04	0.015		
Fe 42	A	180°	2.5 a			0.23		0.05	0.06			
	B		2 a	+ 20				0.045	0.045		0.009	
	C			0	2.8	0.20	0.80	0.04	0.045		0.009	
	D			-20				0.04	0.04	0.015		
Fe 44	A	180°	2.5 a					0.05	0.06			
	B			+ 20				0.045	0.045		0.009	
	C			0	2.8	0.20	0.80	0.04	0.045		0.009	
	D			-20				0.04	0.04	0.015		
Fe 52	A	180°	3 a					0.045	0.045		0.009	
	B			+ 20	2.8	0.20	1.50	0.04	0.045		0.009	
	C			0				0.04	0.045		0.009	
	D			-20				0.04	0.04	0.015		
Fe 50		180°	4 a				0.70	0.045	0.05			
Fe 60							0.70	0.045	0.05			
Fe 70							0.70	0.045	0.05			
Fe 00		90°	4 a					0.045	0.06			

CORRISPONDENZE INDICATIVE TRA ACCIAI DI NORMATIVA UNIFICATA ITALIANA ED ESTERA

acciai di uso generale e da costruzione

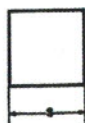
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Fe 33	Fe 320	Fe 310	St 33	A 33-2		
Fe 37 A		Fe 360 A				
Fe 37 B	Fe 360 B	Fe 360 B	St 37-2	E 24-2		A 283 C
Fe 37 C	Fe 360 C	Fe 360 C	St 37-3	E 24-3		
Fe 37 D	Fe 360 D	Fe 360 D	St 37-3	E 24-4		
Fe 42 A					40 A	
Fe 42 B	Fe 410 B				40 B	A 283 D
Fe 42 C	Fe 410 C				40 C	
Fe 42 D	Fe 410 D				40 D	A 131 D
Fe 44 A		Fe 430 A			43A, A1	
Fe 44 B	Fe 430 B	Fe 430 B	St 44-2	E 28-2	43 B	
Fe 44 C	Fe 430 C	Fe 430 C	St 44-3	E 28-3	43 C	
Fe 44 D	Fe 430 D	Fe 430 D	St 44-3	E 28-4	43 D	
Fe 52 B	Fe 510 B	Fe 510 B		E 36-2	50 B	A 242-2
Fe 52 C	Fe 510 C	Fe 510 C	St 52-3	E 36-3	50 C	A 572 gr. 50
Fe 52 D	Fe 510 D	Fe 510 D	St 52-3	E 36-4	50 D	A 633 gr. C.D.

PARTE 1 LAMINATI MERCANTILI



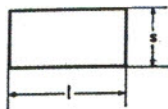
TONDI

dimensioni diametro mm	peso kg/m	dimensioni diametro mm	peso kg/m	dimensioni diametro mm	peso kg/m	dimensioni diametro mm	peso kg/m
5	0,154	26	4,17	63	24,50	140	121
6	0,222	27	4,49	65	26,00	145	130
7	0,302	28	4,83	68	28,50	150	139
8	0,395	30	5,55	70	30,20	155	148
9	0,499	32	6,31	73	32,90	160	158
10	0,617	33	6,71	75	34,70	170	178
11	0,746	34	7,13	78	37,50	180	200
12	0,888	35	7,55	80	39,50	190	223
13	1,04	36	7,99	83	42,50	200	247
14	1,21	37	8,44	85	44,50	220	289
15	1,39	38	8,90	88	47,70	230	326,19
16	1,58	40	9,86	90	49,90	240	355,16
17	1,78	42	10,90	95	55,60	250	385,38
18	2,00	45	12,50	100	61,60		
19	2,23	48	14,20	105	68,00		
20	2,47	50	15,40	110	74,60		
21	2,72	52	16,70	115	81,50		
22	2,96	53	17,30	120	88,80		
23	3,26	55	18,70	125	96,30		
24	3,55	58	20,70	130	104		
25	3,85	60	22,20	135	112		



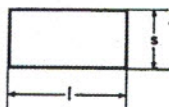
QUADRI

dimensioni lato mm	peso kg/m	dimensioni lato mm	peso kg/m	dimensioni lato mm	peso kg/m	dimensioni lato mm	peso kg/m
5	0.196	18	2.54	45	15.9	140	154
6	0.283	19	2.83	50	19.6	150	177
7	0.385	20	3.14	55	23.7		
8	0.502	22	3.80	60	28.3		
9	0.636	25	4.91	65	33.2		
10	0.785	26	5.31	70	38.5		
11	0.950	28	6.15	80	50.2		
12	1.13	30	7.07	90	63.6		
13	1.33	32	8.04	100	76.5		
14	1.54	35	9.62	110	95.0		
15	1.77	38	11.3	120	113		
16	2.01	40	12.6	130	133		



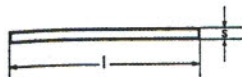
PIATTI

dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m
10 x 3	0,235	20 x 5	0,785	35 x 5	1,37	50 x 6	2,36
10 x 4	0,314	20 x 6	0,942	35 x 6	1,65	50 x 8	3,14
10 x 5	0,392	20 x 8	1,260	35 x 8	2,20	50 x 10	3,92
10 x 6	0,471	20 x 10	1,570	35 x 10	2,75	50 x 12	4,71
12 x 3	0,283	20 x 12	1,880	35 x 12	3,30	50 x 15	5,89
12 x 4	0,377	20 x 15	2,360	35 x 15	4,12	50 x 20	7,85
12 x 5	0,471	22 x 3	0,518	35 x 20	5,50	50 x 25	9,81
12 x 6	0,565	22 x 4	0,691	35 x 25	6,87	50 x 30	11,8
14 x 3	0,330	22 x 5	0,864	40 x 3	0,942	50 x 40	15,7
14 x 4	0,440	22 x 6	1,040	40 x 4	1,26	60 x 3	1,413
14 x 5	0,550	22 x 8	1,38	40 x 5	1,57	60 x 4	1,88
14 x 6	0,659	22 x 10	1,73	40 x 6	1,88	60 x 5	2,36
14 x 8	0,879	22 x 12	2,07	40 x 8	2,51	60 x 6	2,83
15 x 3	0,353	22 x 15	2,59	40 x 10	3,14	60 x 8	3,77
15 x 4	0,471	25 x 3	0,589	40 x 12	3,77	60 x 10	4,71
15 x 5	0,589	25 x 4	0,785	40 x 15	4,71	60 x 12	5,65
15 x 6	0,706	25 x 5	0,981	40 x 20	6,28	60 x 15	7,06
15 x 8	0,942	25 x 6	1,18	40 x 25	7,85	60 x 20	9,42
15 x 10	1,17	25 x 8	1,57	40 x 30	9,42	60 x 25	11,8
16 x 3	0,377	25 x 10	1,95	45 x 3	1,059	60 x 30	14,1
16 x 4	0,502	25 x 12	2,36	45 x 4	1,41	60 x 40	18,8
16 x 5	0,628	25 x 15	2,94	45 x 5	1,77	60 x 50	23,6
16 x 6	0,754	30 x 3	0,706	45 x 6	2,12	70 x 3	1,648
16 x 8	1,00	30 x 4	0,942	45 x 8	2,83	70 x 4	2,20
16 x 10	1,26	30 x 5	1,18	45 x 10	3,53	70 x 5	2,75
18 x 3	0,424	30 x 6	1,41	45 x 12	4,24	70 x 6	3,30
18 x 4	0,565	30 x 8	1,88	45 x 15	5,30	70 x 8	4,40
18 x 5	0,706	30 x 10	2,36	45 x 20	7,09	70 x 10	5,50
18 x 6	0,848	30 x 12	2,83	45 x 25	8,83	70 x 12	6,59
18 x 8	1,130	30 x 15	3,53	45 x 30	10,6	70 x 15	8,24
18 x 10	1,410	30 x 20	4,71	50 x 3	1,177	70 x 20	11,0
20 x 3	0,471	35 x 3	0,824	50 x 4	1,57	70 x 25	13,7
20 x 4	0,628	35 x 4	1,10	50 x 5	1,96	70 x 30	16,5



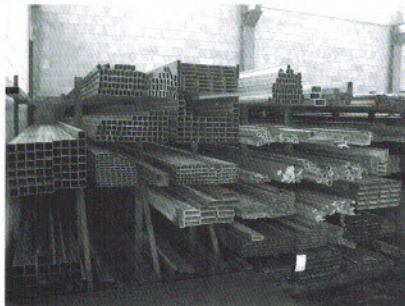
PIATTI

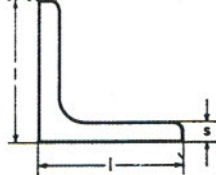
dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m
70 x 40	22,0	100 x 5	3,92	120 x 25	23,6	150 x 4	4,71
70 x 50	27,5	100 x 6	4,71	120 x 30	28,3	150 x 5	5,89
70 x 60	33,0	100 x 8	6,28	120 x 40	37,7	150 x 6	7,06
80 x 3	1,884	100 x 10	7,85	120 x 50	47,1	150 x 8	9,42
80 x 4	2,51	100 x 12	9,42	120 x 60	56,5	150 x 10	11,8
80 x 5	3,14	100 x 15	11,8	130 x 4	4,08	150 x 12	14,1
80 x 6	3,77	100 x 20	15,7	130 x 5	5,10	150 x 15	17,7
80 x 8	5,02	100 x 25	19,6	130 x 6	6,12	150 x 20	23,6
80 x 10	6,28	100 x 30	23,6	130 x 8	8,16	150 x 25	29,4
80 x 12	7,54	100 x 40	31,4	130 x 10	10,2	150 x 30	35,3
80 x 15	9,42	100 x 50	39,2	130 x 12	12,2	150 x 40	47,1
80 x 20	12,6	100 x 60	47,1	130 x 15	15,3	150 x 50	58,9
80 x 25	15,7	110 x 4	3,45	130 x 20	20,4	150 x 60	70,6
80 x 30	18,8	110 x 5	4,32	130 x 25	25,5		
80 x 40	25,1	110 x 6	5,18	130 x 30	30,6		
80 x 50	31,4	110 x 8	6,91	130 x 40	40,8		
80 x 60	37,7	110 x 10	8,64	130 x 50	51,0		
90 x 3	2,119	110 x 12	10,4	130 x 60	61,2		
90 x 4	2,83	110 x 15	13,0	140 x 3	3,297		
90 x 5	3,53	110 x 20	17,3	140 x 4	4,40		
90 x 6	4,24	110 x 25	21,6	140 x 5	5,50		
90 x 8	5,65	110 x 30	25,9	140 x 6	6,59		
90 x 10	7,06	110 x 40	34,5	140 x 8	8,79		
90 x 12	8,48	110 x 50	43,2	140 x 10	11,0		
90 x 15	10,6	110 x 60	51,8	140 x 12	13,2		
90 x 20	14,1	120 x 4	3,77	140 x 15	16,5		
90 x 25	17,7	120 x 5	4,71	140 x 20	22,0		
90 x 30	21,2	120 x 6	5,65	140 x 25	27,5		
90 x 40	28,3	120 x 8	7,54	140 x 30	33,0		
90 x 50	35,3	120 x 10	9,42	140 x 40	44,0		
90 x 60	42,4	120 x 12	11,3	140 x 50	55,0		
100 x 3	2,355	120 x 15	14,1	140 x 60	65,9		
100 x 4	3,14	120 x 20	18,8	150 x 3	3,532		



LARGHI PIATTI

dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m	dimensioni larghezza spessore mm mm	peso kg/m
160 x 5	6,28	200 x 8	12,6	280 x 40	87,9	400 x 40	124,80
160 x 6	7,54	200 x 10	15,7	300 x 8	18,8	400 x 50	156,00
160 x 8	10,0	200 x 12	18,8	300 x 10	23,6	400 x 60	187,20
160 x 10	12,6	200 x 15	23,6	300 x 12	28,3	450 x 5	17,55
160 x 12	15,1	200 x 20	31,4	300 x 15	35,3	450 x 6	21,06
160 x 15	18,8	200 x 25	39,2	300 x 20	47,1	450 x 8	28,08
160 x 20	25,1	200 x 30	47,1	300 x 25	58,9	450 x 10	35,10
160 x 25	31,4	220 x 8	13,8	300 x 30	70,6	450 x 12	42,12
160 x 30	37,7	220 x 10	17,3	300 x 35	82,4	450 x 15	52,65
170 x 5	6,67	220 x 12	20,7	300 x 40	94,2	450 x 20	70,20
170 x 6	8,01	220 x 15	25,9	350 x 5	13,65	450 x 25	87,75
170 x 8	10,7	220 x 20	34,5	350 x 6	16,38	450 x 30	105,30
170 x 10	13,3	220 x 25	43,2	350 x 8	21,84	450 x 35	122,85
170 x 12	16,0	220 x 30	51,8	350 x 10	27,30	450 x 40	140,00
170 x 15	20,0	220 x 35	60,4	350 x 12	32,76	450 x 50	175,50
170 x 20	26,7	220 x 40	69,1	350 x 15	40,95	450 x 60	210,60
170 x 25	33,4	250 x 8	15,7	350 x 20	54,60	500 x 5	19,5
170 x 30	40,3	250 x 10	19,6	350 x 25	68,25	500 x 6	23,40
180 x 6	8,48	250 x 12	23,6	350 x 30	81,90	500 x 8	31,20
180 x 8	11,3	250 x 15	29,4	350 x 35	95,55	500 x 10	39,00
180 x 10	14,1	250 x 20	39,2	350 x 40	109,20	500 x 12	46,80
180 x 12	17,0	250 x 25	49,1	350 x 50	134,50	500 x 15	58,50
180 x 15	21,2	250 x 30	58,9	350 x 60	163,80	500 x 20	78,00
180 x 20	28,3	250 x 35	68,7	400 x 5	15,60	500 x 25	97,50
180 x 25	35,3	250 x 40	78,5	400 x 6	18,72	500 x 30	117,00
180 x 30	42,4	280 x 8	17,6	400 x 8	24,96	500 x 35	136,50
190 x 8	11,9	280 x 10	22,0	400 x 10	31,20	500 x 40	156,00
190 x 10	14,9	280 x 12	26,4	400 x 12	37,44	500 x 50	195,00
190 x 12	17,9	280 x 15	33,0	400 x 15	46,80	500 x 60	234,00
190 x 15	22,4	280 x 20	44,0	400 x 20	62,40		
190 x 20	29,8	280 x 25	55,0	400 x 25	78,00		
190 x 25	37,3	280 x 30	65,9	400 x 30	93,60		
190 x 30	44,7	280 x 35	76,9	400 x 35	106,08		

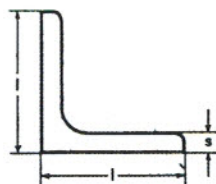




ANGOLARI

a lati uguali ed a spigoli tondi

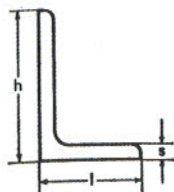
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15 x 3	0,64	50 x 5	3,77	80 x 10	11,90	130 x 12	23,60
20 x 3	0,88	50 x 6	4,47	80 x 12	14,10	130 x 14	27,20
20 x 4	1,14	50 x 7	5,15	90 x 8	10,90	130 x 16	30,90
25 x 3	1,11	50 x 9	6,47	90 x 9	12,20	140 x 13	27,50
25 x 4	1,45	55 x 5	4,18	90 x 11	14,70	140 x 15	31,40
25 x 5	1,77	55 x 6	4,95	90 x 13	17,10	140 x 17	35,30
30 x 3	1,36	55 x 8	6,46	90 x 15	19,50	150 x 14	31,60
30 x 4	1,78	60 x 6	5,42	100 x 10	15,10	150 x 16	35,90
30 x 5	2,18	60 x 8	7,09	100 x 12	17,80	150 x 18	40,10
30 x 6	2,56	60 x 10	8,69	100 x 14	20,60	160 x 15	36,20
35 x 4	2,09	65 x 7	6,83	100 x 16	23,20	160 x 17	40,70
35 x 5	2,57	65 x 9	8,62	110 x 10	16,60	160 x 19	45,10
35 x 6	3,04	70 x 7	7,38	110 x 12	19,70	180 x 16	43,50
40 x 4	2,42	70 x 9	9,34	110 x 14	22,80	180 x 18	48,60
40 x 5	2,97	70 x 11	11,20	120 x 11	19,90	180 x 20	53,70
40 x 6	3,52	75 x 8	9,03	120 x 13	23,30	200 x 16	48,50
45 x 5	3,38	75 x 10	11,10	120 x 15	26,60	200 x 18	54,30
45 x 6	4,00	75 x 12	13,10	120 x 18	31,50	200 x 20	59,90
45 x 7	4,60	80 x 8	9,66				



ANGOLARI

a lati uguali ed a spigoli tondi
serie alleggerita non unificata

dimensioni lato spessore mm mm	peso kg/m	dimensioni lato spessore mm mm	peso kg/m
35 x 3	1,60	80 x 6	7,34
40 x 3	1,84	80 x 7	8,48
45 x 3	2,09	90 x 6	8,30
45 x 4	2,74	90 x 7	9,60
50 x 3	2,33	100 x 6	9,29
50 x 4	3,06	100 x 7	10,70
55 x 4	3,70	100 x 8	12,20
60 x 4	4,18	100 x 9	13,50
60 x 5	4,56	110 x 6	10,24
65 x 5	5,00	110 x 7	11,80
65 x 6	5,93	110 x 8	13,40
70 x 5	5,37	110 x 9	15,00
70 x 6	6,38	120 x 8	14,70
75 x 6	7,00	120 x 9	16,40
75 x 7	8,00	120 x 10	18,20



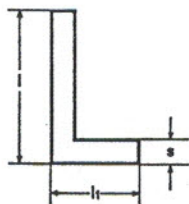
ANGOLARI

a lati disuguali ed a spigoli tondi

dimensioni lato altezza spessore mm mm mm	peso kg/m	dimensioni lato altezza spessore mm mm mm	peso kg/m	dimensioni lato altezza spessore mm mm mm	peso kg/m	dimensioni lato altezza spessore mm mm mm	kg/m
20 x 30 x 4	1,45	30 x 60 x 7	4,59	60 x 120 x 10	13,4	90 x 200 x 9	20,2
20 x 30 x 5	1,77	40 x 60 x 5	3,76	65 x 100 x 7	8,77	90 x 200 x 10	22,2
20 x 35 x 4	1,61	40 x 60 x 6	4,46	65 x 100 x 9	11,1	90 x 200 x 11	24,6
20 x 35 x 5	1,97	40 x 60 x 7	5,14	65 x 100 x 11	13,4	90 x 200 x 12	26,3
20 x 40 x 4	1,77	40 x 80 x 6	5,41	65 x 130 x 8	11,9	90 x 200 x 15	32,5
20 x 40 x 5	2,17	40 x 80 x 8	7,07	65 x 130 x 10	14,6	100 x 150 x 10	19,3
25 x 40 x 4	1,92	50 x 75 x 6	5,65	65 x 130 x 12	17,3	100 x 150 x 12	22,6
25 x 40 x 5	2,36	50 x 75 x 7	6,53	75 x 100 x 8	11,2	100 x 150 x 14	26,1
30 x 45 x 4	2,25	50 x 75 x 9	8,22	75 x 100 x 10	13,8	100 x 200 x 10	23,0
30 x 45 x 5	2,77	50 x 100 x 8	8,99	80 x 120 x 8	12,2	100 x 200 x 12	27,3
30 x 45 x 6	3,27	50 x 100 x 10	11,10	80 x 120 x 10	15,0	100 x 200 x 14	31,6
30 x 50 x 5	2,96	60 x 80 x 7	7,35	80 x 120 x 12	17,8	100 x 200 x 15	35,9
30 x 50 x 6	3,51	60 x 80 x 8	8,33	80 x 120 x 14	20,5		
30 x 60 x 5	3,37	60 x 80 x 10	10,20				
30 x 60 x 6	3,99	60 x 120 x 8	10,90				

ANGOLARI

a lati disuguali ed a spigoli vivi



dimensioni lato mm	altezza mm	spessore mm	peso kg/m
20	12	4	0,879
25	15	4,5	1,25
30	17,5	5	1,67
35	20	5,5	2,14
40	22	6	2,64

Dimensioni

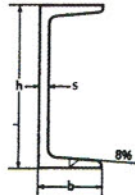
Gli angolari possono essere forniti dalla C.S.B. nelle lunghezze commerciali in tutte le dimensioni riportate nelle tabelle.

Su richiesta del cliente gli angolari possono inoltre essere forniti a lunghezza fissa d'impiego.

Tolleranze

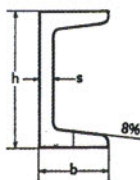
Vengono garantite le tolleranze normali previste dalle seguenti norme di unificazione:

angolari a lati uguali ed a spigoli tondi - serie normale od alleggerita	UNI 5783-73
angolari a lati disuguali ed a spigoli tondi	UNI 5784-73
angolari a lati disuguali ed a spigoli vivi	UNI 6762-70



PROFILATI AD U SERIE NORMALE

h	b	a	e	r	sezione	peso	momenti di inerzia		moduli di resistenza		raggi di inerzia	
							Jx	Jy	Wx	Wy	Ix	Iy
mm	mm	mm	mm	mm	cm ²	kg/m	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm
30	33	5	7	7	5,44	4,27	6,39	5,33	4,26	2,68	1,08	0,99
40	35	5	7	7	6,21	4,87	14,10	6,68	7,05	3,08	1,50	1,04
50	38	5	7	7	7,12	5,59	26,40	9,12	10,60	3,75	1,92	1,13
65	42	5,5	7,5	7,5	9,03	7,09	57,50	14,10	17,70	5,07	2,52	1,25
80	45	6	8	8	11,0	8,65	106	19,4	26,5	6,35	3,10	1,33
100	50	6	8,5	8,5	13,5	10,6	205	29,1	41,1	8,45	3,91	1,47
120	55	7	9	9	17,0	13,3	364	43,1	60,7	11,1	4,63	1,59
140	60	7	10	10	20,4	16,0	605	62,5	86,4	14,7	5,45	1,75
160	65	7,5	10,5	10,5	24,0	18,9	925	85,1	116	18,2	6,21	1,88
180	70	8	11	11	28,0	22,0	1354	114	150	22,4	6,96	2,01
200	75	8,5	11,5	11,5	32,2	25,3	1911	148	191	26,9	7,71	2,14
220	80	9	12,5	12,5	37,4	29,4	2691	196	245	33,5	8,48	2,29
240	85	9,5	13	13	42,3	33,2	3599	247	300	39,5	9,22	2,42
260	90	10	14	14	48,3	37,9	4824	317	371	47,8	10,0	2,56
280	95	10	15	15	53,4	41,9	6276	398	448	57,2	10,8	2,73
300	100	10	16	16	58,8	46,1	8028	493	535	67,6	11,7	2,90



PROFILATI AD U SERIE SPECIALE

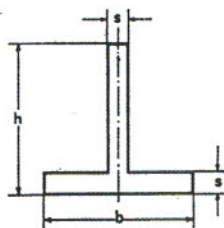
h	b	a	e	r	sezione	peso	momenti di inerzia		moduli di resistenza		raggi di inerzia	
							Jx	Jy	Wx	Wy	Ix	Iy
mm	mm	mm	mm	mm	cm ²	kg/m	cm ⁴	cm ⁴	cm ³	cm ³	cm	cm
* 25	12	4	4	4	1,68	1,30						
30	15	4	4,5	4,5	2,21	1,98	2,53	0,38	1,69	0,39	1,07	0,42
		5	7	7	5,44	4,27	6,39	5,33	4,26	2,68	1,08	0,99
* 35	17	5	5,5	5,5	3,27	2,52						
40	20	5	5,5	5	3,66	3,23	7,58	1,14	3,79	0,86	1,44	0,56
					6,21	4,87	14,10	6,68	7,05	3,08	1,50	1,04
50	25	5	6	6	4,92	4,15	16,80	2,49	6,73	1,48	1,85	0,71
					7,12	5,59	26,40	9,12	10,60	3,75	1,92	1,13
60	30	6	6	6	6,46	5,45	31,60	4,51	10,50	2,16	2,21	0,84
					9,03	7,09	57,50	14,10	17,70	5,07	2,52	1,25

* non unificato

PROFILATI a T

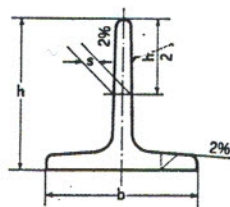
a spigoli vivi

dimensione profilo base mm	altezza mm	spessore mm	peso kg/m
20	20	4,0	1,13
25	25	4,5	1,61
30	30	5,0	2,16
35	35	5,5	2,78
40	40	6,0	3,49
45	45	6,5	4,26
50	50	7	5,11
60	60	8	7,03
70	70	9	9,26
80	80	10	11,80



PROFILATI a T

a spigoli tondi

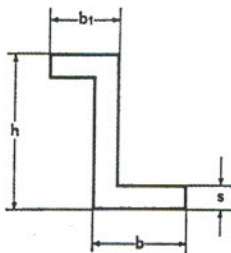


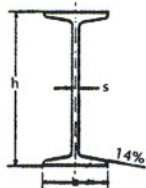
dimensione profilo base mm	altezza mm	spessore mm	peso kg/m
60	30	5,5	3,65
60	60	7	6,23
70	70	8	8,32
80	80	9	10,7
100	100	11	16,4

PROFILATI a Z

a spigoli vivi

dimensione profilo altezza mm	base mm	base 1 mm	spessore mm	peso kg/m
25	15	13	4,5	1,55
30	17	14	5	2,00
35	19	16	5,5	2,55
40	21	17	6	3,11

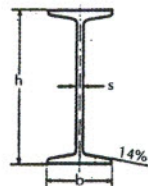




TRAVI NP

dati generali

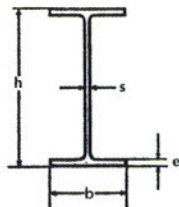
PROFILO					Peso al m. kg	Sez. cm ²	Wx cm ³	Jx cm ⁴
h	b	a	e	r				
80	42	3,9	5,9	3,9	5,9	7,6	19,4	78
100	50	4,5	6,8	4,5	8,3	10,6	34,1	170
120	58	5,1	7,7	5,1	11,1	14,2	54,5	327
140	66	5,7	8,6	5,7	14,3	18,2	81,8	572
160	74	6,3	9,5	6,3	17,9	22,8	117	934
180	82	6,9	10,4	6,9	21,9	27,9	161	1444
200	90	7,5	11,3	7,5	26,2	33,4	214	2138
220	98	8,1	12,2	8,1	31,0	39,5	278	3050
240	106	8,7	13,1	8,7	36,2	46,1	353	4239
260	113	9,4	14,1	9,4	41,9	53,3	441	5735
280	119	10,1	15,2	10,1	47,9	61,0	541	7575
300	125	10,8	16,2	10,8	54,2	69,0	652	9785
320	131	11,5	17,3	11,5	61,0	77,7	781	12490
340	137	12,2	18,3	12,2	68,0	86,7	922	15670
360	143	13,0	19,5	13,0	76,1	97	1087	19580
380	149	13,7	20,5	13,7	84,0	107	1262	23980
400	155	14,4	21,6	14,4	92,5	118	1461	29210
425	163	15,3	23,0	15,3	104	132	1738	36930
450	170	16,2	24,3	16,2	115	147	2035	45790
475	178	17,1	25,6	17,1	128	163	2375	56410
500	185	18,0	27,0	18,0	141	180	2746	68650
550	200	19,0	30,0	19,0	166	212	3598	98950
600	215	21,6	32,4	21,6	199	254	4626	138800



TRAVI NP

tabella dei carichi netti
uniformemente
ripartiti per $\sigma = 1600 \text{ kg/cm}^2$

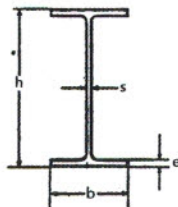
h	DISTANZA TRA GLI APPOGGI IN METRI															
	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00
80	978	810	689	597	525	467	—	—	—	—	—	—	—	—	—	—
100	1725	1430	1218	1058	932	831	747	677	—	—	—	—	—	—	—	—
120	2763	2232	1954	1700	1500	1340	1207	1096	919	—	—	—	—	—	—	—
140	4152	3447	2941	2560	2262	2022	1825	1659	1395	1194	1035	—	—	—	—	—
160	5946	4938	4216	3672	3247	2906	2624	2389	2014	1729	1503	1319	—	—	—	—
180	8188	6804	5811	5064	4481	4012	3626	3303	2791	2401	2093	1842	1632	—	—	—
200	10891	9052	7734	6743	5969	5347	4836	4408	3730	3214	2808	2477	2202	1968	—	—
220	14156	11768	10058	8772	7763	6962	6300	5745	4866	4200	3675	3248	2893	2593	2334	—
240	17983	14953	12783	11151	9878	8856	8016	7313	6201	5358	4695	4156	3709	3331	3004	2720
260	22474	18690	15981	13944	12355	11080	10032	9157	7770	6721	5895	5226	4670	4201	3797	3445
280	27575	22939	19617	17120	15172	13610	12327	11254	9557	8273	7263	6446	5768	5195	4703	4275
300	33247	27656	23654	20648	18302	16421	14875	13584	11544	10000	8786	7803	6990	6304	5714	5202
320	39835	33140	28343	24748	21341	19689	17840	16295	13854	12008	10558	9387	8417	7598	6896	6286
340	47036	39135	33481	29232	25920	23263	21083	19261	16383	14208	12501	11122	9980	9018	8194	7477
360	55464	46150	39487	34480	30577	27447	24878	22733	19344	16784	14774	13152	11811	10681	9713	8873
380	64824	53593	45859	40048	35518	31887	28908	26418	22488	19520	17192	15313	13761	12453	11133	10362
400	74572	62059	53107	46382	41141	36940	33492	30613	26068	22636	19946	17775	15983	14474	13183	12062
425	88726	73842	63197	55200	48968	43972	39876	36453	31052	26976	23782	21206	19080	17290	15760	14434
450	103904	86481	74020	64660	57366	51521	46727	42723	36406	31640	27907	24898	22415	20326	18541	16995
475	121280	100950	86409	75488	66980	60160	54568	49898	42532	36976	32625	29120	26228	23797	21720	19922
500	140243	116740	99932	87308	77474	69592	63131	57735	49225	42808	37785	33738	30402	27598	25204	23132
550	183802	153016	131003	114472	101596	91278	82822	75761	64630	56240	49677	44394	40041	36386	33268	30572
600	236353	196779	168483	147236	130688	117430	106565	97494	83196	72424	64000	57222	51640	46956	42961	39508



TRAVI IPE

dati generali

PROFILO					Peso al m. kg	Sez. cm ²	Wx cm ³	Jx cm ⁴
h	b	a	e	r				
80	46	3,8	5,2	5,0	6,0	7,6	20,0	80
100	55	4,1	5,7	7,0	8,1	10,3	34,2	171
120	64	4,4	6,3	7,0	10,4	13,2	53,0	318
140	73	4,7	6,9	7,0	12,9	16,4	77,3	541
160	82	5,0	7,4	9,0	15,8	20,1	109	869
180	91	5,3	8,0	9,0	18,8	23,9	146	1317
200	100	5,6	8,5	12,0	22,4	28,5	194	1943
220	110	5,9	9,2	12,0	26,2	33,4	252	2772
240	120	6,2	9,8	15,0	30,7	39,1	324	3892
270	135	6,6	10,2	15,0	36,1	45,9	429	5790
300	150	7,1	10,7	15,0	42,2	53,8	557	8356
330	160	7,5	11,5	18,0	49,1	62,6	713	11770
360	170	8,0	12,7	18,0	57,1	72,7	904	16270
400	180	8,6	13,5	21,0	66,3	84,5	1160	23130
450	190	9,4	14,6	21,0	77,6	98,8	1500	33740
500	200	10,2	16,0	21,0	90,7	116	1930	48200
550	210	11,1	17,2	24,0	106	134	2440	67120
600	220	12,0	19,0	24,0	122	156	3070	92080



TRAVI IPE

tabella dei carichi netti
uniformemente
ripartiti per $\sigma = 1600 \text{ kg/cm}^2$

h	DISTANZA TRA GLI APPOGGI IN METRI															
	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	7.00	8.00	9.00	10.00	11.00	12.00	13.00	14.00
80	1009	835	710	616	542	482	—	—	—	—	—	—	—	—	—	—
100	1731	1435	1222	1062	936	835	751	681	—	—	—	—	—	—	—	—
120	2687	2230	1902	1654	1460	1305	1176	1068	896	—	—	—	—	—	—	—
140	3925	3259	2782	2422	2140	1914	1728	1571	1323	1133	—	—	—	—	—	—
160	5541	4603	3931	3425	3029	2711	2450	2230	1882	1617	1408	—	—	—	—	—
180	7428	6173	5273	4597	4068	3643	3294	3002	2538	2185	1907	1681	1492	—	—	—
200	9876	8210	7016	6118	5417	4854	4391	4004	3390	2925	2557	2259	2011	1800	1619	—
220	12837	10673	9124	7959	7050	6320	5720	5219	4424	3822	3348	2963	2644	2373	2140	1937
240	16512	13732	11741	10246	9078	8141	7371	6728	5709	4939	4332	3840	3432	3087	2791	2532
270	21874	18195	15563	13583	12040	10802	9785	8935	7592	6575	5776	5130	4595	4143	3754	3417
300	28413	23638	20222	17655	15653	14048	12731	11629	9889	8574	7542	6707	6017	5435	4935	4101
330	36383	30274	25904	22620	20060	18007	16323	14916	12694	11016	9698	8635	7756	7016	6382	5831
360	46142	38399	32860	28700	25457	22857	20724	18942	16130	14007	12343	11000	9891	8957	8158	7465
400	59226	49294	42191	36855	32697	29364	26631	24350	20747	18029	15901	14185	12769	11577	10559	9677
450	76606	63767	54585	47689	42317	38012	34482	31534	26885	23379	20635	18424	16601	15069	13760	12628
500	98589	82074	70265	61397	54490	48954	44417	40629	34656	30154	26632	23797	21460	19498	17824	16376
550	124663	103788	88863	77656	68927	61934	56202	51417	43875	38192	33748	30172	27226	24754	22646	20824
600	156879	130620	111847	97752	86775	77982	70776	64761	55283	48144	42564	38076	34381	31282	28641	26360

TRAVE IPE SOLLECITATE A COMPRESSIONE

pilastri acciaio con carico di sicurezza = 16 kg/m²

mm	carichi massimi in kg riferiti alle lunghezze dei pilastri in m:											
	2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	8
80	3574	2272	1583	1166								
100	6618	4291	2953	2177	1671							
120	10057	7489	5201	3784	2937	2323	1884					
140	14183	11359	8437	6116	4702	3727	3023	2503				
160	18917	15611	12711	9403	7210	5695	4614	3810	3203	2732		
180	24050	20670	17225	13755	10563	8367	6768	5607	4709	4021	3466	
200	30000	26205	22463	19079	15099	11875	9702	7985	6745	5728	4924	3781
220		32987	28886	24855	21461	17183	13916	11517	9698	8259	7059	5419
240		40623	35954	31595	27681	23696	19190	15878	13310	11353	9790	7483
270		50301	45614	41258	36537	32495	28355	23167	19689	16690	14513	11110
300		61049	56631	51855	46782	42403	38088	33756	28503	24454	20944	16000
330			68136	62600	57234	51896	46586	41907	36688	31596	27217	20780
360			81342	75532	69652	63912	58452	52396	47477	41841	36236	27498
400			95886	89536	83456	76384	70051	63474	58528	53019	45581	34666
450				106093	99421	92444	85448	78646	71207	65593	57904	44280
500				128000	120519	111807	104269	96165	88380	80346	73359	56932
550					141052	132345	122514	112842	105615	96576	88962	70065
600					167516	156981	147692	137142	128000	117183	108995	89784

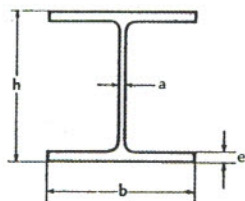
Dimensioni

Le travi vengono fornite da ORLANDO nelle lunghezze commerciali 6-12 mt. Su richiesta del cliente le travi possono essere tagliate in barre a lunghezza fissa sia con taglio a 90°, sia con tagli ad angolature diverse. Possono inoltre essere forate, sabbiare e verniciate.

Tolleranze

Vengono garantite le tolleranze normali previste dalle seguenti norme di unificazione vigenti:

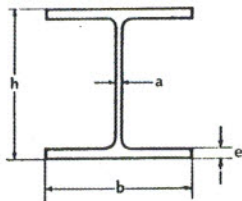
Travi IPE	UNI 5398-64
Travi IPE ad ali larghe e parallele	UNI 5397-64



TRAVI HEA

dati generali

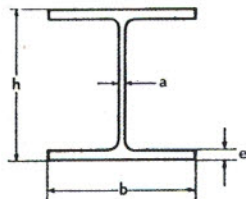
PROFILO						Peso al m. kg	Sez. cm ²	Wx cm ³	Jx cm ⁴
HE	h	b	a	e	r				
100	96	100	5,0	8,0	12,0	16,7	21,2	73	349
120	114	120	5,0	8,0	12,0	19,9	25,3	106	606
140	133	140	5,5	8,5	12,0	24,7	31,4	155	1033
160	152	160	6,0	9,0	15,0	30,4	38,8	220	1673
180	171	180	6,0	9,5	15,0	35,5	45,3	294	2510
200	190	200	6,5	10,0	18,0	42,3	53,8	389	3692
220	210	220	7,0	11,0	18,0	50,5	64,3	515	5410
240	230	240	7,5	12,0	21,0	60,3	76,8	675	7763
260	250	260	7,5	12,5	24,0	68,2	86,8	836	10455
280	270	280	8,0	13,0	24,0	76,4	97,3	1010	13673
300	290	300	8,5	14,0	27,0	88,3	112	1260	18263
320	310	300	9,0	15,5	27,0	97,6	124	1480	22928
340	330	300	9,5	16,5	27,0	105	133	1680	27693
360	350	300	10,0	17,5	27,0	112	143	1890	33090
400	390	300	11,0	19,0	27,0	125	159	2310	45069
450	440	300	11,5	21,0	27,0	140	178	2900	63722
500	490	300	12,0	23,0	27,0	155	197	3550	86975
550	540	300	12,5	24,0	27,0	166	212	4150	111932
600	590	300	13,0	25,0	27,0	178	226	4790	141203
650	640	300	13,5	26,0	27,0	190	241	5470	175178
700	690	300	14,5	27,0	27,0	204	260	6240	215301
800	790	300	15,0	28,0	30,0	224	286	7680	303442
900	890	300	16,0	30,0	30,0	252	320	9480	422075
1000	990	300	16,5	31,0	30,0	272	347	11190	553846



TRAVI HEA

tabella dei carichi netti
uniformemente
ripartiti per $\sigma = 1600 \text{ kg/cm}^2$

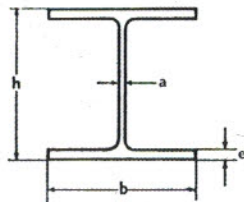
h	DISTANZA TRA GLI APPOGGI IN METRI											
	3	4	5	6	7	8	9	10	11	12	13	14
100	3064	2269	1785	1457	—	—	—	—	—	—	—	—
120	4463	3312	2614	2142	1800	—	—	—	—	—	—	—
140	6539	4861	3844	3158	2661	2282	—	—	—	—	—	—
160	9295	6918	5480	4511	3810	3276	2855	2512	—	—	—	—
180	12437	9265	7348	6059	5127	4419	3861	3408	3030	—	—	—
200	16470	12278	9746	8044	6816	5885	5151	4556	4061	3641	—	—
220	21821	16277	12931	10683	9063	7835	6869	6087	5437	4887	4414	—
240	28618	21358	16978	14037	11920	10317	9057	8036	7191	6476	5862	5327
260	35464	26478	21060	17425	14809	12830	11275	10018	8977	8098	7344	6688
280	42863	32013	25473	21087	17933	15548	13676	12163	10912	9856	8951	8164
300	53493	39965	31813	26349	22421	19453	17125	15244	13690	12380	11258	10283
320	62852	46368	37400	30987	26379	22898	20170	17967	16147	14615	13306	12164
340	71363	53338	42481	35209	29984	26039	22947	20453	18393	16659	15176	13889
360	80301	60034	47822	39646	33775	29343	25871	23071	20760	18815	17152	15711
400	98182	73418	58509	48528	41364	35959	31790	28317	25567	23139	21119	19369
450	123310	92237	73538	61025	52047	45278	39983	35719	32204	29252	26733	24553
500	150997	112977	90102	74801	63827	55558	49092	43888	39603	36005	32937	30286
550	176564	132132	105407	87535	74721	65070	57526	51458	46463	42273	38702	35618
600	203834	152564	121731	101116	86340	75214	66520	59530	53778	48956	45026	41301
650	232816	174280	139082	115553	98692	86000	76085	68116	61560	56066	51388	47351
700	265628	198864	158724	131896	112674	98200	86910	77832	70366	64112	58788	54195
800	327008	244864	195488	162496	138866	121088	107210	96064	86903	79232	72706	67081
900	403724	302352	241428	200728	171584	149664	132558	118824	107540	98096	90065	83146
1000	476624	356992	285104	237088	202713	176864	156698	140512	127218	116096	106642	98500



TRAVI HEB

dati generali

PROFILO						Peso al m. kg	Sez. cm ²	Wx cm ³	Jx cm ⁴
HE	h	b	a	e	r				
100	100	100	6,0	10,0	12,0	20,4	26,0	90	450
120	120	120	6,5	11,0	12,0	26,7	34,0	144	864
140	140	140	7,0	12,0	12,0	33,7	43,0	216	1509
160	160	160	8,0	13,0	15,0	42,6	54,3	311	2492
180	180	180	8,5	14,0	15,0	51,2	65,3	426	3831
200	200	200	9,0	15,0	18,0	61,3	78,1	570	5696
220	220	220	9,5	16,0	18,0	71,5	91,0	736	8091
240	240	240	10,0	17,0	21,0	83,2	106	938	11259
260	260	260	10,0	17,5	24,0	93,0	118	1150	14919
280	280	280	10,5	18,0	24,0	103	131	1380	19270
300	300	300	11,0	19,0	27,0	117	149	1680	25166
320	320	300	11,5	20,5	27,0	127	161	1930	30823
340	340	300	12,0	21,5	27,0	134	171	2160	36656
360	360	300	12,5	22,5	27,0	142	181	2400	43193
400	400	300	13,5	24,0	27,0	155	198	2880	57680
450	450	300	14,0	26,0	27,0	171	218	3550	79887
500	500	300	14,5	28,0	27,0	187	239	4290	107176
550	550	300	15,0	29,0	27,0	199	254	4970	136691
600	600	300	15,5	30,0	27,0	212	270	5700	171041
650	650	300	16,0	31,0	27,0	225	286	6480	210616
700	700	300	17,0	32,0	27,0	241	306	7340	256888
800	800	300	17,5	33,0	30,0	262	334	8980	359083
900	900	300	18,5	35,0	30,0	291	371	10980	494065
1000	1000	300	19,0	36,0	30,0	314	400	12890	644748

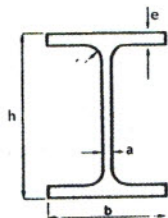


TRAVI HEB

tabella dei carichi netti
uniformemente

ripartiti per $\sigma = 1600 \text{ kg/cm}^2$

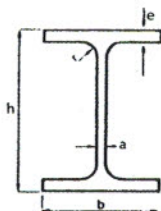
h	DISTANZA TRA GLI APPOGGI IN METRI											
	3	4	5	6	7	8	9	10	11	12	13	14
100	3778	2798	2202	1797	1502	—	—	—	—	—	—	—
120	6063	4501	3553	2911	2446	2090	—	—	—	—	—	—
140	9114	6777	5361	4405	3713	3186	2768	—	—	—	—	—
160	13141	9781	7748	6379	5388	4635	4039	3554	—	—	—	—
180	18022	13427	10649	8780	7431	6406	5597	4940	4393	—	—	—
200	24135	17994	14285	11792	9993	8629	7554	6683	5958	5344	—	—
220	31187	23265	18483	15272	12957	11203	9823	8705	7777	6992	6317	—
240	39770	29682	23596	19511	16569	14342	12591	11174	10000	9006	8153	7411
260	48786	36427	28974	23974	20377	17655	15518	13789	12358	11150	10113	9212
280	58569	43747	34812	28821	24512	21255	18700	16633	14924	13483	12248	11174
300	71327	53290	42422	35137	29900	25943	22839	20333	18261	16515	15020	13721
320	81963	61250	48771	40410	34401	29863	26305	23433	21060	19062	17351	15867
340	91755	68582	54624	45274	38558	33487	29513	26307	23659	21431	19525	17872
360	101971	76130	60728	50346	42890	37263	32854	29300	26364	23895	21784	19954
400	122412	91568	72951	60508	51576	44838	39641	35313	31962	28859	26341	24160
450	150949	112913	90022	74705	63715	55430	49948	43728	39427	35813	32729	30062
500	182474	136528	108886	90395	77134	67142	59328	53040	47861	43514	42238	38149
550	211451	158240	126234	104830	89484	77926	68891	61624	55642	50624	46347	42653
600	242558	181547	144856	120325	102742	89501	79262	70838	63993	58254	53365	49145
650	275805	206460	164763	136890	116916	101880	90135	80694	72928	66420	60878	56095
700	312450	233916	186700	155140	132530	115512	102222	91542	82760	75401	69137	63734
800	382360	286312	228578	190000	162371	141584	125357	112324	101612	92642	85012	78434
900	467607	350196	279633	232494	198740	173352	153541	137634	124566	113628	104327	96314
1000	549031	411224	328414	273102	233504	203728	180498	161852	146538	133725	122834	113077



TRAVI HEM

dati generali

PROFILO						Peso al m. kg	Sez. cm ²	Wx cm ³	Jx cm ⁴
HE	h	b	a	e	r				
100	120	106	12,0	20,0	12,0	41,8	53,2	190	1143
120	140	126	12,5	21,0	12,0	52,1	66,4	288	2018
140	160	146	13,0	22,0	12,0	63,2	80,6	411	3291
160	180	166	14,0	23,0	15,0	76,2	97,1	566	5098
180	200	186	14,5	24,0	15,0	88,9	113	748	7483
200	220	206	15,0	25,0	18,0	103	131	967	10642
220	240	226	15,5	26,0	18,0	117	149	1220	14605
240	270	248	18,0	32,0	21,0	157	200	1800	24289
260	290	268	18,0	32,5	24,0	172	220	2160	31307
280	310	288	18,5	33,0	24,0	189	240	2550	39547
300	340	310	21,0	39,0	27,0	238	303	3480	59201
320	359	309	21,0	40,0	27,0	245	312	3800	68135
340	377	309	21,0	40,0	27,0	248	316	4050	76372
360	395	308	21,0	40,0	27,0	250	319	4300	84867
400	432	307	21,0	40,0	27,0	256	326	4820	104119
450	478	307	21,0	40,0	27,0	263	335	5500	131484
500	524	306	21,0	40,0	27,0	270	344	6180	161929
550	572	306	21,0	40,0	27,0	278	354	6920	197984
600	620	305	21,0	40,0	27,0	285	364	7660	237447
650	668	305	21,0	40,0	27,0	293	374	8430	281667
700	716	304	21,0	40,0	27,0	301	383	9200	329278
800	814	303	21,0	40,0	30,0	317	404	10870	442598
900	910	302	21,0	40,0	30,0	333	424	12540	570434
1000	1008	302	21,0	40,0	30,0	349	444	14330	722299



TRAVI HEM

**tabella dei carichi netti
uniformemente
ripartiti per $\sigma = 1600 \text{ kg/cm}^2$**

h	DISTANZA TRA GLI APPOGGI IN METRI											
	3	4	5	6	7	8	9	10	11	12	13	14
100	7981	5912	4654	3802	3181	2705	—	—	—	—	—	—
120	12131	9007	7112	5771	4901	4191	3627	—	—	—	—	—
140	17346	12900	10205	8388	7072	6070	5276	4628	—	—	—	—
160	23920	17806	14108	11617	9816	8446	7363	6482	5747	—	—	—
180	31647	23580	18704	15423	13055	11256	9837	8685	7726	6911	—	—
200	40948	30531	24239	20011	16961	14647	12825	11347	10119	9078	8182	—
220	51701	38571	30646	25324	21489	18583	16297	14445	12909	11609	10491	9516
240	76327	56970	45294	37457	31814	27543	24186	21469	19217	17315	15681	14258
260	91641	68430	54434	45047	38292	33183	29171	25927	23242	20975	19031	17340
280	108230	80842	64333	53264	45304	39287	34564	30749	27593	24931	22650	20667
300	147762	110405	87895	72810	61966	53774	47350	42163	37875	34263	31169	28484
320	161394	120617	96052	79594	67769	58838	51838	46188	41522	37592	34229	31312
340	172451	128604	102437	84909	72319	62814	55366	49358	44398	40222	36651	33555
360	182712	136596	108827	90231	76876	66798	58904	52663	47285	42885	39087	35813
400	204880	153212	124748	101288	86342	75070	66245	59134	53269	48840	44129	40483
450	233871	174943	139481	115752	98727	85893	75853	67768	61105	55509	50733	46602
500	262863	196675	156854	130216	111112	96717	85461	76402	68940	62678	57337	52721
550	294467	220322	175757	145955	124588	108493	95913	85793	77463	70475	64519	59375
600	325963	243974	194666	161700	138070	120277	106374	95195	85997	78284	71714	66042
650	358801	268588	214343	178082	152097	132536	117256	104974	94871	86404	79194	72972
700	391630	293196	234015	194460	166121	144792	128135	114750	103743	94521	86671	79900
800	462835	346572	276687	229991	196546	171384	151742	135966	123000	112142	102906	94944
900	534041	399948	319359	265522	226971	197976	175349	157182	142257	129764	119141	109989
1000	610366	457164	365103	303612	259591	226488	200663	179934	162910	148865	136558	126131

TRAVE HE SOLLECITATA A COMPRESSIONE

mm		carichi massimi in kg riferiti alle lunghezze dei pilastri in m:											
		2	2,5	3	3,5	4	4,5	5	5,5	6	6,5	7	8
100	A	23555	21068	18434	15924	13732	11084	9093	7521	6304			
	B	29090	26000	22857	19809	16979	13774	11304	9327	7834			
	M	61237	55633	49777	44109	38342	33380	26851	22166	18873			
120	A	29985	27726	25142	22741	20139	17911	15629	12769	10852	9200		
	B	40296	37517	34000	30734	27336	24285	21501	17770	15027	12680		
	M	79879	74816	68987	62863	56812	50590	44827	39494	33096	28105		
140	A	38646	36405	33718	31304	28384	26031	23367	21020	18402	15651	13469	
	B	53333	50218	46802	43270	39540	35833	32300	29029	26060	22122	19005	
	M	100750	95525	89555	83740	77221	70086	64159	58090	52636	45730	39558	
160	A	49269	46676	44028	41112	38559	35474	32333	29561	266874	24537	21333	—
	B	68952	65323	61617	57920	54300	49931	46459	42174	38442	35170	30808	
	M	124288	119507	113401	106410	100232	93029	85834	79671	72260	66393	60925	
180	A	58926	56186	53688	51042	48000	45019	42385	39178	36059	33095	30582	24404
	B	84943	81625	77392	73577	69653	65300	61099	56782	52502	48147	44649	35903
	M	148590	141625	136300	130417	123319	116954	109204	101842	94416	88000	80928	68666
200	A	71140	68317	65709	62832	59777	56631	53465	50339	46782	43474	40413	34850
	B	103272	99174	96123	91882	87384	82754	78100	73505	68659	64082	59504	51850
	M	175066	168064	161600	154470	148990	140990	135585	126554	118689	112342	104517	90943
220	A	86453	82967	80375	76776	74014	70951	67241	63900	60517	56522	53305	46342
	B	122352	118378	113750	109473	105507	101111	95789	91000	86153	81796	75883	67096
	M	202576	195934	180220	182473	175764	168338	160429	152254	144000	136599	129210	113828
240	A	105025	100721	97523	94523	90352	87148	84164	80313	76322	72282	67889	61134
	B	144957	139016	134603	130461	124629	120283	116164	111578	106000	100353	95280	85226
	M	275310	266133	255488	249500	240120	233109	223328	214335	206038	197135	186760	166333
260	A	119724	115733	112000	108500	104421	102117	97802	94476	90181	86260	82177	74267
	B	163310	157866	152774	148000	142436	139294	134354	128870	123816	118400	112094	102400
	M	305530	295260	288000	276661	270276	260266	252776	244000	234240	226683	216888	197393
280	A	135373	130823	127606	123555	119753	116179	112811	108867	104483	101090	96965	87954
	B	182817	176670	172327	166857	161723	158075	152459	148056	143020	137411	131400	120137
	M	384320	325694	317619	307456	300250	288962	282589	272567	265048	254516	247948	226070
300	A		153846	148760	144000	140625	137404	132352	129496	125000	120000	116883	106508
	B		203897	197157	192387	186375	182106	176711	171625	166825	160107	154909	142850
	M		418068	407529	394276	384888	375937	364631	356588	343943	334455	323306	301217
320	A			164495	159232	155500	151938	146352	143194	138222	132683	129246	117775
	B			213289	208129	201625	197007	191170	185669	179272	173208	167584	154538
	M			419495	405835	396190	384000	375438	367058	354042	344275	330596	310062
340	A			176528	170880	166875	163053	157058	151489	148333	142400	137806	126390
	B			225983	218752	213625	208732	201058	196719	187287	183516	177558	163736
	M			421066	410796	401015	388676	379909	368817	358354	346082	334622	311901
360	A				182784	178500	174412	168000	162042	157572	152320	147406	135195
	B				231168	225750	220580	212470	207884	200666	192640	187636	170982
	M				414699	401637	392369	380656	372321	359211	349369	335578	303139
400	A				203520	198750	191278	187058	180425	175448	168476	162038	149647
	B				253184	247250	237954	232705	224453	218262	209589	204180	186164
	M				420387	410456	400984	389014	377739	364531	354612	340705	314024
450	A					222500	214135	209411	201985	195068	188609	181401	166549
	B					272500	262255	256470	247375	240551	230993	222165	205116
	M					419250	409648	397511	386071	375272	360161	348467	321341
500	A					244961	237593	232352	224113	216438	207894	198742	184795
	B					295937	287037	280705	270751	261479	251157	243159	223251
	M					430575	420519	405058	390695	382255	367253	355406	325964
600	A					278769	270447	262608	253426	243221	235324	225093	207085
	B					392384	322388	315328	304225	243877	282352	270000	246857
	M					451100	437533	424759	412709	398575	382842	365987	334436

pilastri acciaio con carico di sicurezza = 16 kg/m²

PARTE 2

TUBI SALDATI

TUBOLARI PER SERRAMENTI

TUBOLARI PER PORTONI

TUBOLARI MANCORRENTI



TUBI SALDATI PER CARPENTERIA



DN	Ø D	s *	kg/m
3/8"	16,75	1,8	0,66
1/2"	21,25	2,2	1,03
3/4"	26,75	2,5	1,50
1"	33,5	2,65	2,02
1 1/4"	42,4	3	2,91
1 1/2"	48,3	3	3,35
2"	60,3	3	4,24
2 1/2"	76,1	3	5,41
3"	88,9	3	6,36
3 1/2"	101,6	3	7,29
4"	114,3	3	8,23
4 1/2"	127	3,7	11,26
5"	139,7	3,7	12,41
5 1/2"	152	4	14,61
6"	168	4	16,18
7 1/2"	193,7	4	18,65
8"	219	5	26,40

* spessore per impieghi più correnti.
I tubi possono tuttavia essere forniti anche
con spessore diverso.



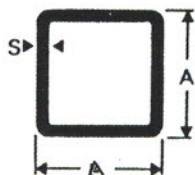


TUBI SALDATI TONDI

da nastro laminato a caldo

UNI 7811

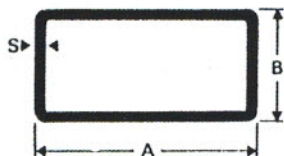
Ø D \ S	1,5	2	2,5	3	4	5	6	7	8	9	10
12	0,39										
14	0,46										
16	0,54	0,69									
18	0,61	0,79									
19	0,65	0,84									
20	0,68	0,89									
22	0,76	0,99									
25	0,87	1,13	1,39	1,63							
28	0,98	1,28	1,57	1,85							
30	1,05	1,38	1,70	2,00							
32	1,13	1,48	1,82	2,15							
35	1,24	1,63	2,00	2,37							
38	1,35	1,78	2,19	2,59	3,35						
40	1,42	1,87	2,31	2,74	3,55						
42	1,49	1,97	2,43	2,88	3,75						
45	1,61	2,12	2,62	3,11	4,04						
48	1,72	2,27	2,80	3,33	4,34	5,34					
50	1,79	2,37	2,93	3,48	4,54						
52	1,87	2,47	3,05	3,63	4,74						
55	1,98	2,61	3,24	3,85	5,03						
57	2,05	2,71	3,36	4,00	5,23						
60	2,16	2,86	3,56	4,21	5,52	6,78					
62	2,24	2,96	3,67	4,37	5,72	7,03					
63	2,27	3,01	3,73	4,44	5,82	7,17					
65	2,35	3,11	3,85	4,59	6,02	7,40					
70	2,53	3,35	4,16	4,96	6,51	8,01					
76	2,76	3,65	4,54	5,41	7,11	8,77	10,37				
80	2,90	3,85	4,78	5,70	7,50	9,25	10,95				
83	3,01	4,00	4,96	5,92	7,80	9,62	11,40				
89	3,23	4,29	5,33	6,36	8,38	10,35	12,27	14,14	15,96		
96		4,64	5,76	6,88	9,08	11,22	13,32	15,36			
102		4,93	6,13	7,32	9,67	11,96	14,21	16,40	18,47		
108		5,23	6,50	7,77	10,26	12,70	15,09	17,44			
114		5,52	6,87	8,21	10,90	13,44	15,99	18,48	20,97	23,37	25,72
121		5,87	7,31	8,73	11,45	14,31	17,02	19,69			
127		6,17	7,68	9,17	12,13	15,04	17,90	20,72	23,48	26,19	28,85
133			8,05	9,62	12,73	15,78	18,83	21,76			
139			8,42	10,06	13,32	16,53	19,69	22,80	25,98	29,01	31,99
152			9,22	11,05	14,64	18,18	21,66	25,10	28,49	31,83	35,12
159				11,54	15,69	18,99	22,64	26,24	29,79	33,29	36,75
168,3			10,23	12,23	16,21	20,14	24,02	27,85	31,63	35,36	39,04
177,8				12,93	17,14	21,31	25,42	29,49	35,50	37,47	41,38
193,7				14,11	18,71	23,27	27,77	32,23	36,64	40,99	45,30
219,1				15,99	21,22	26,40	31,53	36,61	41,65	46,63	51,57
244,5					23,72	29,53	35,29	41,00	46,66	52,27	57,83
273,0					26,54	33,05	39,51	45,92	52,28	58,60	64,86
323,9					31,56	39,32	47,04	54,71	62,32	69,89	77,41
339,7						41,27	49,38	57,43	65,44	73,40	81,31
355,6						43,23	51,73	60,18	68,58	76,93	85,23
406,4						49,50	59,25	68,95	78,60	88,20	97,76
457,2							66,76	77,72	88,62	99,48	110,29
508,0							74,28	86,49	98,65	110,75	122,81



TUBI SALDATI QUADRI

da nastro laminato a caldo

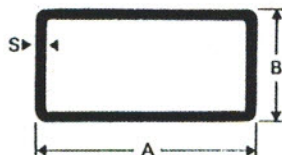
dimensione A x A mm	spessore mm									
	1,5	2	3	4	5	6	7	8	9	10
	peso kg/m									
10 x 10	0,40									
12 x 12	0,50									
15 x 15	0,64	0,88								
20 x 20	0,87	1,13	1,60							
22 x 22	0,98	1,28	1,85							
25 x 25	1,11	1,44	2,07							
30 x 30	1,34	1,76	2,54	3,27						
35 x 35	1,58	2,07	3,01	4,04						
40 x 40	1,81	2,39	3,48	4,09	4,83					
45 x 45	2,05	2,70	3,96	4,72	5,61					
50 x 50	2,28	3,01	4,43	5,83	6,40					
60 x 60	2,75	3,64	5,37	7,03	7,97	10,34				
70 x 70	3,23	4,27	6,31	8,33	9,54	11,10	12,53			
80 x 80		4,90	7,25	9,55	11,11	12,99	14,72	16,36		
90 x 90		5,50	8,20	10,80	12,68	14,87	16,92			
100 x 100		6,15	9,14	12,06	14,26	16,76	19,12	21,39	22,99	24,89
110 x 110			9,84	12,89	15,83	18,64	21,32	23,90	25,81	28,03
120 x 120			11,00	14,54	17,40	20,53	23,52	26,41	28,64	31,17
140 x 140			12,72	16,76	20,52	24,98	27,91	31,43	34,29	37,45
150 x 150			13,86	18,35	22,11	26,19	30,11	33,95	37,12	40,59
160 x 160			14,61	19,27	23,66	28,04	32,31	36,46	39,94	43,73
175 x 175			16,00	21,22	26,04	30,90	35,61	40,23	44,18	48,44
180 x 180				21,78	26,80	31,81	36,70	41,48	45,60	50,01
200 x 200				24,29	29,94	35,58	41,10	46,51	51,25	56,29
220 x 220			20,06	26,81	33,12	39,39	45,50	51,53	56,90	62,57
250 x 250				30,57	37,79	45,00	52,09	59,07	65,38	71,99
260 x 260				31,76	39,41	46,94	54,29	61,58	68,20	75,13
300 x 300					45,64	54,42	63,08	71,63	79,51	87,69
325 x 325					49,57	59,13	68,58	77,91	86,57	95,54



TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

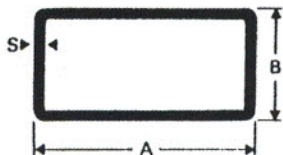
dimensione A x B mm	spessore "S" mm						
	1,5	2	3	4	5	6	7
	peso kg/m						
15 x 10	0,52						
20 x 10	0,64	0,81					
20 x 15	0,75	0,97					
25 x 10	0,75	0,97					
25 x 15	0,87	1,13					
25 x 20	0,99	1,29					
30 x 10	0,87	1,13					
30 x 15	0,99	1,29					
30 x 20	1,11	1,44	2,07				
30 x 25	1,22	1,60	2,31				
35 x 10	0,99	1,29					
35 x 15	1,11	1,44	2,07				
35 x 20	1,22	1,60	2,31				
35 x 25	1,34	1,76	2,54				
40 x 10	1,11	1,44					
40 x 15	1,22	1,60	2,31				
40 x 20	1,34	1,76	2,54	3,35			
40 x 25	1,46	1,91	2,78	3,75			
40 x 30	1,58	2,07	3,01	4,04			
45 x 10	1,22	1,60	2,31				
45 x 15	1,34	1,76	2,54				
45 x 20	1,46	1,91	2,78	3,75			
45 x 25	1,58	2,07	3,01	4,04			
45 x 30	1,69	2,23	3,25	4,34			
50 x 10	1,34	1,76	2,54				
50 x 15	1,46	1,92	2,78				
50 x 20	1,58	2,07	3,01				
50 x 25	1,69	2,23	3,25	4,34			
50 x 30	1,81	2,39	3,48	4,52			
50 x 40	2,05	2,70	3,95	5,15			
60 x 10	1,58	2,07	3,01				
60 x 15	1,69	2,23	3,25				
60 x 20	1,81	2,39	3,48	4,63			
60 x 25	1,93	2,54	3,74	4,93			
60 x 30	2,05	2,70	3,95	5,07			
60 x 40	2,28	3,01	4,43	5,35	6,39		
60 x 50	2,52	3,33	4,90	5,98	8,02		
70 x 20	2,05	2,70	3,95	5,23			
70 x 25	2,17	2,86	4,19				
70 x 30	2,28	3,01	4,43	5,35			
70 x 40	2,52	3,33	4,90	5,98	8,02		



TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

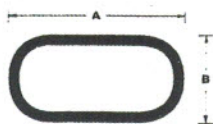
dimensione A x B mm	spessore mm									
	1,5	2	3	4	5	6	7	8	9	10
	peso kg/m									
70 x 50	2,76	3,64	5,37	7,05	7,97	9,21	10,34			
80 x 15	2,16	2,86								
80 x 20	2,28	3,01	4,43							
80 x 30	2,52	3,33	4,90	5,98						
80 x 40	2,76	3,64	5,37	7,05	7,97	9,21	10,34			
80 x 50	2,99	3,96	5,84	7,66	9,62					
80 x 60	3,23	4,27	6,31	7,86	9,54	11,10	12,54			
90 x 30	2,76	3,64	5,37	7,10						
90 x 40	2,99	3,96	5,84	7,66	9,62	11,40				
90 x 50	3,23	4,27	6,31	7,86	10,36	12,28				
90 x 60		4,58	6,78	8,92	11,10	13,17				
100 x 20	2,76	3,64	5,37	7,10						
100 x 30	3,00	3,95	5,84	7,66						
100 x 40	3,22	4,27	6,31	7,86	9,54	11,10	12,54			
100 x 50	3,46	4,58	6,78	8,92	11,40	12,04	13,64			
100 x 60		4,90	7,25	9,55	11,77	12,98	14,74			
100 x 70		5,21	7,72	10,17	12,56	13,93				
100 x 80		5,53	8,19	10,80	13,35	14,87	16,94			
110 x 50		4,90	7,25	9,55	11,77	12,98	14,74			
120 x 30		4,59	6,81	9,55	11,77	12,98	14,74			
120 x 40		4,90	7,25	9,55	11,77	12,98	14,74			
120 x 60		5,53	8,19	10,80	13,35	14,87	16,94			
120 x 80		6,15	9,14	12,06	14,91	16,76	19,14	21,39		
120 x 100			9,90	12,99	15,81	18,62	21,32			
130 x 50		5,50	8,20	10,80	13,35	14,87				
130 x 60		5,84	8,67	11,43	14,31	17,02	19,60			
140 x 40		5,53	8,19	10,80	13,35	14,87				
140 x 50		5,84	8,67	11,43	14,31	17,02	19,60			
140 x 60		6,15	9,14	12,06	14,91	16,76	19,14			
140 x 70		6,47	9,61	12,27	15,04	17,70	21,76	23,6		
140 x 80			9,90	12,99	15,81	18,62	21,32			
150 x 30		5,50	8,20	10,80	13,35					
150 x 40		5,87	8,73	12,27	15,04	17,70				
150 x 50		6,16	9,14	12,06	14,91	16,76	19,14			
150 x 100			11,49	15,20	18,84	21,47	24,90			
160 x 40		6,07	8,96	11,73	14,24	16,74				
160 x 50			9,43	12,36	15,03	17,68				
160 x 60			9,90	12,99	15,81	18,62	21,32			



TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

dimensione A x B mm	spessore mm									
	1,5	2	3	4	5	6	7	8	9	10
	peso kg/m									
160 x 80			11,02	14,57	18,05	20,53	23,80	26,41		
180 x 60			11,02	14,57	18,05	20,53	23,80			
180 x 80			11,78	15,50	18,95	22,39	25,71	28,92		
200 x 100			13,85	18,34	22,09	26,19	30,48	33,95	37,12	41,59
250 x 100			16,02	21,16	26,01	30,90	35,65	40,23	44,18	48,44
250 x 150				24,29	29,94	35,58	41,10	46,51	51,25	56,29
300 x 100				24,29	29,94	35,58	41,10	46,51		
300 x 150			20,58	27,44	33,90	40,34	46,65	52,79		
300 x 200				30,57	37,79	45,00	52,09	59,07		
400 x 200					45,64	54,42	63,08	71,63		
400 x 250					49,57	59,13	68,58	77,91		



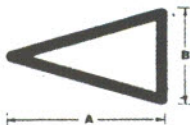
TUBOLARI A SEZIONI VARIE

ovale

A B	30 15	36 18	40 20	50 25	60 30	31 16	45 20	50 10	60 20	80 45
1,5	0,86	1,05	1,12	1,50	1,87	0,90	1,32	1,29	1,63	
2	1,13	1,38	1,47	1,95	2,47	1,90			2,16	
3				2,86	3,63					
4										6,68

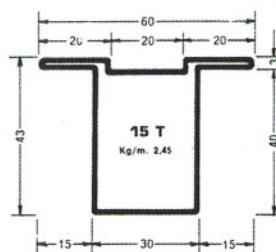
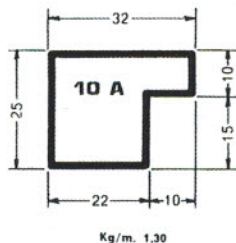
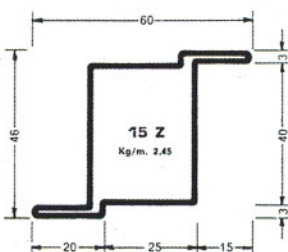
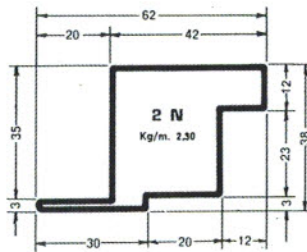
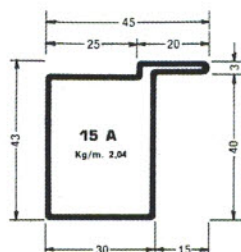
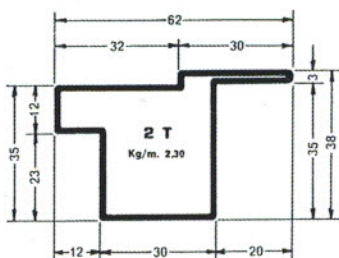
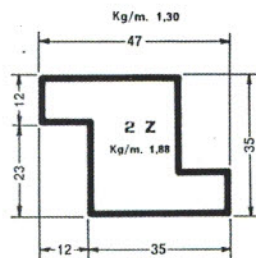
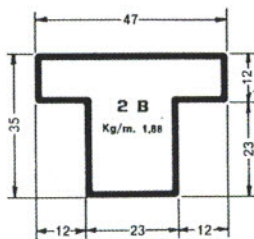
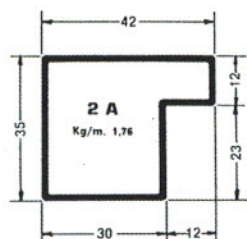
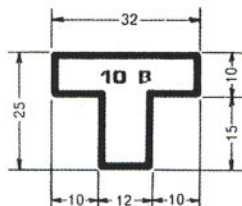
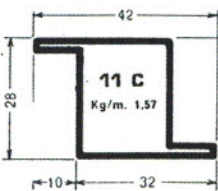
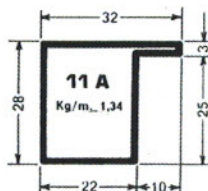
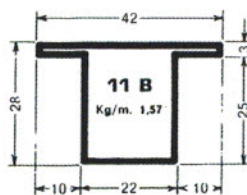
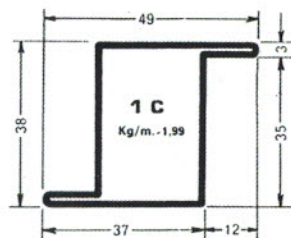
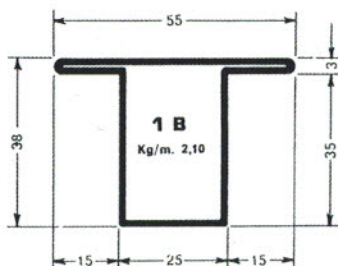
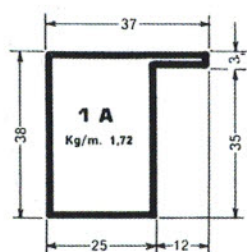
triangolo

A B	30 15	40 22	60 38	60 55
1,5	0,86	1,24		
2	1,13	1,63		
3			3,73	4,29



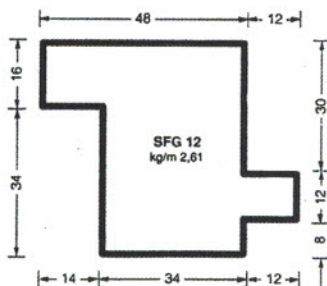
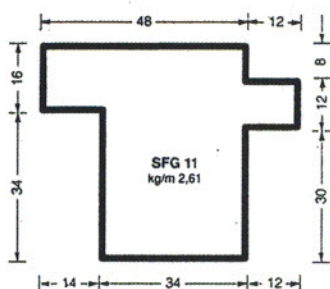
TUBOLARI PER SERRAMENTI

spessore mm 1,5

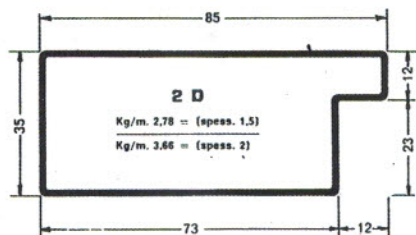
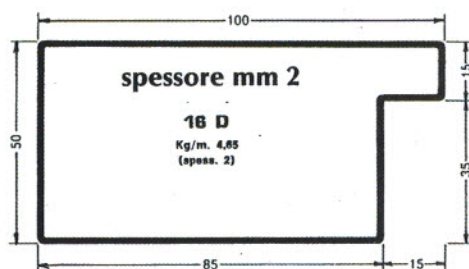


TUBOLARI PER PORTE A LIBRO

spessore mm 1,5



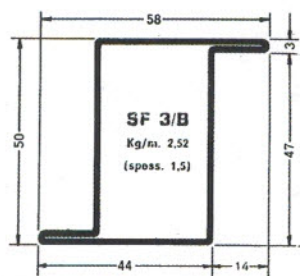
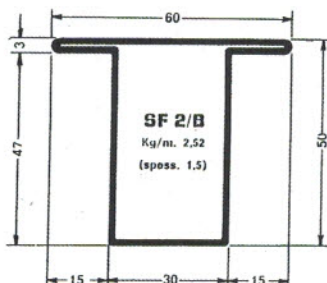
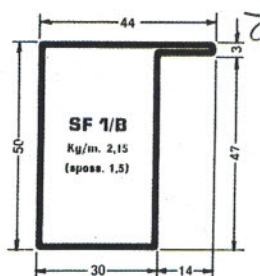
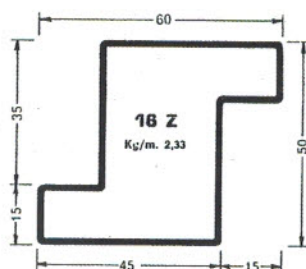
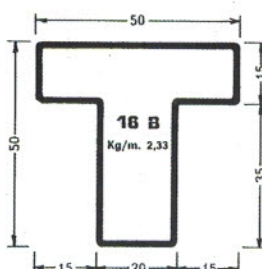
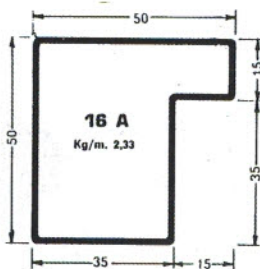
TUBOLARI PER PORTONI



spessore mm 1,5

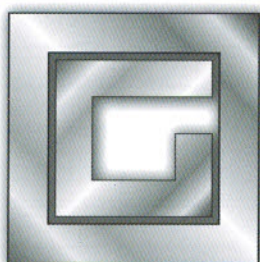
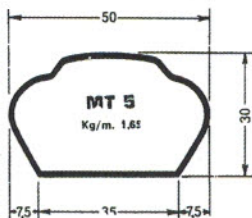
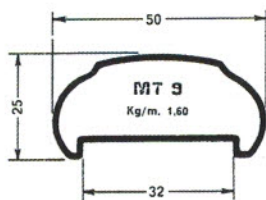
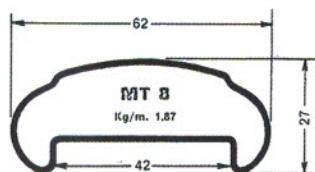
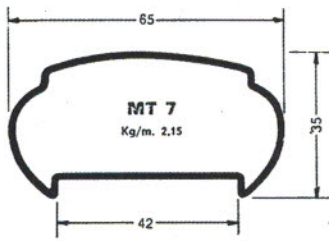
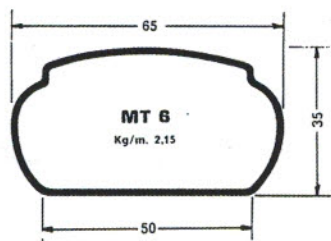
TUBOLARI PER PORTONI

spessore mm 1,5



TUBOLARI MANCORRENTI

(corrimano) spessore mm 1,5

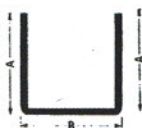


ORLANDO

La Ditta ORLANDO, su richiesta del cliente esegue consegne a domicilio. Possono inoltre essere effettuate anche consegne con servizio autogru.



PARTE 3 PROFILI APERTI



U A LATI UGUALI

dimensioni A x B x A mm	spessore						
	1,5	2	2,5	3	4	5	6
	peso kg/m						
8 x 8 x 8	0,21						
10 x 10 x 10	0,29						
12 x 12 x 12	0,36						
14 x 14 x 14	0,43						
15 x 15 x 15	0,47	0,59					
20 x 20 x 20	0,65	0,83					
22 x 22 x 22	0,72	0,93					
25 x 25 x 25	0,83	1,07	1,30	1,49			
30 x 30 x 30	1,00	1,31	1,60	1,87			
35 x 35 x 35	1,19	1,55	1,90	2,23			
40 x 40 x 40	1,37	1,79	2,20	2,59	3,33		
45 x 45 x 45		2,07	2,50	2,95	3,81		
50 x 50 x 50		2,28	2,80	3,31	4,29	5,40	
60 x 60 x 60		2,76	3,40	4,04	5,25	6,56	
70 x 70 x 70			4,00	4,76	6,21	7,76	
80 x 80 x 80				5,48	7,11	8,89	
90 x 90 x 90				6,20	8,13	10,16	
100 x 100 x 100				6,92	9,01	11,26	13,30
120 x 120 x 120				8,25	11,00	13,60	16,12

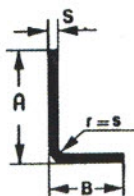


U AD ALI UGUALI

dimensioni A x B x A mm	spessore in mm		
	1,5	2	3
	kg/ml		
10 x 15 x 10	0,35		
20 x 15 x 20	0,59	0,77	
10 x 20 x 10	0,41	0,54	
20 x 22 x 20	0,68	0,90	
30 x 22 x 30	0,91	1,19	
12 x 25 x 12	0,52	0,68	
30 x 25 x 30	0,95	1,24	1,76
40 x 25 x 40	1,18	1,55	2,24
15 x 30 x 15	0,64	0,85	
20 x 30 x 20	0,77	1,00	1,43
25 x 30 x 25	0,89	1,16	1,67



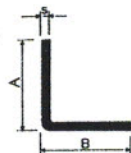
dimensioni A x B x A mm	spessore in mm				
	2	3	4	5	6
	kg/ml				
35 x 30 x 35	1,40	2,00			
40 x 30 x 40	1,64	2,43	3,18		
17 x 35 x 17	0,99				
20 x 35 x 20	1,08	1,53			
30 x 35 x 30	1,40	2,00			
40 x 35 x 40	1,71	2,50			
20 x 40 x 20	1,16	1,67			
30 x 40 x 30	1,47	2,14			
35 x 40 x 35	1,64	2,43	3,18		
20 x 50 x 20	1,33	1,96			
25 x 50 x 25	1,47	2,14			
30 x 50 x 30	1,64	2,43	3,18		
40 x 50 x 40	1,94	2,85	3,70		
20 x 60 x 20	1,47	2,14			
30 x 60 x 30	1,87	2,61	3,39	4,12	
40 x 60 x 40	2,10	3,08	4,01	4,90	
50 x 65 x 50	2,41	3,58	4,73	5,84	
30 x 70 x 30	1,94	2,85	3,70		
35 x 70 x 35	2,10	3,08	4,01	4,90	
45 x 70 x 45	2,41	3,58	4,73	5,84	
40 x 80 x 40	2,41	3,58	4,73	5,84	
50 x 80 x 50	2,73	4,02	5,27	6,47	
60 x 80 x 60	3,04	4,50	5,90	7,26	
40 x 90 x 40	2,57	3,80	4,96	6,08	
45 x 90 x 45	2,73	4,02	5,27	6,47	
30 x 100 x 30	2,41	3,58	4,73	5,84	
40 x 100 x 40	2,73	4,02	5,27	6,47	
50 x 100 x 50	3,04	4,50	5,90	7,26	
60 x 100 x 60	3,36	4,96	6,53	8,04	
50 x 120 x 50	3,36	4,96	6,53	8,04	9,41
55 x 120 x 55		5,20	6,84	8,43	9,84
60 x 120 x 60		5,44	7,15	8,83	10,37
60 x 140 x 60		5,91	7,78	9,61	11,32
50 x 150 x 50		5,71	7,49	9,20	10,85
60 x 160 x 60		6,43	8,45	10,40	12,29
80 x 180 x 80		7,87	10,37	12,80	15,17
100 x 200 x 100		9,31	12,29	15,20	18,05
100 x 220 x 100		9,79	12,93	16,00	19,00
100 x 250 x 100		10,51	13,89	17,20	20,45
100 x 300 x 100		11,71	15,49	19,20	22,85



ANGOLARI A LATI DISEGUALI

dimensioni B x A mm	spessore in mm							
	1,5	2	2,5	3	4	5	6	7
	peso kg/m							
10 x 20	0,33							
12 x 25	0,42	0,55						
15 x 25	0,45	0,59						
15 x 30	0,51	0,66	0,83	0,99				
15 x 40		0,83	1,03	1,22				
20 x 25		0,66	0,83	0,99				
20 x 30		0,75	0,93	1,10				
20 x 35		0,83	1,03	1,22				
20 x 40		0,94	1,14	1,34				
20 x 45		0,99	1,22	1,46				
20 x 50		1,06	1,32	1,56				
20 x 60		1,22	1,52	1,81				
25 x 30		0,83	1,03	1,22				
25 x 40		0,99	1,22	1,46				
25 x 50		1,14	1,42	1,70				
30 x 40		1,06	1,32	1,56				
30 x 50		1,22	1,52	1,81				
30 x 60			1,72	2,04				
30 x 80				2,52	3,33			
40 x 60				2,28	3,01			
40 x 80				2,75	3,64			
40 x 100				3,22	4,27			

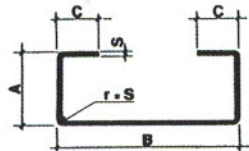




ANGOLARI A LATI UGUALI

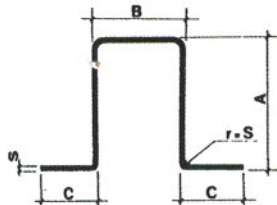
dimensioni B x A mm	spessore in mm							
	1,5	2	2,5	3	4	5	6	7
	peso kg/m							
10 x 10	0,20							
15 x 15	0,31	0,40						
20 x 20	0,43	0,56	0,69					
25 x 25	0,55	0,72	0,90	1,03				
30 x 30	0,67	0,88	1,10	1,25				
35 x 35		1,03	1,30	1,53				
40 x 40		1,20	1,45	1,75				
45 x 45		1,35	1,69	2,00	2,63			
50 x 50		1,51	1,87	2,20	2,95	3,65		
60 x 60			2,27	2,70	3,50	4,40	5,22	
70 x 70				3,15	4,15	5,22	6,68	
80 x 80				3,65	4,76	6,75	7,16	
90 x 90				4,12	5,46	6,80	8,10	
100 x 100				4,60	6,00	7,45	8,85	10,22
120 x 120					7,34	9,00	10,70	12,40
150 x 150						11,40	13,55	15,70





PROFILATI APERTI A "C"

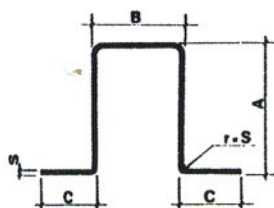
dimensioni C x A x B mm	spessore					
	1,5	2	2,5	3	4	5
	peso kg/m					
10 x 15 x 40	0,945					
7,5 x 20 x 30	0,883					
10 x 20 x 40	1,090	1,35				
5 x 25 x 25	0,883					
10 x 25 x 50	1,290	1,66				
10 x 30 x 40	1,290	1,66				
10 x 30 x 50	1,410	1,82				
5 x 35 x 15	1,000					
5 x 35 x 35	1,230					
10 x 35 x 50	1,530	1,97				
15 x 35 x 80	2,000	2,60				
10 x 40 x 40	1,530	1,98	2,394	2,826		
15 x 40 x 50	1,760	2,29	2,78	3,29		
15 x 40 x 80	2,120	2,76	3,375	4,00		
15 x 40 x 100	2,350	3,07	3,76	4,47		
15 x 40 x 120	2,590	3,39	4,16	4,94		
20 x 40 x 80	2,280	2,97	3,64	4,30		
20 x 40 x 120	2,76	3,61	4,44	5,28		
15 x 45 x 45	1,86	2,41	2,94	3,48		
15 x 45 x 50	1,92	2,49	3,04	3,60		
15 x 45 x 60	2,08	2,65	3,24	3,84		
20 x 45 x 100	2,69	3,45	4,24	5,04		
15 x 50 x 50	2,08	2,65	3,24	3,84		
15 x 50 x 80	2,44	3,13	3,84	4,56		
15 x 50 x 100	2,69	3,45	4,24	5,04		
30 x 50 x 150		4,73	5,84	6,96		
30 x 50 x 200		5,53	6,84	8,16		
15 x 60 x 40	2,16	2,81	3,44	4,08		
30 x 60 x 120	3,50	4,57	5,65	6,72	8,73	
30 x 60 x 150	3,85	5,05	6,25	7,45	9,69	
30 x 60 x 200	4,44	5,85	7,24	8,60	11,29	
20 x 70 x 50	2,65	3,47	4,24	5,04	6,49	
30 x 70 x 100	3,48	4,57	5,64	6,72	8,73	
30 x 70 x 150	4,08	5,37	6,64	7,92	10,33	
30 x 70 x 200	4,68	6,17	7,64	9,12	11,93	
20 x 80 x 40	2,76	3,61	4,44	5,28	6,84	
20 x 80 x 80	3,21	4,25	5,24	6,24	8,09	
30 x 80 x 100	3,72	4,89	6,04	7,20	9,37	
30 x 80 x 150	4,32	5,69	7,04	8,40	10,97	
30 x 80 x 200	4,98	6,49	8,04	9,60	12,57	
30 x 100 x 60	3,77	4,89	6,04	7,20	9,37	
30 x 100 x 100	4,28	5,53	6,84	8,16	10,65	
30 x 100 x 150	4,85	6,33	7,84	9,36	12,25	
30 x 100 x 200	5,40	7,13	8,84	10,56	13,85	
30 x 100 x 300	6,60	8,80	10,64	12,90	17,05	



PROFILI APERTI

OMEGA SIMMETRICI

dimensioni C x A x B mm	spessore						
	1,5	2	2,5	3	4	5	6
	peso kg/m						
10 x 15 x 15	0,636						
10 x 15 x 30	0,816	1,02					
10 x 20 x 20	8,16						
10 x 25 x 15	0,876	1,10					
10 x 25 x 50	1,300	1,66					
15 x 30 x 15	1,110	1,42					
15 x 30 x 30	1,300	1,66					
15 x 30 x 50	1,540	1,98					
15 x 35 x 15	1,240	1,58					
15 x 35 x 35	1,480	1,90					
20 x 35 x 20	1,410	1,82	2,20				
20 x 35 x 35	1,600	2,06	2,50	3,20			
20 x 35 x 50	1,780	2,30	2,80	3,26			
20 x 40 x 30	1,660	2,14	2,60	3,02			
25 x 40 x 25	1,720	2,22	2,70	3,14			
25 x 40 x 30	1,780	2,30	2,80	3,26			
25 x 40 x 40	1,900	2,46	3,00	3,50			
20 x 45 x 20	1,660	2,14	2,60				
20 x 45 x 30	1,780	2,30	2,80	3,26			
25 x 45 x 45	2,080	2,70	3,30	3,86			
20 x 50 x 25	1,840	2,38	2,90				
20 x 50 x 30	1,900	2,46	3,00	3,50			
20 x 50 x 50	2,130	2,78	3,40	3,98			
25 x 50 x 30	2,010	2,62	3,20	3,75			
25 x 50 x 40	2,140	2,78	3,40	3,98			
30 x 50 x 25	2,07	2,70	3,30				
30 x 50 x 30	2,13	2,78	3,40	3,98			

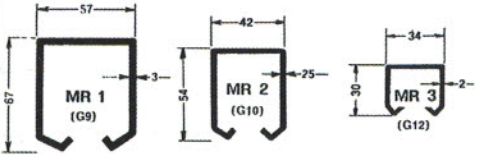
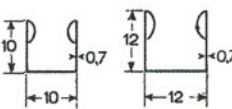
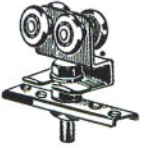
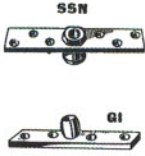


PROFILI APERTI

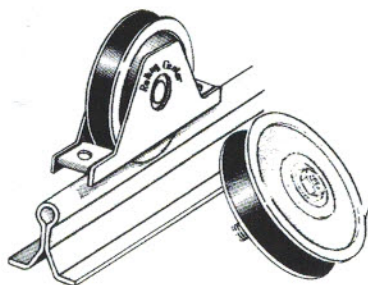
OMEGA SIMMETRICI

dimensioni C x A x B mm	spessore						
	1,5	2	2,5	3	4	5	6
	peso kg/m						
20 x 60 x 30	2,13	2,78	3,40	3,98			
20 x 60 x 40	2,26	2,95	3,60	4,22			
25 x 60 x 30	2,26	2,95	3,60	4,22			
25 x 60 x 40	2,38	3,10	3,80	4,46			
30 x 60 x 30	2,38	3,10	3,80	4,46			
30 x 60 x 40	2,50	3,26	4,00	4,70			
20 x 70 x 25	2,31	3,02	3,70	4,34			
20 x 70 x 40	2,50	3,26	4,00	4,70			
20 x 70 x 50	2,61	3,42	4,20	4,95			
25 x 70 x 40	2,61	3,42	4,20	4,95			
25 x 70 x 50	2,73	3,58	4,40	5,18			
30 x 70 x 30		3,42	4,20	4,95			
30 x 70 x 50		3,74	4,60	5,42			
20 x 75 x 50		3,58	4,40	5,18			
25 x 75 x 50		3,74	4,60	5,42			
30 x 75 x 50		3,90	4,80	5,66			
20 x 80 x 40		3,58	4,40	5,18			
20 x 80 x 50		3,74	4,60	5,42			
25 x 80 x 40		3,74	4,60	5,42			
25 x 80 x 50		3,90	4,80	5,66			
30 x 80 x 40		3,90	4,80	5,66			
30 x 80 x 50		4,06	5,00	5,90			
15 x 100 x 30		3,90	4,80	5,66			
25 x 100 x 40		4,38	5,40	6,38			
25 x 100 x 50		4,54	5,60	6,62			
25 x 100 x 60		4,70	5,80	6,84			
30 x 100 x 40		4,54	5,60	6,62			
30 x 100 x 50		4,70	5,80	6,84			
30 x 100 x 60		4,86	6,00	7,10			
40 x 100 x 40		4,86	6,00	7,10			
30 x 110 x 50		5,02	6,20	7,34			
30 x 120 x 50		5,34	6,60	7,82	10,18		
30 x 120 x 60		5,50	6,80	8,06	10,50		
40 x 120 x 80		6,14	7,60	9,03	11,77		
30 x 150 x 80		6,78	8,40	9,98	13,06	16,00	
40 x 150 x 80		7,10	8,80	10,46	13,70	16,80	
40 x 150 x 110		7,58	9,40	11,18	14,66	18,00	

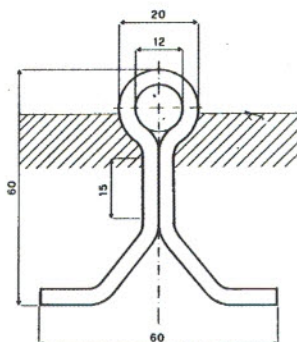
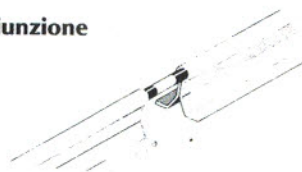
MONOROTAIE E CARRELLI

 Tipo per carrelli grandi peso al m kg 5,000 Tipo per carrelli piccoli peso al m kg 3,180 Tipo per carrelli mignon peso al m kg 1,774	 FERMAVETRO A SCATTO ZINCATO peso m kg 0,203 peso m kg 0,240 spessore m/m 0,7
 Viti zincate autofilettanti per fermavetri a scatto per tipi 10 - 12	 PORTATA MONOROTAIE (con supporto ogni metro) Carrelli grandi e piccoli a 2 e 4 ruote 2 RA 4 RA 2 RB 4 RB Carrello tipo 2 r A = kg/m 400 tipo 4 r B = kg/m 450 tipo 2 r B = kg/m 200 tipo 4 r A = kg/m 750
 Carrelli Mignon a 4 ruote per MR 3 4 RC	 STAFFA SNODATA per carrelli ns / tipi MR 1 MR 2 GUIDA INFERIORE ad oliva con rullo ottone Ø 10 Ø 15 Ø 25

GUIDA ROLLING A PAVIMENTO



tondo giunzione



PARTE 4 LAMIERE, RETI ONDULATE

LAMIERE A FREDDO

spessore mm	peso kg/m ²	spessore mm	peso kg/m ²	qualità	impieghi
0,40	3,15	1,50	11,75	Fe P01 Fe P02 Fe P03 Fe P04	per azioni di formatura e di piega stampaggi di normale difficoltà medio stampaggio antinvecchiante; stampaggi molto difficili
0,45	3,52	1,80	14,15		
0,50	3,90	2,00	15,70		
0,60	4,70	2,50	19,60	tipo UNISMALT tipo S tipo SMP tipo M1	per smaltatura diretta adatto alla smaltatura a due mani adatto alla smaltatura a polvere per elementi lamellari di motori elettrici
0,70	5,50	3,00	23,55		
0,80	6,30				
0,90	7,05				
1,00	7,80				
1,20	9,35				

LAMIERE ZINCATE

numeri	spessore mm	tipo senzimir		impieghi
		peso kg/m ²	qualità	
30	0,30	2,74	Fe P01G	normali operazioni di piegatura e foratura
29	0,35	3,13		
28	0,40	3,52	Fe P02G	operazioni di profilatura non impegnative e di piegatura più impegnative
27	0,45	3,91		
26	0,50	4,30		
25	0,55	4,70	Fe P04G	stampaggi profondi
24	0,60	5,10		
23	0,70	5,90		
22	0,80	6,65		
20	1,00	8,25		
18	1,25	9,90		
16	1,50	12,15		
14	2,00	16,10		
12	2,50	20,05		
10	3,00	24,00		

LAMIERE A CALDO DA TRENO E DA COILS

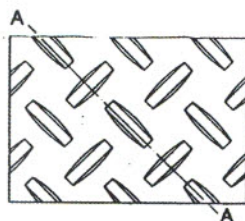
spessore mm	peso kg/m ²	spessore mm	peso kg/m ²	spessore mm	peso kg/m ²	spessore mm	peso kg/m ²
1,5	11,8	17	133	35	275	75	589
2	15,7	18	141	36	283	80	628
2,5	19,6	19	149	37	290	85	667
3	23,5	20	157	38	298	90	707
3,5	27,4	21	165	39	306	95	746
4	31,4	22	173	40	314	100	785
5	39	23	181	42	330	105	824
6	47	24	188	44	345	110	864
7	55	25	196	46	361	115	903
8	63	26	204	48	377	120	942
9	71	27	212	50	393	130	1021
10	79	28	220	52	408	140	1099
11	86	29	228	54	424	150	1178
12	94	30	236	56	440	160	1256
13	102	31	243	58	455	170	1335
14	110	32	251	60	471	180	1413
15	118	33	259	65	510	190	1492
16	126	34	267	70	550	200	1670

LAMIERE DECAPATE

spessore mm	peso kg/m ²
1,5	11,8
1,8	14,2
2	15,7
2,5	19,6
3	23,5
3,5	27,4
4	31,4
5	39
6	47

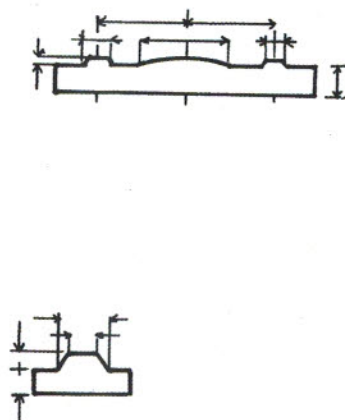
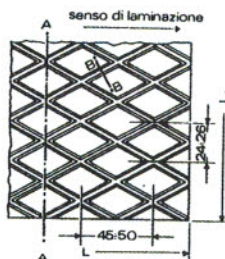
LAMIERE BUGNATE

spessore mm	peso kg/m ²
2	16,97
2,5	20,87
3	26,05
4	33,95
5	41,75
6	52,10
8	67,90



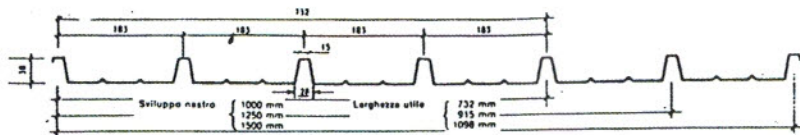
LAMIERE STRIATE

spessore mm	peso kg/m ²
* 2,5	22,2
3	28,6
4	36,5
5	44,3
6	52,1
7	60
8	67,8
10	83,6
12	99,1
* 14	115



ELEMENTI GRECATI PER COPERTURE, PARETI E CONTROSOFFITTI

EGB 401



CARATTERISTICHE STATICHE

Zincata
Lunghezza 2 - 3 - 4 - 5 - 6 mt

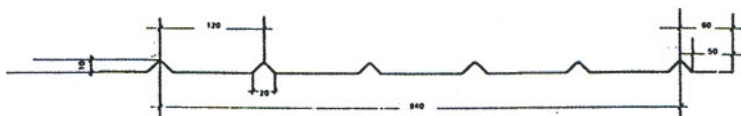
Preverniciata testa nera
bianco grigio
Lunghezza 2 - 3 - 4 - 5 - 6 mt

Spessore		0,6	0,7	0,8	1,0
Peso kg/m ²		6,42	7,49	8,57	10,72
Peso kg/m ²	1000	4,71	5,49	6,28	7,85
	1250	5,88	6,86	7,85	9,81
	1500	7,06	8,24	9,42	11,77
J cm ⁴ /m		13,79	16,04	18,31	22,83
W cm ³ /m		4,75	5,55	6,36	7,98

CARICO MAX UNIFORMEMENTE DISTRIBUITO IN kg/m²
(sovraccarico + peso proprio) / $\sigma = 1400 \text{ kg/cm}^2$

spessore	distanze fra gli appoggi in metri												
mm	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00
0,6	530	340	235	175	135	105	85	70	60	50	45	40	35
						97	71	54	41	31	25	21	
0,7	620	400	275	205	155	125	100	80	70	60	50	45	40
						113	82	62	48	36	30	24	
0,8	715	435	315	230	180	140	115	95	80	65	60	50	45
						130	94	71	54	42	34	27	
1,0	895	575	395	290	225	175	145	120	100	85	75	65	55
						162	117	88	68	52	43	34	
Freccia cm	0,23	0,37	0,53	0,73	0,97	1,20	1,49	1,79	2,19	2,51	3,04	3,46	3,90
0,6	665	425	295	220	170	130	105	90	75	65	55	45	40
									68	52	43	35	
0,7	775	500	345	255	195	155	125	100	85	75	65	55	50
									80	55	50	40	
0,8	895	570	395	290	225	175	145	120	100	85	75	65	55
									91	70	57	46	
1,0	1120	720	495	365	280	220	180	150	125	105	90	80	70
									114	87	71	58	
freccia cm	0,18	0,27	0,40	0,55	0,73	0,89	1,10	1,38	1,64	1,92	2,23	2,47	2,85

IT/80



CARATTERISTICHE STATICHE

Zincata
Lunghezza 3 - 4 - 5 - 6 mt

Spessore	0,8
Peso kg/m	6,28
Peso kg/m ²	7,47



ART. S/17

A = Avanzamento mm 2,5

S = Spessore mm 1,5 - Pseo mq/kg 3,9 circa

FORMATI = Rotoli altezza 1000/1250/1500
lunghezza 6.000/10.000 circa

MAGLIA = 10 x 43



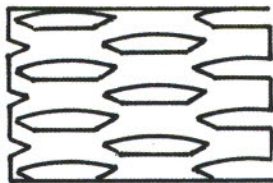
ART. S/20

A = Avanzamento mm 3,0

S = Spessore mm 2,0 - Pseo mq/kg 3,9 circa

FORMATI = Rotoli altezza 1000/1250/1500
lunghezza 6.000/10.000 circa

MAGLIA = 20 x 60



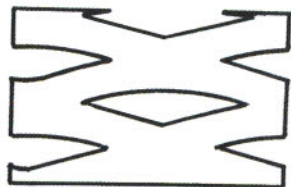
ART. F/21

A = Avanzamento mm 4,0

S = Spessore mm 3,0 - Pseo mq/kg 17,5 circa

FORMATI = 2000 x 1000

VUOTO = 05 x 25



ART. F/5

A = Avanzamento mm 7,0

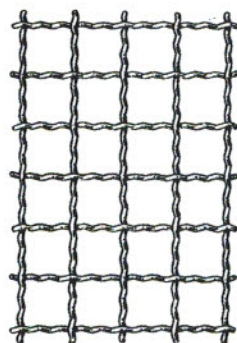
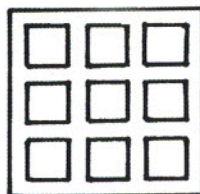
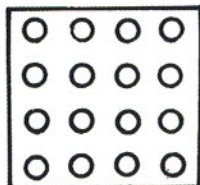
S = Spessore mm 3,0 - Pseo mq/kg 18 circa

FORMATI = 2000 x 1000

VUOTO = 10 x 40

LAMIERE FORATE

formato 2.000 x 1.000



FORI TONDI

foro Ø mm	passo mm	spessore mm
2	3,2	1 - 1,5
3	5,0	1 - 1,5 - 2 - 3
4	7,0	1 - 1,5 - 2 - 3
5	8,0	1 - 1,5 - 2 - 3
6	9,0	1 - 1,5 - 2 - 3
8	12,0	1 - 1,5 - 2 - 3 - 4
10	15,0	1 - 1,5 - 2 - 3 - 4 - 5 - 6
15	22,0	1 - 1,5 - 2 - 3

FORI QUADRI

foro Ø mm	passo mm	spessore mm
5 x 5	7,0	1 - 1,5
8 x 8	10,0	1,5
8 x 8	15,0	1,5
10 x 10	13,0	1,5
10 x 10	15,0	1,5

RETI ONDULATE A MAGLIA QUADRA IN ROTOLI

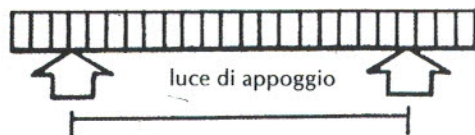
maglia mm	filo mm	altezza mm	peso kg/mq
10 x 10	2,0	1.000	4,50
15 x 15	2,4	1.000	4,60
20 x 20	3,0	1.000	5,60
25 x 25	3,0	1.000	4,80
30 x 30	3,5	1.000	4,80
40 x 40	4,0	1.000	5,30
50 x 50	5,0	1.000	6,90
40 x 40	4,0	1.000	5,3
50 x 50	5,0	1.000	6,9

PARTE 5

GRIGLIATO ELETTOFORGIATO

PORTATA PER CARICHI UNIFORMEMENTE DISTRIBUITI (kg/mq)

carico uniformemente distribuito



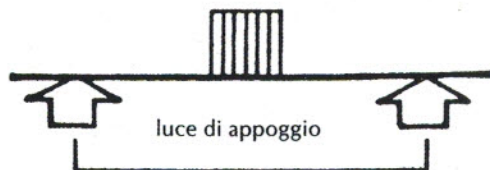
maglia	piatto	peso kg/mq	distanza netta tra gli appoggi (mm)												
			300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
15 x 76	20 x 2	22,6	6500	3500	2900	2500	2000	1500	1000						
	25 x 2	28,1	19000	10500	6700	4700	3300	2200	1550	1150	650				
	30 x 2	33,4	27000	15000	10000	7000	5000	3800	2700	2000	1200	800	500		
	40 x 2	44,0	47000	27000	17000	12000	10000	7000	5500	4500	2600	1700	1100	800	500
22 x 76	25 x 2	19,8	12700	7200	4600	3200	2300	1500	1050	800					
	30 x 2	23,5	18300	10300	6600	4600	3400	2600	1850	1350	750	500			
	25 x 3	28,9	20000	11000	7000	4900	3400	2300	1600	1200	700				
	30 x 3	34,4	28000	16000	10000	7000	5100	4000	2900	2000	1150	750	500		
	40 x 3	45,3	50000	28000	18000	12500	9000	7000	5500	4500	2800	1800	1200	900	600
25 x 76	20 x 2	14,5	6000	3300	2200	1500	1000	700							
	25 x 2	17,7	11300	6450	4150	2800	1900	1350	900	700					
	30 x 2	21,0	16300	9400	6000	4000	2800	2150	1500	1200	680	450			
	25 x 3	25,8	17100	9500	6000	4000	2800	1900	1400	1000	620				
	30 x 3	30,6	24400	14000	9000	6100	4200	3200	2200	1800	1000	680			
	40 x 3	40,3	44000	25000	16000	11000	8000	6300	4700	3700	2400	1600	1000	700	580
	40 x 4	53,1	58000	33000	21000	14000	10000	8400	6200	4900	3200	2100	1300	900	770
	50 x 4	65,9	90000	51000	33000	22000	16000	13000	10000	8000	5400	4000	2800	2100	1400
	60 x 4	78,8	145000	81000	52000	36000	26000	20000	16000	13000	9000	6000	5000	3600	2600
	70 x 4	91,7	174000	98000	62000	43000	32000	24000	20000	16000	11000	8000	6200	4900	3700
30 x 100	25 x 2	14,7	9500	5400	3400	2400	1700	1100	800	600					
	25 x 3	22,1	14500	8000	5200	3700	2500	1650	1200	850					
	30 x 3	26,2	21000	11500	7100	5100	3800	2900	2100	1500	850	550			
	40 x 3	34,2	37000	21000	13000	9000	6600	5100	4100	3300	2000	1300	850	650	450
34 x 76	25 x 2	13,5	8300	4700	3000	2100	1500	1000	700	500					
	30 x 2	15,9	12000	6800	4300	3100	2300	1700	1200	900	500				
	25 x 3	19,4	12500	7000	4500	3200	2200	1450	1050	750					
	30 x 3	23,0	18000	10000	6500	4600	3400	2500	1800	1300	750	480			
	40 x 3	30,1	32000	18000	11500	8200	6000	4500	3600	2900	1800	800	550	370	

Carico di sicurezza 16 (kg/mm²)

Freccia elastica minore di 1:250 della luce netta di appoggio

PORTATA PER CARICHI CONCENTRATI SU IMPRONTA (kg)

carico concentrato su impronta



maglia	piatto	peso kg/mq	distanza netta tra gli appoggi (mm)												
			300	400	500	600	700	800	900	1000	1200	1400	1600	1800	2000
15 x 76	20 x 2	22,6	580	400	290	220	190	160	120						
	25 x 2	28,1	1350	900	700	550	480	400	300	240	170				
	30 x 2	33,4	1850	1250	950	750	650	550	500	400	300	200	150		
	40 x 2	44,0	2900	1950	1500	1200	1000	850	750	680	550	420	320	250	200
22 x 76	25 x 2	19,8	1050	730	550	440	370	300	240	200					
	30 x 2	23,5	1450	980	750	600	500	430	380	320	220	160			
	25 x 3	28,9	1400	950	720	580	490	400	320	250	180				
	30 x 3	34,4	1950	1440	1000	800	680	580	500	410	290	210	160		
	40 x 3	45,3	3250	2200	1670	1350	1130	980	840	750	620	470	360	290	230
25 x 76	20 x 2	11,5	390	270	200	150	120								
	25 x 2	17,7	900	650	480	380	320	260	220	180					
	30 x 2	21,0	1300	880	670	500	440	380	300	250	170	140			
	25 x 3	25,8	1250	850	640	480	430	350	280	220	150				
	30 x 3	30,6	1750	1400	910	710	580	490	420	360	270	180			
	40 x 3	40,3	2900	2000	1600	1300	1050	860	750	650	550	400	320	270	210
	40 x 4	53,1	3850	2650	2100	1750	1400	1150	1000	850	650	500	400	350	250
	50 x 4	65,9	5500	4000	3050	2250	1950	1650	1450	1200	1100	800	650	600	500
	60 x 4	78,8	8800	6000	4500	3600	3050	2650	2250	2000	1600	1450	1200	1050	950
70 x 4	91,7	10500	7100	5400	4300	3600	3100	2700	2400	2000	1700	1500	1300	1100	
30 x 100	25 x 2	14,7	880	600	450	360	310	250	210	160					
	25 x 3	22,1	1120	760	580	470	390	320	260	210					
	30 x 3	26,2	1550	1060	800	650	550	470	400	350	210	170			
	40 x 3	34,2	2600	1750	1350	1100	900	790	680	600	500	390	300	240	200
34 x 76	25 x 2	13,5	820	570	430	350	290	240	200	150					
	30 x 2	15,9	1100	750	570	450	380	330	290	240	150				
	25 x 3	19,4	1050	740	550	440	360	300	230	190					
	30 x 3	23,0	1500	1000	750	600	500	430	380	320	220	160			
	40 x 3	30,1	2400	1600	1220	980	820	700	610	540	450	370	270	210	

Tipo di carico:

- pedonale kg 150 concentrati su impronta
- autovettura kg 400 concentrati su impronta
- autocarro kg 1500 concentrati su impronta
- autotreno kg 3000 concentrati su impronta

Carico di sicurezza 16 (kg/mm²)

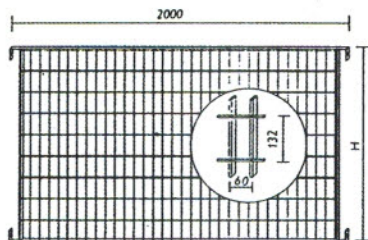
Freccia elastica minore di 1:250 della luce netta di appoggio

Impronta 250x250 (mm)

Per ulteriori informazioni rivolgersi al nostro ufficio tecnico.

MODULI RECINZIONE ZINCATI

bordati con piatto 25 x 6



altezza (mm)	interasse (mm)	peso (kg/cad.)		
		maglia: 60 x 132 25 x 2	maglia: 60 x 132 25 x 3	maglia: 60 x 66 25 x 3
930	2.000	21,5	28,2	30,6
1.200	2.000	26,0	34,7	37,8
1.330	2.000	28,3	37,9	41,3
1.460	2.000	30,6	41,2	44,9
1.720	2.000	32,5	44,7	48,9

PIANTANA ZINCATATA

in piatto 60 x 8

ALTEZZA mm 1.200 per pannello da H mm 930
ALTEZZA mm 1.500 per pannello da H mm 1.200
ALTEZZA mm 1.600 per pannello da H mm 1.330
ALTEZZA mm 1.800 per pannello da H mm 1.460
ALTEZZA mm 2.000 per pannello da H mm 1.720

PESO (kg/cad.) 4,8
PESO (kg/cad.) 6,0
PESO (kg/cad.) 6,4
PESO (kg/cad.) 7,2
PESO (kg/cad.) 7,6

BULLONI CON DADO

TESTA ESAGONALE ZINCATI
TESTA ESAGONALE INOX
ANTIFURTO INOX

MISURA mm 8 x 30
MISURA mm 8 x 30
MISURA mm 8 x 30

ANGOLARI ZINCATI CON ZANCHE

MISURA mm 30 x 30 x 5
MISURA mm 35 x 35 x 5

LUNGHEZZA mm 2.000
LUNGHEZZA mm 2.000

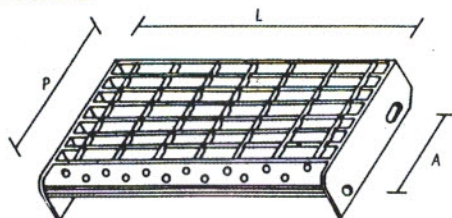
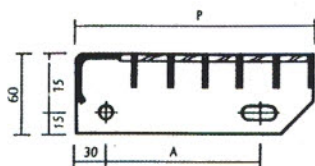
GRADINI ZINCATI

completi di flangia forata e rompivisuale

asola 12 x 25

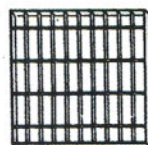
foro Ø 12

flange piatto 60 x 3 con foro ovale



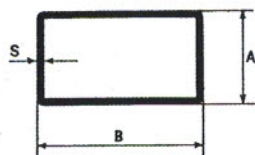
lunghezza L (mm)	pedana P (mm)	foratura A (mm)	grigliato (maglia)	peso zinc. (kg/cod.)
600	205	115	25 x 76 25 x 2	3,4
700	255	180	25 x 76 25 x 2	
800	255	180	25 x 76 25 x 2	5,2
1000	305	180	25 x 76 25 x 2	7,4
1200	330	180	15 x 76 25 x 2	13,1
1200	330	180	15 x 76 30 x 2	15,4

PANNELLI ZINCATI BORDATI



portata (tipo)	dimensioni (mm)	peso (kg/cod.)	grigliato (maglia)
AUTOVETTURA	150 x 1000	3,8	25 x 76 25 x 2
AUTOVETTURA	200 x 1000	4,7	25 x 76 25 x 2
AUTOVETTURA	250 x 1000	5,7	25 x 76 25 x 2
AUTOVETTURA	300 x 1000	6,7	25 x 76 25 x 2
AUTOVETTURA	400 x 1000	8,6	25 x 76 25 x 2
AUTOVETTURA	500 x 1000	10,5	25 x 76 25 x 2
AUTOVETTURA	600 x 1000	12,5	25 x 76 25 x 2
PEDONALE	700 x 1000	14,4	25 x 76 25 x 2
PEDONALE	800 x 1000	16,3	25 x 76 25 x 2
PEDONALE	900 x 1000	18,2	25 x 76 25 x 2
PEDONALE	1000 x 1000	20,2	25 x 76 25 x 2
AUTOVETTURA	225 x 225	1,3	25 x 76 25 x 2
AUTOVETTURA	325 x 325	2,6	25 x 76 25 x 2
AUTOVETTURA	425 x 425	4,1	25 x 76 25 x 2
AUTOVETTURA	525 x 525	6,2	25 x 76 25 x 2
AUTOTRENO	250 x 1000	12,5	25 x 76 40 x 3
AUTOTRENO	350 x 1000	27,3	25 x 76 50 x 4
AUTOTRENO	450 x 1000	34,4	25 x 76 50 x 4
AUTOTRENO	550 x 1000	41,5	25 x 76 50 x 4

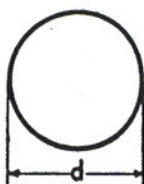
PARTE 6 TUBI IN ACCIAIO INOSSIDABILE, LAMIERE



TUBI RETTANGOLARI

peso teorico chilogrammi per metro

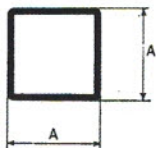
sezione mm	spessore								
	1,0 mm	1,2 mm	1,5 mm	2,0 mm	2,5 mm	3,0 mm	4,0 mm	5,0 mm	6,0 mm
20 x 10	0,453	0,538	0,661						
20 x 15	0,533	0,634	0,781						
25 x 15	0,613	0,729	0,900	1,175					
30 x 10	0,613	0,729	0,900						
30 x 15	0,693	0,825	1,020	1,335					
30 x 20	0,772	0,921	1,140	1,494					
35 x 15	0,772	0,921	1,140						
35 x 20	0,852	1,017	1,259	1,654					
40 x 15	0,852	1,017	1,259	1,654					
40 x 20	0,926	1,112	1,379	1,813					
40 x 30	1,091	1,303	1,618	2,132					
50 x 20	1,091	1,303	1,618	2,132					
50 x 25		1,399	1,738	2,292					
50 x 30	1,251	1,495	1,857	2,451					
60 x 20		1,495	1,857	2,451					
60 x 30		1,686	2,097	2,770		4,081			
60 x 40		1,878	2,336	3,089		4,559	5,960		
70 x 20		1,686	2,097	2,770					
80 x 40		2,261	2,814	3,727	4,600	5,516	7,222		
80 x 60			3,293	4,365	5,408	6,473	8,504		
100 x 40			3,293	4,365	5,408	6,473	8,504		
100 x 50			3,532	4,684	5,790	6,952	9,115		
100 x 60			3,771	5,003		7,430	9,807		
100 x 80				5,642		8,387	11,083	13,728	
120 x 60				5,642		8,387	11,083	13,728	16,324
120 x 80				6,279		9,343	12,358	15,322	18,236
150 x 50				6,279		9,343	12,358	15,322	18,236
200 x 100				9,469		14,129	18,738	23,297	27,806
200 x 150				11,064		16,521	21,928	27,285	32,592
250 x 100				11,064		16,521	21,928	27,285	32,592



TUBI TONDI

peso teorico chilogrammi per metro

diametro mm	spessore								
	1,0 mm	1,2 mm	1,5 mm	2,0 mm	2,5 mm	3,0 mm	4,0 mm	5,0 mm	6,0 mm
10	0,225	0,264	0,319						
12	0,275	0,325	0,394	0,500					
14	0,326	0,385	0,470	0,601					
15	0,351	0,415	0,507	0,651					
16	0,376	0,445	0,545	0,701					
17,2	0,406	0,481	0,590	0,761	0,921				
18	0,426	0,505	0,620	0,801					
19,05	0,452	0,536	0,659	0,854					
20	0,476	0,565	0,695	0,901					
21,3	0,508	0,604	0,744	0,967	1,177				
22	0,526	0,625	0,770	1,002					
23	0,551	0,655	0,808	1,051					
25	0,601	0,715	0,883	1,152	1,409				
26,9	0,649	0,772	0,954	1,247	1,527	1,795			
28	0,676	0,805	0,995	1,302	1,596	1,878			
30	0,726	0,865	1,070	1,402	1,722	2,028			
32	0,776	0,925	1,146	1,502	1,847	2,178			
33,7	0,819	0,977	1,209	1,588	1,953	2,306			
34	0,826	0,985	1,221	1,602	1,971	2,328			
35	0,851	1,016	1,258	1,653	2,035	2,404			
38,1	0,929	1,109	1,375	1,808	2,229	2,637			
40	0,977	1,166	1,446	1,903	2,348	2,779			
42,4	1,037	1,238	1,536	2,023	2,498	2,960	3,847		
44,5	1,089	1,301	1,615	2,128	2,629	3,117			
45	1,102	1,316	1,634	2,153	2,661	3,155			
48,3	1,184	1,415	1,758	2,319	2,867	3,403	4,438		
50	1,227	1,466	1,822	2,404	2,974	3,531	4,607		
50,8	1,247	1,490	1,852	2,444		3,591			
51	1,252	1,496	1,859	2,454	3,036	3,606			
52	1,277	1,526	1,897	2,504	3,099	3,681			
54	1,327	1,587	1,972	2,604	3,224	3,831			
57			2,085	2,754	3,412	4,057	5,309		
60,3	1,485	1,776	2,209	2,920	3,618	4,304	5,640		
63,5	1,565		2,329	3,080	3,819	4,545	5,960		
70	1,728	2,067	2,573	3,405	4,226	5,033	6,611		
76,1	1,881	2,251	2,802	3,711	4,607	5,491	7,222		
80	1,978	2,368	2,948	3,906	4,852	5,784	7,613		
88,9			3,283	4,352	5,409	6,453	8,504		
101,6			3,760	4,988	6,204	7,407	9,776	12,094	14,363
104			3,850	5,108	6,354	7,587	10,016	12,395	14,724
114,3			4,237	5,624	6,999	8,361	11,048	13,684	16,271
129			4,789	6,360	7,919	9,465	12,520	15,525	18,480
139,7			5,191	6,896	8,589	10,269	13,592	16,864	20,087
154			5,728	7,612	9,484	11,343	15,024	18,655	22,236
168,3			6,245	8,328	10,379	12,417	16,456	20,445	24,384
193,7			7,219	9,600	11,969	14,325	19,000	23,625	28,200
203			7,568	10,066	12,551	15,024	19,932	24,790	29,597
204			7,606	10,116	12,614	15,099	20,032	24,915	29,748
219,1			8,173	10,872	13,559	16,233	21,544	26,805	32,016



TUBI QUADRI

peso teorico chilogrammi per metro

sezione mm	spessore								
	1,0 mm	1,2 mm	1,5 mm	2,0 mm	2,5 mm	3,0 mm	4,0 mm	5,0 mm	6,0 mm
10 x 10	0,294								
12 x 12	0,358								
15 x 15	0,453	0,538	0,661						
16 x 16	0,485	0,576	0,709	0,920					
18 x 18	0,549	0,653	0,805						
20 x 20	0,613	0,729	0,900	1,175					
25 x 25	0,772	0,921	1,140	1,494	1,846	2,179			
30 x 30	0,932	1,112	1,379	1,813	2,222	2,645			
35 x 35	1,091	1,303	1,618	2,132	2,629	3,118			
40 x 40	1,251	1,495	1,857	2,451	3,036	3,602	4,708		
45 x 45	1,410	1,686	2,097	2,770	3,433	4,081	5,309		
50 x 50	1,570	1,878	2,336	3,089	3,818	4,559	5,960		
60 x 60			2,814	3,727	4,607	5,516	7,222		
80 x 80			3,771	5,003	6,203	7,430	9,807	12,095	
100 x 100			4,728	6,279	7,918	9,343	12,358	15,322	18,236
120 x 120				7,555		11,257	14,910	18,512	22,064
150 x 150				9,469		14,129	18,738	23,297	27,806
175 x 175				11,064		16,521	21,928	27,285	32,592



LAMIERE

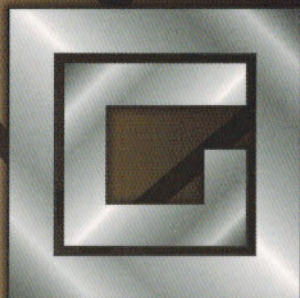
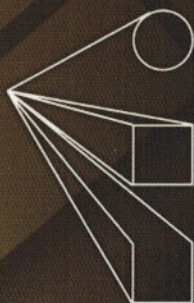
qualità AISI 304-316

spessore mm	laminato a freddo	laminato a caldo
	peso kg/m ²	peso kg/m ²
0,5	4,00	—
0,6	4,80	—
0,7	5,50	—
0,8	6,40	—
1,0	8,00	—
1,2	9,60	—
1,5	12,00	—
2,0	16,00	16,00
2,5	20,00	20,00
3,0	24,00	24,00
4,0	32,00	32,00
5,0	—	40,00
6,0	—	48,00
8,0	—	64,00
10,0	—	80,00
12,0	—	96,00

Sono disponibili a magazzino rotoli in vari spessori e formati. Possibilità di tagli a misura.

QUALITÀ ACCIAI INOSSIDABILI E CORRISPONDENTE CON NORME ESTERE

Italia UNI	USA AISI	Germania WERKSTOFF	Francia AFNOR	Svezia SIS	URSS GOST	Gran Bretagna BSI
X5CrNi18-10	304	1.4301	Z6CN18-09	2332	08Kh18N10	304S15
X2CrNi18-11	304L	1.4306	Z2CN18-10	2352	03Kh18N11	304S11
X6CrNi18-11	321	1.4541	Z6CNT18-10	2337	08Kh18N10T	321S31
X6CrNi25-20	310S	1.4842	Z12CN25-20	2361	10Kh23N18	310S24
X5CrNiMo17-12	316	1.4401	Z6CND17-11	2347	/	316S31
X2CrNiMo17-12	316L	1.4404	Z2CND17-12	2348	03Kh17N14M2	316S11
X6CrNiMoTi17-12	316Ti	1.4571	Z6CNDT17-12	2350	08Kh17N13M2T	320S31
X2CrNiMo17-13	316SL	1.4435	Z2CND17-13	2353	03Kh16N15M3	316S13
X5CrNiMo17-13	316S	1.4436	Z6CND17-12	2343	/	316S33



ORLANDO

PRODOTTI SIDERURGICI - LEGNAME - FERRO BATTUTO - LAMIERE GREGATE E COIBENTATE

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