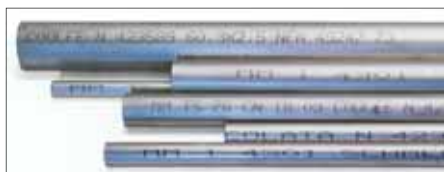


TUBI INOX SALDATI



- SALDATI AL "TIG"
- SALDATI AD ALTA FREQUENZA
- MATERIALI: 304 - 304L - 316 316L



NORME: DIN 17457-11850 NFA 49147-49247-49249 ASTM A 249-A 269- A 270

PRESSIONI MASSIME D'ESERCIZIO A 20 C° PER TUBI SALDATI
IN AISI 304-304L-316-316L-316TI-321

Diametro	Spessore	Aisi 304 - 321 316 Ti Kg/cm ²	Aisi 304 L - 316 L Kg/cm ²	Diametro	Spessore	Aisi 304 - 321 316 Ti Kg/cm ²	Aisi 304 L - 316 L Kg/cm ²	Diametro	Spessore	Aisi 304 - 321 316 Ti Kg/cm ²	Aisi 304 L - 316 L Kg/cm ²
15	1	116	96	42,4	1,65	68	56	101,6	1,65	28	23
16	1	109	90	42,4	2	82	68	101,6	2	34	28
16	1,5	163	135	42,4	2,6	107	89	101,6	3	51	43
17,2	1,65	167	139	42,4	2,9	119	99	103	1,5	25	21
17,2	2	203	168	42,4	3,2	132	109	104	2	34	28
18	1	97	80	44,5	1,5	59	49	114,3	1,65	25	21
18	1,5	145	120	44,5	2	78	65	114,3	2	30	25
19,05	1	91	76	48,3	1,65	60	49	114,3	2,6	40	33
19,05	1,25	114	95	48,3	2	72	60	114,3	2,9	44	37
19,05	1,65	151	125	48,3	2,6	94	78	114,3	3,2	49	40
20	1	87	72	48,3	2,9	105	87	114,3	3,6	55	46
20	1,5	131	108	48,3	3,2	115	96	114,3	4	61	51
21,3	1,65	135	112	50	1,5	52	43	129	2	27	22
21,3	2	164	136	50	2	70	58	139,7	2	25	21
21,3	2,6	213	176	53	1,5	49	41	139,7	2,6	32	27
22	1	79	66	54	2	65	54	139,7	3	37	31
22	1,5	119	99	60,3	1,65	48	40	139,7	4	50	41
25,4	1	69	57	60,3	2	58	48	154	2	23	19
25,4	1,25	86	71	60,3	2,6	75	62	156	3	34	28
25,4	1,65	113	94	60,3	2,9	84	69	168,3	2	21	17
26,9	1,65	107	89	60,3	3,2	92	77	168,3	2,6	27	22
26,9	2	130	107	60,3	3,6	104	86	168,3	3	31	26
26,9	2,6	168	140	70	1,5	37	31	168,3	3,6	37	31
28	1	62	52	70	2	50	41	168,3	4	41	34
28	1,5	93	77	76,1	1,65	38	31	204	2	17	14
30	1	58	48	76,1	2	46	38	205	2,5	21	18
30	1,5	87	72	76,1	2,6	60	49	206	3	25	21
32	1	54	45	76,1	2,9	66	55	219,1	2	16	13
32	1,5	82	68	76,1	3,2	73	61	219,1	2,6	21	17
33,7	1,65	85	71	76,1	3,6	82	68	219,1	3	24	20
33,7	2	103	86	83	1,5	31	26	219,1	3,6	29	24
33,7	2,9	150	124	84	2	41	34	219,1	4	32	26
33,7	3,2	165	137	88,9	1,65	32	27	254	2	14	11
34	1	51	43	88,9	2	39	33	256	3	20	17
34	1,5	77	64	88,9	2,6	51	42	273	2	13	11
38	1	46	38	88,9	2,9	57	47	273	2,6	17	14
38	1,5	69	57	88,9	3,2	63	52	273	3	19	16
40	1	44	36	88,9	3,6	71	59	273	3,6	23	19
40	1,5	66	54	88,9	4	78	65	273	4	26	21

*** ATTENZIONE ***

Questa tabella, è un semplice aiuto ed una indicazione di massima per l'impiego (alla temperatura di 20 C°) di tubi inox di prima scelta saldati al tig o ad elettrodo con fattore = 0,75 e snervamento di 21 Kg/mm². in quanto questi tubi non sono soggetti ad alcuna prescrizione per il rating d'uso.

Inoltre, essendo i dati ricavati teoricamente, ogni impiego deve essere attentamente valutato in base alla particolare situazione fisica del momento da parte del progettista, che si dovrà assumere ogni responsabilità dell'esito finale.

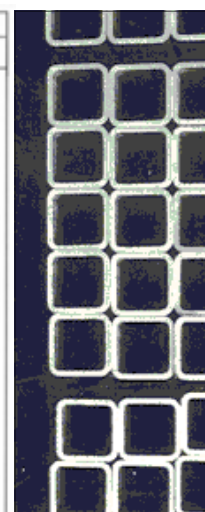
TUBI INOX AISI 304 A SEZIONE RETTANGOLARE

Sezione mm	SPESSORE IN MILLIMETRI					
	1,5	2,0	2,5	3,0	4,0	5,0
20x10	0,661					
20x15	0,781					
25x15	0,900	1,175				
30x10	0,900					
30x15	1,020	1,335				
30x20	1,140	1,494				
35x15	1,140					
35x20	1,259	1,654				
40x15	1,259	1,654				
40x20	1,379	1,813				
40x30	1,618	2,132				
50x20	1,618	2,132				
50x25	1,738	2,292				
50x30	1,857	2,451				
60x20	1,857	2,451				
60x30	2,097	2,770		4,081		
60x40	2,336	3,089		4,559	5,960	
70x20	2,097	2,770				
80x40	2,814	3,727	4,600	5,516	7,222	
80x60		4,365	5,408	6,473	8,504	
100x40		4,365	5,408	6,473	8,504	
100x50		4,684	5,790	6,952	9,115	
100x60		5,003		7,430	9,807	
100x80		5,642		8,387	11,083	13,728
120x60		5,642		8,387	11,083	13,728
120x80		6,279		9,343	12,358	15,322
150x50		6,279		9,343	12,358	15,322
200x100		9,469		14,129	18,738	23,297
200x150		11,064		16,521	21,928	27,285
250x100		11,064		16,521	21,928	27,285



TUBI INOX 304 A SEZIONE QUADRATA

Sezione mm	SPESSORE IN MILLIMETRI						
	1,0	1,2	1,5	2,0	3,0	4,0	5,0
10x10	0,294						
12x12	0,358						
15x15	0,453	0,538	0,661				
20x20	0,613	0,729	0,900	1,175			
25x25			1,140	1,494	2,179		
30x30			1,379	1,813	2,645		
35x35			1,618	2,132	3,118		
40x40			1,857	2,451	3,602	4,708	
45x45			2,097	2,770	4,081	5,309	
50x50			2,336	3,089	4,559	5,960	
60x60			2,814	3,727	5,516	7,222	
70x70				4,559	6,681		
80x80				5,003	7,430	9,807	12,095
100x100				6,279	9,343	12,358	15,322
120x120				7,555	11,257	14,910	18,512
150x150				9,469	14,129	18,738	23,297





TUBI INOX SENZA SALDATURA

AISI 304L - 316L - 321

A NORME ANSI B36.9 36.10

Diametro nominale in pollici	Diametro esterno in mm.	Spessori nominali e pesi													
		Numero di schedula													
		Sched. 40 S e Standard		Sched. 80 S e Extra Strong		Double Extra Strong		5 S		10 S		10		20	
		mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.
1/8	10,29	1,73	0,371	2,41	0,476	—	—	—	—	1,24	0,281	—	—	—	—
1/4	13,72	2,24	0,644	3,02	0,809	—	—	—	—	1,65	0,499	—	—	—	—
3/8	17,15	2,31	0,858	3,20	1,118	—	—	—	—	1,65	0,640	—	—	—	—
1/2	21,34	2,77	1,26	3,73	1,62	7,47	2,54	1,65	0,814	2,11	1,016	—	—	—	—
3/4	26,67	2,87	1,68	3,91	2,19	7,82	3,63	1,65	1,034	2,11	1,298	—	—	—	—
1	33,40	3,38	2,50	4,55	3,23	9,09	5,45	1,65	1,312	2,77	2,125	—	—	—	—
1 1/4	42,16	3,56	3,38	4,85	4,46	9,70	7,75	1,65	1,674	2,77	2,732	—	—	—	—
1 1/2	48,26	3,68	4,05	5,08	5,40	10,16	9,54	1,65	1,926	2,77	3,155	—	—	—	—
2	60,33	3,91	5,43	5,54	7,47	11,07	13,44	1,65	2,424	2,77	3,992	—	—	—	—
2 1/2	73,03	5,16	8,62	7,01	11,40	14,02	20,39	2,11	3,747	3,05	5,345	—	—	—	—
3	88,90	5,49	11,28	7,62	15,25	15,24	27,65	2,11	4,585	3,05	6,557	—	—	—	—
3 1/2	101,60	5,74	13,56	8,08	18,62	—	—	2,11	5,272	3,05	7,526	—	—	—	—
4	114,80	6,02	16,06	8,56	22,29	17,12	40,99	2,11	5,945	3,05	8,496	—	—	—	—
5	141,30	6,55	21,76	9,52	30,92	19,05	57,37	2,77	9,639	3,40	11,740	—	—	—	—
6	168,28	7,11	28,23	10,97	42,52	21,95	79,11	2,77	11,514	3,40	14,037	—	—	—	—
8	219,08	8,18	42,49	12,70	64,57	22,22	107,78	2,77	15,049	3,76	20,334	—	—	6,35	33,920
10	273,05	9,27	60,24	12,70	81,46	—	—	3,40	23,028	4,19	28,290	—	—	6,35	41,70
12	323,85	9,52	73,76	12,70	97,36	—	—	3,96	31,806	4,57	36,633	—	—	6,35	49,68
14	355,60	9,52	81,21	12,70	107,28	—	—	3,98	35,150	4,78	42,102	6,35	54,63	7,92	67,98
16	406,40	9,52	93,13	12,70	123,18	—	—	4,19	42,333	4,78	48,220	6,35	62,58	7,92	77,90
18	457,20	9,52	105,05	12,70	139,07	—	—	4,19	47,680	4,78	54,300	6,35	70,50	7,92	87,80
20	508,00	9,52	116,97	12,70	154,97	—	—	4,77	60,300	5,53	69,766	6,35	78,47	9,52	116,97
24	609,60	9,52	140,81	12,70	186,75	—	—	5,53	83,913	6,35	96,215	6,35	94,57	9,52	140,80
30	762,00	—	—	—	—	—	—	6,35	120,53	—	—	7,92	147,45	12,70	234,44

TUBI INOX SENZA SALDATURA

AISI 304L - 316L - 321

A NORME ANSI B36.9 36.10



Diametro nominale in pollici	Diametro esterno in mm.	Spessori nominali e pesi															
		Numero di schedule															
		30		40		60		80		100		120		140		160	
		mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.	mm.	kg/m.
1/8	10,29	—	—	1,73	0,371	—	—	2,41	0,476	—	—	—	—	—	—	—	—
1/4	13,72	—	—	2,24	0,644	—	—	3,02	0,809	—	—	—	—	—	—	—	—
3/8	17,15	—	—	2,31	0,858	—	—	3,20	1,118	—	—	—	—	—	—	—	—
1/2	21,34	—	—	2,77	1,26	—	—	3,73	1,62	—	—	—	—	—	—	4,78	1,95
3/4	26,67	—	—	2,87	1,68	—	—	3,91	2,19	—	—	—	—	—	—	5,56	2,89
1	33,40	—	—	3,38	2,50	—	—	4,55	3,23	—	—	—	—	—	—	6,35	4,23
1 1/4	42,16	—	—	3,56	3,38	—	—	4,85	4,46	—	—	—	—	—	—	6,35	5,60
1 1/2	48,26	—	—	3,68	4,05	—	—	5,08	5,40	—	—	—	—	—	—	7,14	7,23
2	60,33	—	—	3,91	5,43	—	—	5,54	7,47	—	—	—	—	—	—	8,74	11,10
2 1/2	73,03	—	—	5,16	8,62	—	—	7,01	11,40	—	—	—	—	—	—	9,52	14,90
3	88,90	—	—	5,49	11,28	—	—	7,62	15,25	—	—	—	—	—	—	11,13	21,30
3 1/2	101,60	—	—	5,74	13,56	—	—	8,08	18,62	—	—	—	—	—	—	—	—
4	114,30	—	—	6,02	16,06	—	—	8,56	22,29	—	—	11,13	28,25	—	—	13,50	33,50
5	141,30	—	—	6,55	21,76	—	—	9,52	30,92	—	—	12,70	40,20	—	—	15,90	49,00
6	168,28	—	—	7,11	28,23	—	—	10,97	42,52	—	—	14,30	54,20	—	—	18,20	67,40
8	219,08	7,04	36,80	8,18	42,49	10,30	53,00	12,70	64,57	15,10	75,70	18,20	90,20	20,60	100,80	23,00	111,20
10	273,05	7,04	51,00	9,27	60,24	12,70	81,46	15,09	95,84	18,26	114,59	21,44	132,85	25,40	154,97	28,58	172,11
12	323,85	8,38	65,14	10,31	79,71	14,27	108,97	17,48	131,81	21,44	159,67	25,40	186,70	28,58	207,87	33,32	238,60
14	355,60	9,52	81,21	11,13	94,31	15,09	126,51	19,05	157,90	23,83	194,64	27,79	224,36	31,75	253,32	35,71	281,49
16	406,40	9,52	93,13	12,70	123,18	16,66	160,04	21,44	203,26	26,19	245,34	30,96	286,33	36,53	332,72	40,49	364,94
18	457,20	11,13	122,12	14,27	155,90	19,05	205,60	23,83	254,24	29,36	309,55	34,92	363,33	36,97	408,21	45,24	459,18
20	508,00	12,70	155,00	15,09	183,14	20,62	247,79	26,19	310,91	32,54	381,20	38,10	441,06	44,45	507,63	50,01	564,24
24	609,60	14,70	209,54	17,48	254,74	24,61	354,82	30,96	441,30	38,89	546,84	46,02	639,18	52,37	719,18	59,54	800,74
30	762,00	15,88	291,81	—	—	—	—	—	—	—	—	—	—	—	—	—	—

**PRESSIONE MASSIMA AMMISSIBILE NELLE TUBAZIONI SENZA SALDATURA IN ACCIAIO INOSSIDABILE AISI 304L
NORME ASTM A 213 - 269 - 312**

European standard for Industrial piping (EN 13480-3 : 2012 Issue 1)

	20°C	50°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C
TUBO SS 1,59X0,36	688	640	576	512	464	432	406	387	371
TUBO SS 3X0,5	505	470	423	376	341	317	298	284	272
TUBO SS 3X0,7	711	662	595	529	480	446	420	400	384
TUBO SS 4,76X0,89	579	539	485	431	391	364	342	326	312
TUBO SS 6X1	505	470	423	376	341	317	298	284	272
TUBO SS 8X1	363	338	304	270	245	228	214	204	196
TUBO SS 8X1.5	581	541	487	433	392	365	343	327	313
TUBO SS 10X1	283	263	237	210	191	178	167	159	152
TUBO SS 10X1.5	447	416	374	332	301	280	264	251	241
TUBO SS 10X2	629	585	526	468	424	395	371	354	339
TUBO SS 12X1	232	216	194	172	156	145	137	130	125
TUBO SS 12X1.5	363	338	304	270	245	228	214	204	196
TUBO SS 12X2	505	470	423	376	341	317	298	284	272
TUBO SS 13.72X1.65	347	323	291	258	234	218	205	195	187
TUBO SS 13.72X2.24	493	459	413	367	333	310	291	277	266
TUBO SS 13.72X3.02	667	620	558	496	450	419	394	375	360
TUBO SS 14X1	196	183	164	146	132	123	116	110	106
TUBO SS 14X1.5	305	284	256	227	206	192	180	172	165
TUBO SS 14X2	422	393	354	314	285	265	249	238	228
TUBO SS 15X1	182	170	153	136	123	114	108	102	98
TUBO SS 15X2	390	363	327	290	263	245	230	220	210
TUBO SS 16X1.5	264	245	221	196	178	165	156	148	142
TUBO SS 16X2	363	338	304	270	245	228	214	204	196
TUBO SS 17.15X2.31	395	367	331	294	266	248	233	222	213
TUBO SS 17.15X3.2	578	538	484	430	390	363	341	325	312
TUBO SS 18X1.5	232	216	194	172	156	145	137	130	125
TUBO SS 18X2	318	296	266	237	214	200	188	179	171
TUBO SS 20X2	283	263	237	210	191	178	167	159	152
TUBO SS 20X4	629	585	526	468	424	395	371	354	339
TUBO SS 21.34X2.11	280	260	234	208	188	175	165	157	151
TUBO SS 21.34X2.77	379	352	317	282	255	238	223	213	204
TUBO SS 22X2	255	237	213	190	172	160	150	143	137
TUBO SS 26.67X2.11	219	204	183	163	148	137	129	123	118
TUBO SS 26.67X2.87	307	285	257	228	207	193	181	173	165
TUBO SS 26.67X3.91	435	405	364	324	293	273	257	245	235
TUBO SS 30X2	182	170	153	136	123	114	108	102	98
TUBO SS 30X3	283	263	237	210	191	178	167	159	152
TUBO SS 33.4X2.77	231	215	193	172	155	145	136	130	124
TUBO SS 33.4X3.38	287	267	240	213	193	180	169	161	154
TUBO SS 33.4X4.55	400	372	335	298	270	251	236	225	216
TUBO SS 42.16X2.77 ASTM	180	167	150	134	121	113	106	101	97
TUBO SS 42.16X3.56 ASTM	235	219	197	175	159	148	139	132	127
TUBO SS 48.26X2.77 ASTM	156	145	130	116	105	98	92	87	84
TUBO SS 48.26X3.68 ASTM	211	196	176	157	142	132	124	118	113
TUBO SS 60.33X2.77 ASTM	123	114	103	91	83	77	72	69	66
TUBO SS 60.33X3.91 ASTM	177	165	148	132	119	111	104	99	95
TUBO SS 73.03X3.05 ASTM	111	104	93	83	75	70	66	63	60
TUBO SS 73.03X5.16 ASTM	194	181	162	144	131	122	114	109	105
TUBO SS 88.9X3.05 ASTM	91	84	76	67	61	57	53	51	49
TUBO SS 88.9X5.49 ASTM	168	156	141	125	113	105	99	94	91
TUBO SS 101.6X3.05 ASTM	79	74	66	59	53	49	47	44	42
TUBO SS 101.6X5.74 ASTM	153	142	128	114	103	96	90	86	82
TUBO SS 114.3X3.05 ASTM	70	65	59	52	47	44	41	39	38
TUBO SS 114.3X6.02 ASTM	142	132	119	106	96	89	84	80	76
TUBO SS 141.3X6.55 ASTM	124	116	104	92	84	78	73	70	67
TUBO SS 219.1X8.18 ASTM	99	92	83	74	67	62	58	56	53
TUBO SS 273.05X9.27	90	84	75	67	60	56	53	50	48
TUBO SS 323.85X12.7	104	97	87	78	70	65	61	59	56

Questi valori sono stati ricavati da calcoli teorici e quindi puramente indicativi, spetta al progettista o utilizzatore valutarne l'applicazione assumendosi ogni responsabilità.

TUBI INOX - SERIE ALIMENTARE

- TUBI IN ACCIAIO INOSSIDABILE AISI 304 - 316 SCORDONATI E SPAZZOLATI.
- TUBI IN ACCIAIO INOSSIDABILE AISI 304 - 316 SCORDONATI E SATINATI ESTERNO / INTERNO.
- TUBI IN ACCIAIO INOX AISI 304 - 316 SCORDONATI, SATINATI INTERNAMENTE E LUCIDATI ESTERNAMENTE.
- TUBI IN ACCIAIO INOX SS - ASTM A270/Asme BPE ALIMENTARI IN AISI 316L SCH. 5S CON RUGOSITA'

DIMENSIONI DEI TUBI LUCIDATI SERIE "ALIMENTARE" AISI 304 - 316

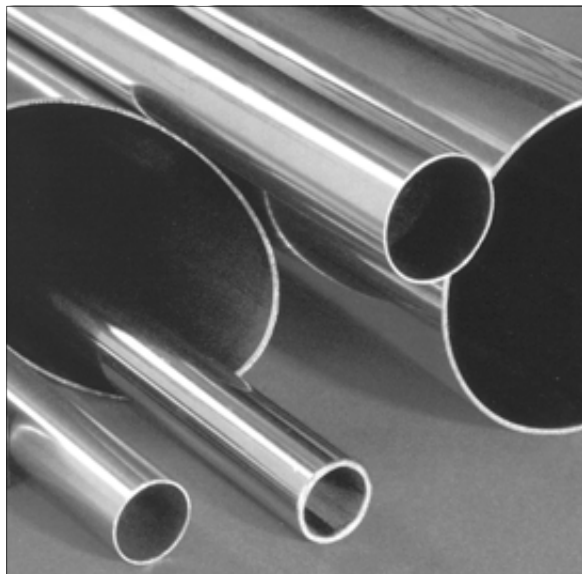
mm.	25,4	x	1,2
mm.	28	x	1,5
mm.	34	x	1,5
mm.	38,1	x	1,5
mm.	40	x	1,5
mm.	50,8	x	1,5
mm.	52	x	1,5
mm.	60,3	x	1,5
mm.	63,5	x	1,5
mm.	70	x	1,5
mm.	70	x	2
mm.	76,1	x	1,6
mm.	76,1	x	2
mm.	85	x	2
mm.	101,6	x	2

LUNGHEZZA
STANDARD:
MT. 6

TUBI SS ASTM A270 AISI 316L

mm.	12,70	x	1,65
mm.	19,05	x	1,65
mm.	25,40	x	1,65
mm.	38,10	x	1,65
mm.	50,80	x	1,65
mm.	63,50	x	1,65
mm.	76,20	x	2,11
mm.	101,60	x	2,11

LUNGHEZZA
STANDARD:
MT. 6,10

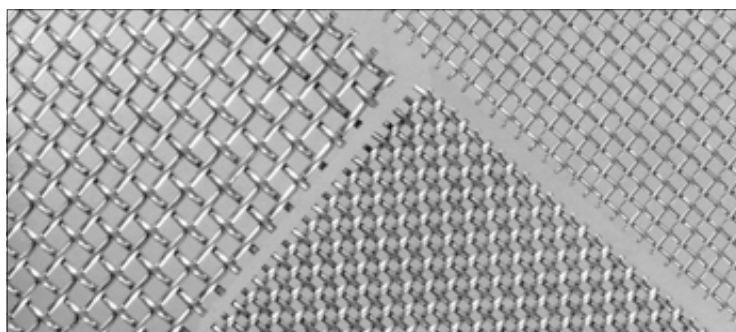


RETI IN ACCIAIO INOSSIDABILE

PESO AL MQ. DELLE RETI ONDULATE

DIAMETRO FILO LUCE MAGLIA	Ø 1,50	Ø 2,00	Ø 3,00	Ø 4,00
10x10	2,50	4,50		
15x15		3,20		
20x20		2,40		
20x20			5,50	
30x30			3,70	
40x40			2,80	
40x40				4,80
50x50			2,30	
50x50				3,90

I pesi sopraindicati sono approssimativi e non impegnativi.



**Tele metalliche a
tessuto unito in
acciaio inox
da 1 a 500 mesh**

