



COLD-DRAWN WELDED TUBES

EN • IT



MARCEGAGLIA
CARBON STEEL

COLD-DRAWN WELDED TUBES TUBI SALDATI TRAFILATI A FREDDO

DIMENSIONAL RANGE - GAMMA DIMENSIONALE

MIN. OUTSIDE DIAMETER - DIAMETRO ESTERNO MIN. **15 mm**

MAX. OUTSIDE DIAMETER - DIAMETRO ESTERNO MAX. **245 mm**

MIN. THICKNESS - SPESSORE MIN. **1,5 mm**

MAX. THICKNESS - SPESSORE MAX. **15 mm**

Superior thicknesses (in execution seamless) and different sizes on request

Spessori superiori (in esecuzione senza saldatura) e misure differenti su richiesta

Marcegaglia Carbon Steel offers a wide range of precision cold-drawn tubes, welded and seamless, in all carbon steel and low-alloy steel varieties, for automotive, hydraulic and mechanical applications. Cold-drawn tubes production takes place in the Boltiere and Rivoli plants. Marcegaglia Boltiere stands out as one of the largest cold-drawn tube production plants in Europe, in terms of production capacity and product range, with a global distribution.

Marcegaglia Carbon Steel vanta un'ampia offerta di tubi trafilati a freddo di precisione, saldati e senza saldatura, in tutte le varietà di acciai al carbonio e di acciai basso legati, per applicazioni automobilistiche, oleodinamiche e meccaniche. La produzione di tubi trafilati a freddo avviene negli stabilimenti di Boltiere e Rivoli. Marcegaglia Boltiere si distingue come uno dei più grandi impianti di produzione di tubi trafilati a freddo in Europa, in termini di capacità produttiva e gamma di prodotti, con una distribuzione a livello globale.

MAIN MANUFACTURING STANDARD

PRINCIPALE NORMA DI FABBRICAZIONE

COLD-DRAWN WELDED TUBES

TUBI SALDATI TRAFILATI A FREDDO

EN 10305-2

STANDARD AND OPTIONAL TESTING Prove e controlli standard e opzionali	
Chemical composition	Analisi chimica
Impact test	Prova di resilienza
Visual and dimensional test	100% Controllo visivo e dimensionale 100%
Eddy current test	100% acc. to EN 10246-3 Controllo a correnti indotte 100% sec. EN 10246-3
Ultrasonic test	100% acc. to EN 10246-7 Controllo ultrasuoni 100% sec. EN 10246-7

MANUFACTURING STANDARD	PRODUCT DESIGNATION	GRADE*	TREATMENT
Norma di fabbricazione	Designazione prodotto	Qualità	Tipologie di trattamento
EN 10305-2	Cold-drawn welded tubes Tubi saldati trafilati a freddo		+C Hard. No final treatment after final cold drawing. <i>Crudo.</i> Senza trattamento termico dopo la trafilatura a freddo conclusiva.
			+LC Soft. Final heat treatment is followed by a suitable drawing pass (limited reduction of area). <i>Crudo malleabile.</i> La trafilatura a freddo avviene in una passata dopo l'ultimo trattamento termico.
		E195	+SR Stress Relieved. After final cold drawing, the tubes are stress relieved in a controlled atmosphere. <i>Disteso.</i> Dopo l'ultima trafilatura a freddo, si procede alla ricottura di distensione in condizioni di atmosfera controllata.
		E235	
		E275	
		E355	
		E460	+A Annealed. After final cold drawing, the tubes are annealed in a controlled atmosphere. <i>Ricotto.</i> I tubi sono ricotti in condizioni di atmosfera controllata dopo l'ultima trafilatura a freddo.
			+N Normalized. After final cold drawing, the tubes are normalized in a controlled atmosphere. <i>Normalizzato.</i> I tubi sono normalizzati in condizioni di atmosfera controllata dopo l'ultima trafilatura a freddo.

(*) Upon request: supply of grades not included in the above mentioned standards - Su richiesta si forniscono anche qualità differenti dalla norma

SUPPLY CONDITIONS - Condizioni di fornitura
- Tubes are supplied in 5000/8000 mm lengths unless otherwise specified in order <i>I tubi vengono forniti in barre commerciali da mm 5000/8000. Lunghezze fisse su specifico accordo all'ordine</i>
- Dimensional tolerances according to manufacturing standard <i>Tolleranze dimensionali secondo le norme di fabbricazione</i>
- Special tolerances upon request <i>Tolleranze speciali su richiesta</i>
- Control documents 2.1, 2.2, 3.1, 3.2 according to EN 10204 and other specific norm requirements <i>Documenti di controllo 2.1, 2.2, 3.1, 3.2 secondo norma EN 10204 e indicazione specifiche di ciascuna norma</i>

ROUND TUBES		EN 10305-2																	
Tubi saldati trafilati																			
	outside diameter mm																		
		1,5	2,0	2,5	3,0	3,5	4,0	4,5	5,0	5,5	6,0	6,5	7,0	7,5	8,0	9,0	10,0	12,5	15,0
	10	0,31	0,39	0,46	0,52	0,56	0,59	0,61	0,62										
	15	0,50	0,64	0,77	0,89	0,99	1,09	1,17	1,23										
	18	0,61	0,79	0,96	1,11	1,25	1,38	1,50	1,60										
	20	0,68	0,89	1,08	1,26	1,42	1,58	1,72	1,85	1,97	2,07								
	25	0,87	1,13	1,39	1,63	1,86	2,07	2,27	2,47	2,64	2,81	2,97	3,11						
	30	1,05	1,38	1,70	2,00	2,29	2,56	2,83	3,08	3,32	3,55	3,77	3,97						
	35	1,24	1,63	2,00	2,37	2,72	3,06	3,38	3,70	4,00	4,29	4,57	4,83	5,09	5,33				
	40	1,42	1,87	2,31	2,74	3,15	3,55	3,94	4,32	4,68	5,03	5,37	5,70	6,01	6,31				
	45	1,61	2,12	2,62	3,11	3,58	4,04	4,49	4,93	5,36	5,77	6,17	6,56	6,94	7,30				
	50	1,79	2,37	2,93	3,48	4,01	4,54	5,05	5,55	6,04	6,51	6,97	7,42	7,86	8,29				
	55	1,98	2,61	3,24	3,85	4,44	5,03	5,60	6,17	6,71	7,25	7,77	8,29	8,79	9,27				
	60	2,16	2,86	3,54	4,22	4,88	5,52	6,16	6,78	7,39	7,99	8,58	9,15	9,71	10,26				
	65	2,35	3,11	3,85	4,59	5,31	6,02	6,71	7,40	8,07	8,73	9,38	10,01	10,63	11,24				
	70	2,53	3,35	4,16	4,96	5,74	6,51	7,27	8,01	8,75	9,47	10,18	10,88	11,56	12,23	9,03	14,80		
	75	2,72	3,60	4,47	5,33	6,17	7,00	7,82	8,63	9,43	10,21	10,98	11,74	12,48	13,22	9,77	16,03		
	80	2,90	3,85	4,78	5,70	6,60	7,50	8,38	9,25	10,10	10,95	11,78	12,60	13,41	14,20	10,51	17,26		
	85	3,09	4,09	5,09	6,07	7,03	7,99	8,93	9,86	10,78	11,69	12,58	13,46	14,33	15,19	11,24	18,50		
	90	3,27	4,34	5,39	6,44	7,47	8,48	9,49	10,48	11,46	12,43	13,38	14,33	15,26	16,18	11,98	19,73	23,89	
	95	3,46	4,59	5,70	6,81	7,90	8,98	10,04	11,10	12,14	13,17	14,19	15,19	16,18	17,16	12,72	20,96	25,43	
	100	3,64	4,83	6,01	7,18	8,33	9,47	10,60	11,71	12,82	13,91	14,99	16,05	17,11	18,15	13,46	22,19	26,97	
	105	3,83	5,08	6,32	7,55	8,76	9,96	11,15	12,33	13,50	14,65	15,79	16,92	18,03	19,14	14,20	23,43	28,51	
	110	4,01	5,33	6,63	7,92	9,19	10,46	11,71	12,95	14,17	15,39	16,59	17,78	18,96	20,12	14,94	24,66	30,05	
	115	4,20	5,57	6,94	8,29	9,62	10,95	12,26	13,56	14,85	16,13	17,39	18,64	19,88	21,11	15,68	25,89	31,60	
	120	4,38	5,82	7,24	8,66	10,06	11,44	12,82	14,18	15,53	16,87	18,19	19,51	20,81	22,10	16,42	27,13	33,14	
	130	4,75	6,31	7,86	9,40	10,92	12,43	13,93	15,41	16,89	18,35	19,80	21,23	22,66	24,07	17,90	29,59	36,22	
	135			8,17	9,77	11,35	12,92	14,48	16,03	17,56	19,09	20,60	22,10	23,58	25,05	18,64	30,83	37,76	44,39
	150			8,48	10,14	11,78	13,42	15,04	16,65	18,24	19,83	21,40	22,96	24,51	26,04	19,38	32,06	39,30	46,24
	145			8,79	10,51	12,21	13,91	15,59	17,26	18,92	20,57	22,20	23,82	25,43	27,03	20,12	33,29	40,84	48,09
	150			9,09	10,88	12,64	14,40	16,15	17,88	19,60	21,31	23,00	24,68	26,36	28,01	20,86	34,52	42,38	49,94
	160								19,11	20,95	22,79	24,60	26,41	28,20	29,99	22,34	36,99	45,47	53,64
	170								20,34	22,31	24,27	26,21	28,14	30,05	31,96	23,82	39,46	48,55	57,33
	180								21,58	23,67	25,75	27,81	29,86	31,90	33,93	25,30	41,92	51,63	61,03
	190								22,81	25,02	27,22	29,41	31,59	33,75	35,90	26,78	44,39	54,71	64,73
	200								24,04	26,38	28,70	31,02	33,32	35,60	37,88	28,26	46,85	57,80	68,43
	210								25,28	27,74	30,18	32,62	35,04	37,45	39,85	29,74	49,32	60,88	72,13
	215														38,38	40,84	30,48	50,55	62,42
	220														39,30	41,82	31,22	51,79	63,96
	225														40,23	42,81	31,96	53,02	65,50
	230														41,15	43,80	32,70	54,25	67,04
	245														43,93	46,76	52,38	57,95	71,67
Other dimensions on request - Altre dimensioni su richiesta																			

READY-TO-USE CYLINDER TUBES H9

TUBI TRAFILATI PER CILINDRI PRONTI ALL'USO H9

EN 10305-2

TECHNICAL CHARACTERISTICS CARATTERISTICHE TECNICHE	
GRADE QUALITÀ	E355
TREATMENT TIPOLOGIA DI TRATTAMENTO	+C
SURFACE FINISHING FINITURA SUPERFICIALE	• Outside diameter smooth as drawn (EN 10305-2) <i>Diametro esterno</i> liscio e trafilato sec. EN 10305-2 • Inside diameter roughness Ra < 0.80 μ (average 0.50÷0.60 μ) <i>Diametro interno</i> rugosità Ra < 0,80 μ (media 0,50÷0,60 μ)
DIMENSIONAL TOLERANCES TOLLERANZE DIMENSIONALI	• Outside diameter 50% EN 10305-2 <i>Diametro esterno</i> 50% EN 10305-2 • Inside diameter ISO H9 (ISO H10 for thickness < 4 mm) <i>Diametro interno</i> ISO H9 (ISO H10 per spessori < 4 mm) • Eccentricity - Eccentricità < 3% • Straightness - Rettilineità 1:1000 mm



COLD-DRAWN TUBES EN 10305-2				
inside diameter mm	outside diameter mm	wall thickness mm	tolerance ISO	weight kg/m
20,0	30,0	5,0	H 9	3,1
25,0	35,0	5,0	H 9	3,7
32,0	40,0	4,0	H 10	3,5
	42,0	5,0	H 9	4,6
35,0	45,0	5,0	H 9	4,9
40,0	45,0	2,5	H 10	2,6
	50,0	5,0	H 9	5,5
45,0	55,0	5,0	H 9	6,2
	60,0	7,5	H 9	9,7
50,0	55,0	2,5	H 10	3,2
	60,0	5,0	H 9	6,8
	65,0	7,5	H 9	10,6
55,0	65,0	5,0	H 9	7,4
	70,0	7,5	H 9	11,6
60,0	70,0	5,0	H 9	8,0
	72,0	6,0	H 9	9,8
	75,0	7,5	H 9	12,5
63,0	73,0	5,0	H 9	8,4
	75,0	6,0	H 9	10,2
65,0	75,0	5,0	H 9	8,6
	80,0	7,5	H 9	13,4
70,0	80,0	5,0	H 9	9,2
	85,0	7,5	H 9	14,3
75,0	85,0	5,0	H 9	9,9
	90,0	7,5	H 9	15,3
	90,0	5,0	H 9	10,5
80,0	92,0	6,0	H 9	12,7
	95,0	7,5	H 9	16,2
	95,0	5,0	H 9	11,1
85,0	100,0	7,5	H 9	17,1
	100,0	5,0	H 9	11,7
90,0	105,0	7,5	H 9	18,0
	105,0	5,0	H 9	12,3
95,0	110,0	7,5	H 9	18,9
	110,0	5,0	H 9	12,9
100,0	115,0	7,5	H 9	19,9
	125,0	7,5	H 9	21,7
110,0	130,0	7,5	H 9	22,6
125,0	140,0	7,5	H 9	24,5
130,0	145,0	7,5	H9	25,4

Imperial unit sizes on request Misure in pollici su richiesta

DELIVERY CONDITIONS - Condizioni di fornitura
- Commercial lengths 5000-8000 mm, custom lengths upon request <i>Lunghezze commerciali mm 5000-8000, lunghezze specifiche su richiesta</i>
- Surface protection <i>Protezione superficiale</i>
- Marking: MM E355 OD x ID EN 10305-2 +C - Heath <i>Marcatura: MM E355 DE x DI EN 10305-2 +C - Colata</i>

AGRICULTURE
AGRICOLTURA

LIFTING
SOLLEVAMENTO

CYLINDER TUBES SUITABLE FOR HONING, SKIVING AND ROLLER BURNISHING

TUBI TRAFILATI PER CILINDRI ATTI ALLA FINITURA INTERNA

EN 10305-1/2

EARTH MOVING
MOVIMENTO TERRA

BUILDINGS
COSTRUZIONI

MATERIAL HANDLING
MOVIMENTAZIONE

TRANSPORT
TRASPORTO

TECHNICAL CHARACTERISTICS CARATTERISTICHE TECNICHE	
GRADE QUALITÀ	E355
TREATMENT TIPOLOGIA DI TRATTAMENTO	+SR
SURFACE FINISHING FINITURA SUPERFICIALE	• Outside diameter smooth as drawn (EN 10305-2) <i>Diametro esterno</i> liscio e trafilato sec. EN 10305-2 • Inside diameter with stock allowance (skiving/roller burnishing) <i>Diametro interno</i> con sovrametalli (pelorullatura)
DIMENSIONAL TOLERANCES TOLLERANZE DIMENSIONALI	• Outside diameter 50% EN 10305-2 <i>Diametro esterno</i> 50% EN 10305-2 • Eccentricity - <i>Eccentricità</i> < 3% • Straightness - <i>Rettilinearità</i> 1:1000 mm
DELIVERY CONDITIONS - Condizioni di fornitura	
- Commercial lengths 5000-8000 mm, custom lengths upon request <i>Lunghezze commerciali</i> mm 5000-8000, altre lunghezze su richiesta	
- Surface protection <i>Protezione superficiale</i>	
- Marking: Marcegaglia E355 OD x WT - EN10305-2 +SR - Heath <i>Marcatura: Marcegaglia E355 DE x SP - EN10305-2 +SR - Colata</i>	

CYLINDER TUBES TUBI PER CILINDRI STOCK ALLOWANCE FOR HONING SOVRAMETALLI PER LEVIGATURA							EN 10305-1/2
inside diameter mm	wall thickness mm						
	5,0	6,0	7,5	10,0	12,5	15,0	
30,0							
35,0							
40,0							
45,0							
50,0							
55,0							
60,0							
63,0							
65,0							
70,0							
75,0							
80,0							
85,0							
90,0							
95,0							
100,0							
105,0							
110,0							
115,0							
120,0							
125,0							
130,0							
135,0							
140,0							
145,0							
150,0							
155,0							
160,0							
165,0							
170,0							
175,0							
180,0							
185,0							
190,0							
195,0							
200,0							

Inside diameter tolerance

-0,15/-0,30	-0,30/-0,70
-0,25/-0,45	-0,50/-1,00
-0,25/-0,55	

CYLINDER TUBES TUBI PER CILINDRI STOCK ALLOWANCE FOR SKIVING AND ROLLER BURNISHING SOVRAMETALLI PER PELATURA E RULLATURA							EN 10305-1/2
inside diameter mm	wall thickness mm						
	5,0	6,0	7,5	10,0	12,5	15,0	
30,0							
35,0							
40,0							
45,0							
50,0							
55,0							
60,0							
63,0							
65,0							
70,0							
75,0							
80,0							
85,0							
90,0							
95,0							
100,0							
105,0							
110,0							
115,0							
120,0							
125,0							
130,0							
135,0							
140,0							
145,0							
150,0							
155,0							
160,0							
165,0							
170,0							
175,0							
180,0							
185,0							
190,0							
195,0							
200,0							
210,0							
220,0							

Inside diameter tolerance

-0,30/-0,55	-0,50/-0,90
-0,40/-0,70	-0,60/-1,20
-0,50/-0,85	



SKIVED AND ROLLER BURNISHED CYLINDER TUBES H8

TUBI TRAFILATI PER CILINDRI PELORULLATI FINITI H8

EN 10305-2

TECHNICAL CHARACTERISTICS <i>Caratteristiche tecniche</i>	
GRADE QUALITÀ	E355
TREATMENT <i>TIPOLOGIA DI TRATTAMENTO</i>	+SR (BKS)
SURFACE FINISHING <i>FINITURA SUPERFICIALE</i>	• Outside diameter: smooth as drawn (EN 10305-2) <i>Diametro esterno:</i> liscio e trafilato sec. EN 10305-2 • Inside diameter: skived and roller-burnished H8 Ra max 0.3 μ <i>Diametro interno:</i> pelati e rullati H8 Ra max 0,3 μ
DIMENSIONAL TOLERANCES <i>TOLLERANZE DIMENSIONALI</i>	• Insidel diameter: ISO H8, min. 40 mm - max. 220 mm <i>Diametro interno:</i> ISO H8, min. 40 mm - max. 220 mm

STANDARD DELIVERY PROGRAM

TABELLE DIMENSIONALI DEL PROGRAMMA DI FORNITURA STANDARD

weight kg/m			
SKIVED AND ROLLER BURNISHED CYLINDER TUBES <i>Tubi trafilati per cilindri finiti internamente</i>			
inside Ø mm	outside Ø mm	wall thickness mm	weight kg/m
40,0	50,0	5,0	5,55
	52,0	6,0	6,81
	55,0	7,5	8,79
45,0	55,0	5,0	6,17
	57,0	6,0	7,55
	60,0	7,5	9,71
50,0	60,0	5,0	6,78
	62,0	6,0	8,29
	65,0	7,5	10,63
55,0	65,0	5,0	7,40
	67,0	6,0	9,03
	70,0	7,5	11,56
60,0	70,0	5,0	8,01
	72,0	6,0	9,77
	75,0	7,5	12,48
	80,0	10,0	17,26
63,0	73,0	5,0	8,38
	75,0	6,0	10,21
	78,0	7,5	13,04
	83,0	10,0	18,00
65,0	75,0	5,0	8,63
	77,0	6,0	10,51
	80,0	7,5	13,41
	85,0	10,0	18,50
70,0	80,0	5,0	9,25
	82,0	6,0	11,24
	85,0	7,5	14,33
	90,0	10,0	19,73
	85,0	5,0	9,86
75,0	87,0	6,0	11,98
	90,0	7,5	15,26
	95,0	10,0	20,96
	90,0	5,0	10,48
80,0	92,0	6,0	12,72
	95,0	7,5	16,18
	100,0	10,0	22,19

inside Ø mm	outside Ø mm	wall thickness mm	weight kg/m
85,0	95,0	5,0	11,10
	97,0	6,0	13,46
	100,0	7,5	17,11
	105,0	10,0	23,43
90,0	100,0	5,0	11,71
	102,0	6,0	14,20
	105,0	7,5	18,03
	110,0	10,0	24,66
95,0	105,0	5,0	12,33
	107,0	6,0	14,94
	110,0	7,5	18,96
	115,0	10,0	25,89
100,0	110,0	5,0	12,95
	112,0	6,0	15,68
	115,0	7,5	19,88
	120,0	10,0	27,13
105,0	115,0	5,0	13,56
	117,0	6,0	16,42
	120,0	7,5	20,81
	125,0	10,0	28,36
110,0	120,0	5,0	14,18
	122,0	6,0	17,16
	125,0	7,5	21,73
	130,0	10,0	29,59
115,0	135,0	12,5	37,76
	140,0	15,0	46,24
	125,0	5,0	14,80
	127,0	6,0	17,90
	130,0	7,5	22,66
120,0	135,0	10,0	30,83
	140,0	12,5	39,30
	145,0	15,0	48,09
	130,0	5,0	15,41
	132,0	6,0	18,64

inside Ø mm	outside Ø mm	wall thickness mm	weight kg/m
120,0	145,0	12,5	40,84
	150,0	15,0	49,94
125,0	135,0	5,0	16,03
	137,0	6,0	19,38
	140,0	7,5	24,51
	145,0	10,0	33,29
	150,0	12,5	42,38
	155,0	15,0	51,79
130,0	140,0	5,0	16,65
	142,0	6,0	20,12
	145,0	7,5	25,43
	150,0	10,0	34,52
	155,0	12,5	43,93
	160,0	15,0	53,64
135,0	145,0	5,0	17,26
	147,0	6,0	20,86
	150,0	7,5	26,36
	155,0	10,0	35,76
	160,0	12,5	45,47
	165,0	15,0	55,49
140,0	150,0	5,0	17,88
140,0	152,0	6,0	21,60
	155,0	7,5	27,28
	160,0	10,0	36,99
	165,0	12,5	47,01
	170,0	15,0	57,33
145,0	155,0	5,0	18,50
	157,0	6,0	22,34
	160,0	7,5	28,20
	165,0	10,0	38,22
	170,0	12,5	48,55
	175,0	15,0	59,18

inside Ø mm	outside Ø mm	wall thickness mm	weight kg/m
150,0	160,0	5,0	19,11
	162,0	6,0	23,08
	165,0	7,5	29,13
	170,0	10,0	39,46
	175,0	12,5	50,09
160,0	180,0	15,0	61,03
	170,0	5,0	20,34
	172,0	6,0	24,56
	175,0	7,5	30,98
	180,0	10,0	41,92
	185,0	12,5	53,17
170,0	190,0	15,0	64,73
	185,0	7,5	32,83
	190,0	10,0	44,39
	195,0	12,5	56,26
180,0	200,0	15,0	68,43
	195,0	7,5	34,68
	200,0	10,0	46,85
	205,0	12,5	59,34
	210,0	15,0	72,13
	205,0	7,5	36,53
190,0	210,0	10,0	49,32
	215,0	12,5	62,42
	220,0	15,0	75,83
	215,0	7,5	38,38
200,0	220,0	10,0	51,79
	225,0	12,5	65,50
	230,0	15,0	79,53

COLD-DRAWN TUBES FOR TELESCOPIC CYLINDERS

TUBI TRAFILATI PER CILINDRI TELESCOPICI

EN 10305-2

DIMENSIONS AND SHAPES DEVELOPED
ACCORDING TO CUSTOMER SPECIFICATIONS
*DIMENSIONI E SAGOME SONO SVILUPPATE
IN CONFORMITÀ AI REQUISITI DEL CLIENTE*

DIMENSIONAL TOLERANCES UPON
CUSTOMER SPECIFICATIONS
*TOLLERANZE DIMENSIONALI
SECONDO ACCORDI SPECIFICI*



LIGHT TIPPING
RIBALTABILI LEGGERI



INDUSTRIAL
INDUSTRIALI



AGRICULTURAL
AGRICOLI

TECHNICAL CHARACTERISTICS CARATTERISTICHE TECNICHE

GRADE QUALITÀ	E355
TREATMENT TIPOLOGIA DI TRATTAMENTO	+SR
SURFACE FINISHING FINITURA SUPERFICIALE	• Outside diameter smooth as drawn (EN 10305-2) <i>Diametro esterno</i> liscio e trafilato sec. EN 10305-2 • Inside diameter: roughness Ra < 1.6 µ <i>Diametro interno:</i> rugosità Ra < 1,6 µ
DIMENSIONAL TOLERANCES TOLLERANZE DIMENSIONALI	• Straightness - Rettilinearità 0,50 mm/m max



COLD-DRAWN TUBES SUITABLE FOR CHROME PLATING
TUBI TRAFILATI PER STELI ATT ALLA CROMATURA

EN 10305-2



DIMENSIONS AND SHAPES DEVELOPED
ACCORDING TO CUSTOMER SPECIFICATIONS
DIMENSIONI E SAGOME SONO SVILUPPATE
IN CONFORMITÀ AI REQUISITI DEL CLIENTE

DIMENSIONAL TOLERANCES UPON
CUSTOMER SPECIFICATIONS
TOLLERANZE DIMENSIONALI
SECONDO ACCORDI SPECIFICI



TECHNICAL CHARACTERISTICS CARATTERISTICHE TECNICHE

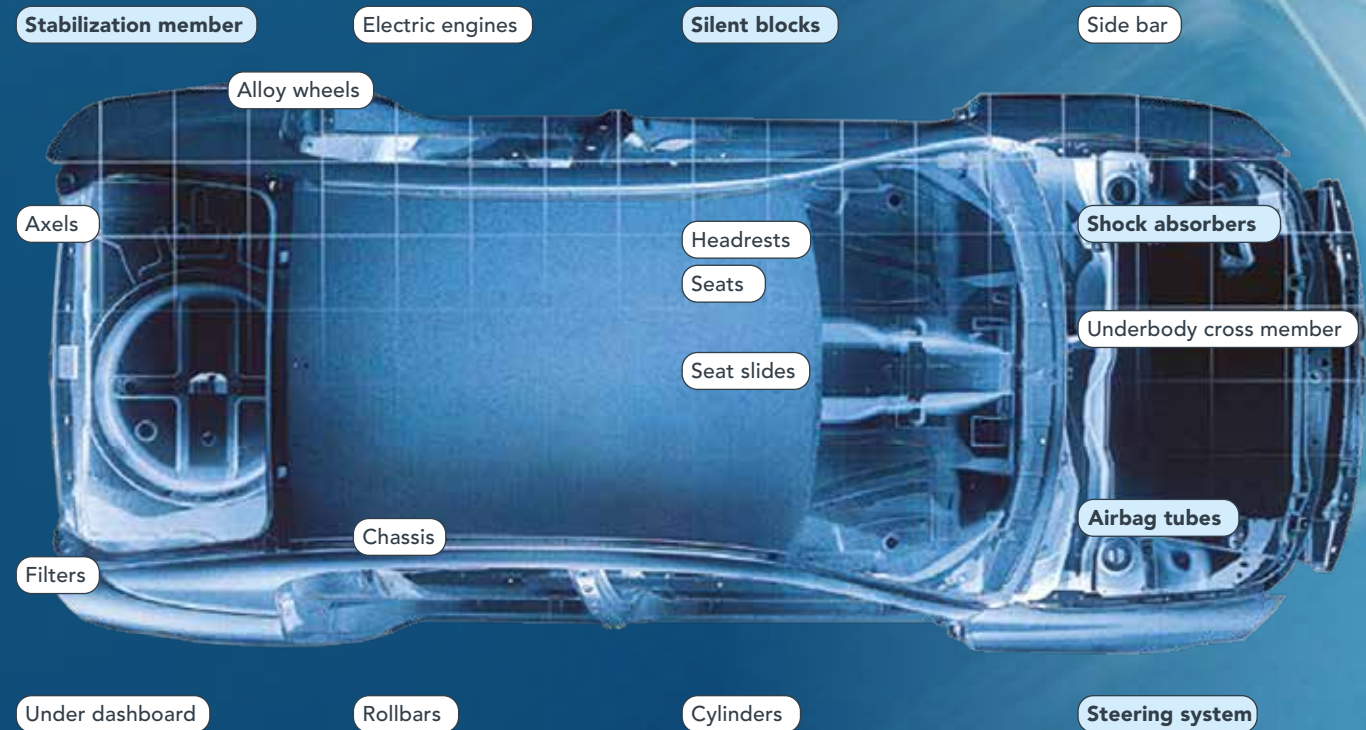
Table with 2 columns: Property (Grade, Treatment, Surface Finishing) and Value (E355, +N, +SR, etc.).

Table with 3 columns: Outside diameter mm, wall thickness mm, tolerance (1/100 mm). It lists various dimensions and their corresponding tolerances.



COLD-DRAWN TUBES FOR AUTOMOTIVE
AND MECHANICAL APPLICATIONS
TUBI TRAFILATI PER APPLICAZIONI AUTOMOTIVE
E MECCANICHE

EN 10305-2



STABILIZATION MEMBERS
STABILIZZATORI

SILENT BLOCKS
SILENT BLOCKS

SHOCK ABSORBERS
AMMORTIZZATORI

AIRBAG TUBES
TUBI AIRBAG

STEERING SYSTEMS
SISTEMI DI STERZO

TECHNICAL CHARACTERISTICS CARATTERISTICHE TECNICHE	
GRADE QUALITÀ	E155, E195, E235, E275, E355, E410
TREATMENT TIPOLOGIA DI TRATTAMENTO	+C, +LC, +SR, +A, +N
SURFACE FINISHING FINITURA SUPERFICIALE	• Outside diameter and inside diameter: smooth as drawn (EN 10305-2) <i>Diametro esterno e interno: liscio e trafilato sec. EN 10305-2</i> • On request: roughness Ra < 0.4 µ <i>Su richiesta: rugosità Ra < 0,4 µ</i>
DIMENSIONAL TOLERANCE TOLLERANZE DIMENSIONALI	• Standard: according to EN 10305-2 <i>Standard: secondo EN 10305-2</i> • Special: on request <i>Speciali: su richiesta</i>
OPTIONAL PROCESSING LAVORAZIONI OPZIONALI	• Drawing in reactive oil <i>Trafilatura in olio reattivo</i> • Dephosphating <i>Defosfatazione</i>

COLD-DRAWN TUBES FOR CARDANS

TUBI TRAFILATI A FREDDO PER CARDANI

EN 10305-2

**DIMENSIONS AND SHAPES DEVELOPED
ACCORDING TO CUSTOMER SPECIFICATIONS**
*DIMENSIONI E SAGOME SONO SVILUPPATE
IN CONFORMITÀ AI REQUISITI DEL CLIENTE*

**DIMENSIONAL TOLERANCES UPON
CUSTOMER SPECIFICATIONS**
*TOLLERANZE DIMENSIONALI
SECONDO ACCORDI SPECIFICI*



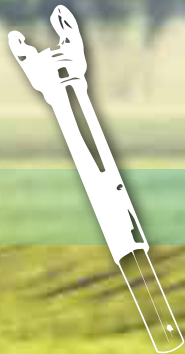
TECHNICAL CHARACTERISTICS <i>Caratteristiche tecniche</i>	
GRADE QUALITÀ	E235, E355
TREATMENT TIPOLOGIA DI TRATTAMENTO	+C, +LC, +N



CAR AXLES
ASSALI PER AUTO



TRUCK AXLES
ASSALI PER CAMION



LAND TREATMENT
TRATTAMENTO TERRA



HARVESTING
RACCOLTA



FORESTRY
FORESTALE

PACKAGING: COLD-DRAWN TUBES

IMBALLAGGI: TUBI TRAFILATI

STANDARD PACKAGING - IMBALLO STANDARD



Strapped bundles*
standard weight: approx. 1.5 tonnes - maximum weight: 2 tonnes

Fasci reggiati*
peso standard: circa 1,5 tonnellate - peso massimo: 2 tonnellate

* Each package is identified for complete tracking
* Ciascun pacco è corredato da un cartellino identificativo per la completa tracciatura



CUSTOM

NON-STANDARD PACKAGING IS DEVELOPED ACCORDING TO CUSTOMER REQUEST

IMBALLI SPECIFICI SONO STUDIATI E FORNITI IN ACCORDO CON IL CLIENTE

OPTIONAL PACKAGING - IMBALLO OPZIONALE



Internal and external oiling, for temporary storage
Oliatura interna ed esterna per stoccaggio temporaneo

Aluminium-plastic foil
Rivestimento in alluminio plastificato

Plastic caps at the ends*
*Tappi in plastica alle estremità**

* standard supply condition for:
- Ready-to-use cylinder tubes
- Skived and roller burnished cylinder tubes

* Condizione di fornitura standard per:
- Tubi trafilati per cilindri pronti all'uso
- Tubi trafilati per cilindri finiti internamente

Special packaging for sea shipments
Imballo specifico per spedizioni via mare

COLD-DRAWN TUBES: QUALITY AND ENVIRONMENT

TUBI TRAFILATI: QUALITÀ E AMBIENTE

The production facilities are equipped with state-of-the-art machinery and are at the core of a **continuous investment policy** by Marcegaglia aimed to increase and sustain their production capacity and range, the **quality** of processes and **safety** and environmental standards.

The **quality laboratory** staff and the **technical-sales assistance** team are dedicated to support the sales and production activities, from the processing of requests to the research and development of new product and quality specifications.

*Le sedi produttive sono all'avanguardia per la tecnologia dei loro impianti e sono al centro degli **investimenti costanti** di Marcegaglia per incrementare e migliorare le proprie capacità, le proprie gamme produttive e la **qualità** dei processi, oltre alla **sicurezza** e alla tutela dell'ambiente.*

*Il supporto del **laboratorio qualità** e del **servizio di assistenza tecnico-commerciale** consente di fornire risposte mirate sia in termini di elaborazione dell'offerta, sia nello studio di nuove specifiche di prodotto e qualità speciali.*



The production chain of Marcegaglia Carbon Steel cold-drawn tubes is **ISO 9001:2015** and **IATF 16949:2016** certified. In 2019 RINA awarded the Boltiere plant "**Best4 ISO 26000:2010**" certification, reserved for companies certified in the Quality, Environment, Safety and Social Responsibility sectors.

The Quality Management System of the Boltiere plant has the following certifications:

- **ISO 9001:2015** (Quality System)
- **ISO 14001:2015** (Environmental System)
- **BS OHSAS 18001:2007** (Health and Safety System)
- **ISO 26000:2010** (Social Responsibility)

The Boltiere plant, like other companies in the Marcegaglia group, is also **ISO 50001:2011** certified for energy.

*La produzione del tubo trafilato Marcegaglia Carbon Steel è certificata **ISO 9001:2015** e **IATF 16949:2016**. Nel 2019 RINA ha conferito allo stabilimento di Boltiere la certificazione "**Best4 ISO 26000:2010**", riservata alle Aziende certificate nei settori Qualità, Ambiente, Sicurezza e Responsabilità Sociale.*

Il Sistema di Gestione per la Qualità dello stabilimento di Boltiere è conforme a:

- **ISO 9001:2015** (Sistema di Qualità)
- **ISO 14001:2015** (Sistema di Qualità Ambientale)
- **BS OHSAS 18001:2007** (Sistema di Salute e Sicurezza)
- **ISO 26000:2010** (Responsabilità Sociale)

*Lo stabilimento di Boltiere, come altre realtà del gruppo Marcegaglia, è anche certificato **ISO 50001:2011** per l'energia.*





Technical norms are referred to in the latest release valid at the publication date of the present catalogue.
Le norme citate si riferiscono all'edizione in vigore alla data di pubblicazione del catalogo.

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Concept: StudioChiesa

Pursuant to the provisions of Legislative Decree 231 of 8 June 2001, Marcegaglia Carbon Steel s.p.a. now has an "Organization, management and control model" in place, in the belief that this model is a useful awareness-building tool for all the company's directors and employees and all other stakeholders (customers, partners and sundry collaborators), so that when they perform their own particular activities they act with integrity and avoid the risk of committing the offences set forth in the Decree. Marcegaglia Carbon Steel s.p.a. has thus put in place a structured and integrated prevention and control system designed to cut down the risk of committing offences linked to the company's business activity, with a focus on preventing and/or combating possible unlawful conduct.

In linea con le prescrizioni del Decreto Legislativo 8 giugno 2001, n°231, Marcegaglia Carbon Steel s.p.a. si è dotata di un "Modello di organizzazione, gestione e controllo", nella convinzione lo stesso sia un valido strumento di sensibilizzazione nei confronti di tutti gli Amministratori e i dipendenti della società e di tutti gli altri soggetti alla medesima cointeressati (clienti, fornitori, partners, collaboratori a diverso titolo), affinché gli stessi, nell'espletamento delle proprie attività, adottino comportamenti corretti e lineari, tali da prevenire il rischio di commissione dei reati contemplati nel Decreto. Marcegaglia Carbon Steel s.p.a., in tale modo, pone in essere un sistema strutturato ed organico di prevenzione e controllo, finalizzato alla riduzione del rischio di commissione dei reati connessi all'attività aziendale, con particolare riguardo alla prevenzione/contrasto di eventuali comportamenti illeciti.



MARCEGAGLIA

CARBON STEEL

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