



Engineering steel

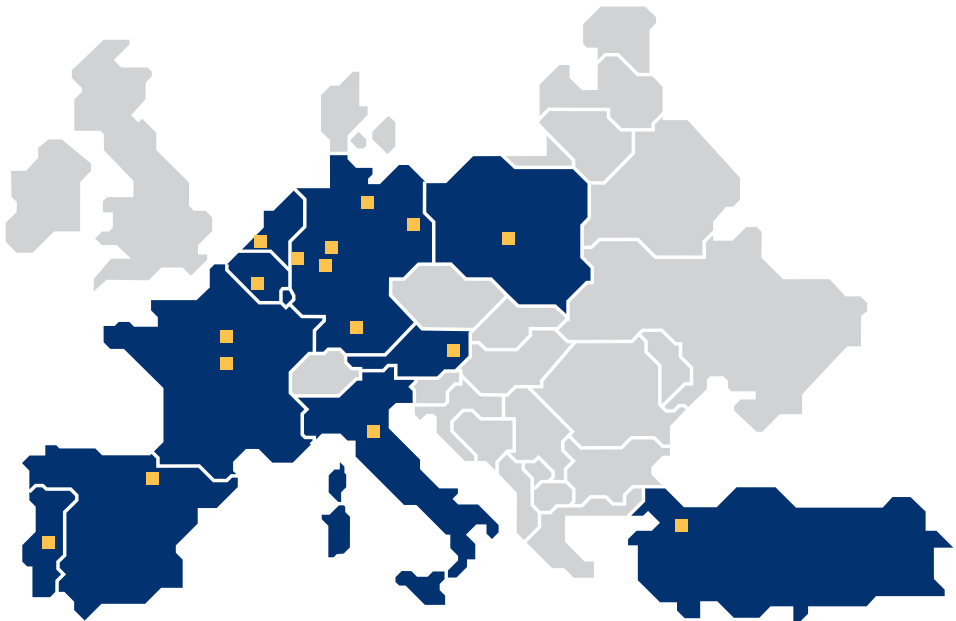
IMS Nederland : your reliable partner for steel, stainless steel and aluminum since 1954

IMS Nederland was founded in 1954 in Schiedam, as the Dutch branch of the German group SCHMOLZ+BICKENBACH. Initially, the range mainly consisted of (bare) steel. Over the years, quality steel, stainless steel and aluminium have been added to the delivery program and IMS Nederland has developed into an all-round supplier

Since 2015, the company has been part of the France-based IMS group, which was created in 1980 from the merger of various trading companies and has been part of Jacquet Metal Service since 2010.

IMS group offers a wide range of bar, sheet and tube material in many qualities. These products meet specific requirements that ensure excellent machining by our customers (forging, machining, bending, welding, heat treatment) and have certain mechanical properties when processed. They are used in the production of parts that are subject to severe mechanical loads, such as in many types of machines, engines, lifting equipment, heavy transport equipment, shafts, gears, springs, valves, valves, the automotive industry and the energy sector.

IMS group is now represented in 15 European countries and has 60 distribution centres with a total of approx. 1950 employees





IMS group is a major player in the market that revolves around steel, stainless steel and aluminum.

A market with specific possibilities and its own varied problems. We offer the solution for all your questions.

Our products are processed by a wide range of customers.

You will find our customers in eg. the automotive, aircraft and food industry, construction and offshore.

C15E

acc. EN 10084, hot rolled
 W.St.Nr.: 1.0401 Tolerances
 acc. EN 10060 In lengths of
 approx. 5 - 6 m Certificate
 EN10204/3.1



25 mm	75 mm	130 mm	220 mm
30 mm	80 mm	135 mm	230 mm
35 mm	85 mm	140 mm	240 mm
38 mm	90 mm	150 mm	245 mm
40 mm	95 mm	160 mm	250 mm
45 mm	100 mm	170 mm	260 mm
50 mm	105 mm	175 mm	270 mm
55 mm	110 mm	180 mm	280 mm
60 mm	115 mm	190 mm	300 mm
65 mm	120 mm	200 mm	
70 mm	125 mm	210 mm	

C15E+N

Acc. EN 10084, forged (SEW 550)/
 normalized/turned W.St.Nr.: 1.0401
 Tolerance -0/+ 3 mm
 In lengths of approx. 5 - 6 m
 Certificate EN10204/3.1



310 mm	350 mm	390 mm	430 mm
320 mm	360 mm	400 mm	
330 mm	370 mm	410 mm	
340 mm	380 mm	420 mm	

C35

Acc. EN 10083, hot rolled

W.St.Nr.: 1.0501. Tolerances

acc. EN 10060. In lengths of
approx. 5 - 6 m. Certificate

EN10204/3.1



16 mm	48 mm	115 mm	200 mm
18 mm	50 mm	120 mm	210 mm
19 mm	55 mm	125 mm	220 mm
20 mm	60 mm	130 mm	230 mm
22 mm	65 mm	135 mm	240 mm
24 mm	70 mm	140 mm	250 mm
25 mm	75 mm	145 mm	260 mm
28 mm	80 mm	150 mm	270 mm
30 mm	85 mm	155 mm	280 mm
32 mm	90 mm	160 mm	290 mm
35 mm	95 mm	165 mm	300 mm
40 mm	100 mm	170 mm	
42 mm	105 mm	180 mm	
45 mm	110 mm	190 mm	

S355JO/J2

Acc. EN 10025-2, hot rolled

W.St.Nr.: 1.0577/1.0553

Tolerances acc. EN 10060.

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



16 mm	45 mm	110 mm	190 mm
18 mm	48 mm	115 mm	200 mm
20 mm	50 mm	120 mm	210 mm
22 mm	55 mm	125 mm	220 mm
24 mm	60 mm	130 mm	230 mm
25 mm	65 mm	135 mm	240 mm
28 mm	70 mm	140 mm	250 mm
30 mm	75 mm	145 mm	260 mm
32 mm	80 mm	150 mm	270 mm
35 mm	85 mm	155 mm	280 mm
36 mm	90 mm	160 mm	290 mm
38 mm	95 mm	165 mm	300 mm
40 mm	100 mm	170 mm	
42 mm	105 mm	180 mm	

S355J2 (+N)

Acc. EN 10025-2, hot rolled/(normalized)/peeled or turned

W.St.Nr.: 1.0577

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



210 mm	240 mm	270 mm	300 mm
220 mm	250 mm	280 mm	
230 mm	260 mm	290 mm	

S355J2+N

Acc. EN 10025-2, forged (SEW 550)/normalized/

peeled or turned

W.St.Nr.: 1.0577

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



300 mm	400 mm	500 mm	600 mm
310 mm	410 mm	510 mm	610 mm
320 mm	420 mm	520 mm	620 mm
330 mm	430 mm	530 mm	650 mm
340 mm	440 mm	540 mm	700 mm
350 mm	450 mm	550 mm	750 mm
360 mm	460 mm	560 mm	800 mm
370 mm	470 mm	570 mm	
380 mm	480 mm	580 mm	
390 mm	490 mm	590 mm	

S355J2+N

Acc. EN 10025-2, hot rolled/normalized

W.St.Nr.: 1.0577

Tolerances acc. EN 10060:2006

In lengths of 6 - 7 m

Certificate EN 10204/3.2 + LRS

Impact test ISO-V at -20Gr. min 27 Joule and at -40Gr. min. 42 Joule



100 mm	140 mm	180 mm
120 mm	160 mm	200 mm

and further....

- » Extensive range through our warehouses in Germany and other countries
(eg.: P250/A105/C22.8/100Cr6/21CrMoV5-7/50-51CrV4/31CrMoV9)
- » Possibilities to deliver material with certificates acc. 3.2 LRS/GL/ABS/DNV/BV/ABS/etc etc.
- » LR allowance to restamp

S355J0/2

Acc. EN 10025, hot rolled

W.St.Nr.: 1.0553

Tolerances acc. EN 10059

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



30 mm	70 mm	125 mm	180 mm
35 mm	80 mm	130 mm	190 mm
40 mm	90 mm	140 mm	200 mm
45 mm	100 mm	150 mm	
50 mm	110 mm	160 mm	
60 mm	120 mm	170 mm	

C45

Acc. EN 10083, hot rolled

W.St.Nr.: 1.0503

Tolerances acc. EN 10059

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



20 mm	50 mm	90 mm	150 mm
25 mm	55 mm	100 mm	160 mm
30 mm	60 mm	110 mm	170 mm
35 mm	70 mm	120 mm	180 mm
40 mm	75 mm	130 mm	190 mm
45 mm	80 mm	140 mm	200 mm

C45 (R/E)

Acc. EN 10083, hot rolled

W.St.Nr.: 1.0503/1.1191/1.1201

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



10 mm	38 mm	95 mm	170 mm
12 mm	40 mm	100 mm	175 mm
14 mm	42 mm	105 mm	180 mm
16 mm	45 mm	110 mm	190 mm
18 mm	48 mm	115 mm	200 mm
20 mm	50 mm	120 mm	210 mm
22 mm	55 mm	125 mm	220 mm
24 mm	60 mm	130 mm	230 mm
25 mm	65 mm	135 mm	240 mm
27 mm	70 mm	140 mm	250 mm
28 mm	75 mm	145 mm	260 mm
29 mm	80 mm	150 mm	270 mm
30 mm	85 mm	155 mm	280 mm
32 mm	87 mm	160 mm	290 mm
35 mm	90 mm	165 mm	300 mm

C45 (R/E) (+N)

Acc. EN 10083, hot rolled/(normalized)/peeled or turned

W.St.Nr.: 1.0503/1.1191/1.1201

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN1020/3.1



210 mm	250 mm	290 mm	330 mm
220 mm	260 mm	300 mm	
230 mm	270 mm	310 mm	
240 mm	280 mm	320 mm	

C45 (R/E)+N

Acc. EN 10083, forged (SEW 550)/normalized/ peeled or turned

W.St.Nr.: 1.0503/1.119/1.1201

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	400 mm	500 mm	620 mm
320 mm	410 mm	510 mm	630 mm
330 mm	420 mm	520 mm	640 mm
340 mm	430 mm	530 mm	650 mm
350 mm	440 mm	540 mm	680 mm
360 mm	450 mm	550 mm	700 mm
370 mm	460 mm	560 mm	725 mm
380 mm	470 mm	570 mm	750 mm
390 mm	480 mm	580 mm	800 mm
395 mm	490 mm	600 mm	825 mm

C60 (R/E)Acc. EN 10083, hot rolled (¹⁾= peeled also available)

W.St.Nr.: 1.060 /1.1221/1.1223

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204 3.1



16 mm	50 mm	115 mm	190 mm
20 mm	55 mm	120 mm	200 mm
22 mm	60 mm	125 mm	210 mm ¹⁾
25 mm	65 mm	130 mm	220 mm ¹⁾
28 mm	70 mm	135 mm	230 mm ¹⁾
30 mm	75 mm	140 mm	240 mm ¹⁾
32 mm	80 mm	145 mm	250 mm ¹⁾
35 mm	85 mm	150 mm	260 mm ¹⁾
36 mm	90 mm	155 mm	270 mm ¹⁾
38 mm	95 mm	160 mm	280 mm ¹⁾
40 mm	100 mm	165 mm	290 mm ¹⁾
42 mm	105 mm	170 mm	300 mm ¹⁾
45 mm	110 mm	180 mm	

C60 (E)+N

Acc. EN 10083, forged (SEW 550) peeled/normalized/peeled or turned

W.St.Nr.: 1.1221

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	380 mm	450 mm	570 mm
320 mm	390 mm	460 mm	600 mm
330 mm	400 mm	470 mm	625 mm
340 mm	410 mm	480 mm	650 mm
350 mm	420 mm	500 mm	
360 mm	430 mm	520 mm	
370 mm	440 mm	550 mm	

15CrNi6+A/17CrNi6-6+A

Case hardening steel acc. EN 10084, hot rolled/annealed

W.St.Nr.: 1.5919/1.5918

Tolerances acc. EN 10060

In lengths of approx. 5 - 6,2 m

Certificate EN10204/3.1



25 mm	55 mm	90 mm	150 mm
28 mm	60 mm	95 mm	160 mm
30 mm	65 mm	100 mm	170 mm
35 mm	70 mm	110 mm	180 mm
40 mm	75 mm	120 mm	190 mm
45 mm	80 mm	130 mm	200 mm
50 mm	85 mm	140 mm	

16MnCr (S)5 (EC80)

Case hardening steel acc. EN 10084, hot rolled

W.St.Nr.: 1.7131 (1.7139)

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



16MnCr (S)5 (EC80)			
20 mm	58 mm	120 mm	200 mm
22 mm	60 mm	125 mm	210 mm
25 mm	65 mm	130 mm	215 mm
28 mm	70 mm	135 mm	220 mm
30 mm	75 mm	140 mm	230 mm
32 mm	80 mm	145 mm	240 mm
35 mm	85 mm	150 mm	250 mm
38 mm	90 mm	155 mm	260 mm
40 mm	95 mm	160 mm	270 mm
42 mm	100 mm	165 mm	280 mm
45 mm	105 mm	170 mm	290 mm
48 mm	110 mm	180 mm	300 mm
50 mm	115 mm	190 mm	

16MnCr5+TH (EC80)

Case hardening steel acc. EN 10084, forged (SEW 550)/peeled or turned

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



16MnCr5+TH (EC80)			
310 mm	380 mm	450 mm	525 mm
320 mm	390 mm	460 mm	550 mm
330 mm	400 mm	470 mm	600 mm
340 mm	410 mm	480 mm	700 mm
350 mm	420 mm	490 mm	720 mm
360 mm	430 mm	500 mm	
370 mm	440 mm	510 mm	

18CrNiMo7-6+FP

Case hardening steel acc. EN 10084, hot rolled (¹⁾= peeled also available)/annealed
W.St.Nr.: 1.6587

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



40 mm	85 mm	130 mm	220 mm ¹⁾
45 mm	90 mm	140 mm	230 mm ¹⁾
50 mm	95 mm	150 mm	240 mm ¹⁾
55 mm	100 mm	160 mm	250 mm ¹⁾
60 mm	105 mm	170 mm	260 mm ¹⁾
65 mm	110 mm	180 mm	270 mm ¹⁾
70 mm	115 mm	190 mm	280 mm ¹⁾
75 mm	120 mm	200 mm	290 mm ¹⁾
80 mm	125 mm	210 mm ¹⁾	300 mm ¹⁾

18CrNiMo7-6+TH

Case hardening steel acc. EN 10084, forged SEW 550/
annealed/ peeled or turned

W.St.Nr.: 1.6587, EN 10084

Tolerance -0/+ 3 mm

Lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	370 mm	430 mm	490 mm
320 mm	380 mm	440 mm	500 mm
330 mm	390 mm	450 mm	750 mm
340 mm	400 mm	460 mm	
350 mm	410 mm	470 mm	
360 mm	420 mm	480 mm	

25CrMo4+QT

Alloy steel acc. EN 10083, hot rolled/quenched and tempered

W.St.Nr.: 1.7218

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



25 mm	70 mm	140 mm	230 mm
30 mm	75 mm	150 mm	240 mm
35 mm	80 mm	160 mm	250 mm
40 mm	85 mm	170 mm	260 mm
45 mm	90 mm	180 mm	270 mm
50 mm	100 mm	190 mm	280 mm
55 mm	115 mm	200 mm	290 mm
60 mm	120 mm	210 mm	300 mm
65 mm	130 mm	220 mm	

30CrNiMo8+QT

Alloy steel acc. EN 10083 hot rolled/quenched and tempered

(¹⁾= peeled also available)

W.St.Nr.: 1.6580

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



20 mm	75 mm	130 mm	220 mm ¹⁾
25 mm	80 mm	135 mm	230 mm ¹⁾
30 mm	85 mm	140 mm	240 mm ¹⁾
35 mm	90 mm	145 mm	250 mm ¹⁾
40 mm	95 mm	150 mm	260 mm ¹⁾
45 mm	100 mm	160 mm	270 mm ¹⁾
50 mm	105 mm	170 mm	280 mm ¹⁾
55 mm	110 mm	180 mm	290 mm ¹⁾
60 mm	115 mm	190 mm	300 mm ¹⁾
65 mm	120 mm	200 mm	
70 mm	125 mm	210 mm ¹⁾	

30CrNiMo8+QT

Alloy steel acc. EN 10083 hot rolled/forged (SEW 550)/quenched and tempered
peeled or turned

W.St.Nr.: 1.6580

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	350 mm	390 mm	450 mm
320 mm	360 mm	400 mm	480 mm
330 mm	370 mm	410 mm	500 mm
340 mm	380 mm	420 mm	

34CrAlNi7-10+QT+SR

Nitriding steel acc. EN 10085, hot rolled/quenched and tempered (¹= peeled also available)

W.St.Nr.: 1.8550

Tolerances acc. EN 10060

Lengths of approx. 5 - 6 m

Certificate EN10204/3.1



35 mm	85 mm	135 mm	220 mm ^{¹)}
40 mm	90 mm	140 mm	230 mm ^{¹)}
45 mm	95 mm	145 mm	240 mm ^{¹)}
50 mm	100 mm	150 mm	250 mm ^{¹)}
55 mm	105 mm	160 mm	260 mm ^{¹)}
60 mm	110 mm	170 mm	270 mm ^{¹)}
65 mm	115 mm	180 mm	280 mm ^{¹)}
70 mm	120 mm	190 mm	290 mm ^{¹)}
75 mm	125 mm	200 mm	300 mm ^{¹)}
80 mm	130 mm	210 mm ^{¹)}	

34CrNiMo6+QT

Alloy steel acc. EN 10083, hot rolled/quenched and tempered ("= peeled also available)

W.St.Nr.: 1.6582

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



20 mm	60 mm	125 mm	220 mm ¹⁾
22 mm	65 mm	130 mm	230 mm ¹⁾
25 mm	70 mm	135 mm	240 mm ¹⁾
28 mm	80 mm	140 mm	260 mm ¹⁾
30 mm	85 mm	150 mm	270 mm ¹⁾
32 mm	90 mm	160 mm	280 mm ¹⁾
35 mm	95 mm	170 mm	290 mm ¹⁾
40 mm	100 mm	180 mm	300 mm ¹⁾
45 mm	105 mm	190 mm	
50 mm	110 mm	200 mm	
55 mm	120 mm	210 mm ¹⁾	

34CrNiMo6+QT

Alloy steel acc. EN 10083, forged (SEW550)/quenched and tempered/turned

W.St.Nr.: 1.6582

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	350 mm	390 mm	430 mm
320 mm	360 mm	400 mm	440 mm
330 mm	370 mm	410 mm	
340 mm	380 mm	420 mm	

42CrMo(S)4+A

Alloy steel acc. EN 10083, hot rolled/annealed

W.St.Nr.: 1.7225 (1.7227)

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



42CrMo(S)4+A			
20 mm	60 mm	100 mm	160 mm
25 mm	65 mm	105 mm	170 mm
30 mm	70 mm	110 mm	180 mm
35 mm	75 mm	120 mm	190 mm
40 mm	80 mm	125 mm	200 mm
45 mm	85 mm	130 mm	
50 mm	90 mm	140 mm	
55 mm	95 mm	150 mm	

42CrMo(S)4+QT

Alloy steel acc. EN 10083, hot rolled/quenched and tempered (¹⁾= peeled also available)

W.St.Nr.: 1.7225 (1.7227)

Tolerances acc. EN 10060

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



42CrMo(S)4+QT			
20 mm	55 mm	120 mm	200 mm
22 mm	60 mm	125 mm	210 mm ¹⁾
25 mm	65 mm	130 mm	220 mm ¹⁾
28 mm	70 mm	135 mm	230 mm ¹⁾
30 mm	75 mm	140 mm	240 mm ¹⁾
32 mm	80 mm	145 mm	250 mm ¹⁾
35 mm	85 mm	150 mm	260 mm ¹⁾
36 mm	90 mm	155 mm	270 mm ¹⁾
38 mm	95 mm	160 mm	280 mm ¹⁾
40 mm	100 mm	165 mm	290 mm ¹⁾
42 mm	105 mm	170 mm	300 mm ¹⁾
45 mm	110 mm	180 mm	
50 mm	115 mm	190 mm	

42CrMo(S)4+QT

Alloy steel acc. EN 10083, forged (SEW 550)/quenched and tempered, peeled or turned

W.St.Nr.: 1.7225 (1.7227)

Tolerance -0/+ 3 mm

In lengths of approx. 5 - 6 m

Certificate EN10204/3.1



310 mm	390 mm	470 mm	625 mm
320 mm	400 mm	480 mm	630 mm
330 mm	410 mm	490 mm	750 mm
340 mm	420 mm	500 mm	800 mm
350 mm	430 mm	520 mm	825 mm
360 mm	440 mm	550 mm	
370 mm	450 mm	580 mm	
380 mm	460 mm	600 mm	



Hardness comparison table

Tensile strength N/mm ²	Vickers Hardness HV	Brinell Hardness HB	Rockwell Hardness HRB	Rockwell Hardness HRC
255	80	76.0		
270	85	80.7	41.0	
285	90	85.5	48.0	
305	95	90.2	52.0	
320	100	95.0	56.2	
335	105	99.8		
350	110	105	62.3	
370	115	109		
385	120	114	66.7	
400	125	119		
415	130	124	71.2	
430	135	128		
450	140	133	75.0	
465	145	138		
480	150	143	78.7	
495	155	147		
510	160	152	81.7	
530	165	156		
545	170	162	85.0	
560	175	166		
575	180	171	87.1	
595	185	176		
610	190	181	89.5	
625	195	185		
640	200	190	91.5	
660	205	195	92.5	
675	210	199	93.5	
690	215	204	94.0	
705	220	209	95.0	
720	225	214	96.0	
740	230	219	96.7	
755	235	223		
770	240	228	98.1	20.3

TECHNICAL INFORMATION

Tensile strength N/mm ²	Vickers Hardness HV	Brinell Hardness HB	Rockwell Hardness HRB	Rockwell Hardness HRC
785	245	233		21.3
800	250	238	99.5	22.2
820	255	242		23.1
835	260	247	(101)	24.0
850	265	252		24.8
865	270	257	(102)	25.6
880	275	261		26.4
900	280	266	(104)	27.1
915	285	271		27.8
930	290	276	(105)	28.5
950	295	280		29.2
965	300	285		29.8
995	310	295		31.0
1030	320	304		32.2
1060	330	314		33.3
1095	340	323		34.4
1125	350	333		35.5
1155	360	342		36.6
1190	370	352		37.7
1220	380	361		38.8
1255	390	371		39.8
1290	400	380		40.8
1320	410	390		41.8
1350	420	399		42.7
1385	430	409		43.6
1420	440	418		44.5
1455	450	428		45.3
1485	460	437		46.1
1520	470	447		46.9
1555	480	(456)		47.7
1595	490	(466)		48.4
1630	500	(475)		49.1

Tolerances hot rolled round bars acc. EN 10060

Diameter	Tolerance	Diameter	Tolerance
10 - 15 mm	+/- 0,4 mm	105 - 120 mm	+/- 1,5 mm
16 - 25 mm	+/- 0,5 mm	125 - 160 mm	+/- 2,0 mm
26 - 35 mm	+/- 0,6 mm	165 - 200 mm	+/- 2,5 mm
36 - 50 mm	+/- 0,8 mm	220 mm	+/- 3,0 mm
52 - 80 mm	+/- 1,0 mm	250 mm	+/- 4,0 mm
85 - 100 mm	+/- 1,3 mm	>250 mm	+/- 6,0 mm

Straightness

$d \leq 25$ mm	none
$25 \leq d \leq 80$ mm	$\leq 0,4$ % of the length
$80 < d$	$\leq 0,25$ % of the length

Deviation on roundness

Maximum 75 % of the tolerance on the diameter (see above)

Mechanical properties

Dutch	German	English	
Vloeigrens	Streckgrenze	Yield Point	N/mm ²
Trekvastheid	Zugfestigkeit	Tensile strength	N/mm ²
Rek	Bruchdehnung	Elongation	%
Insnoering	Einschnürung	Reduction of Area	%
Kerfslagwaarde	Kerbschlagzähigkeit	Impact Value	Joule
Hardheid HB	Härte HB	Hardness HB	HB

Chemical elements

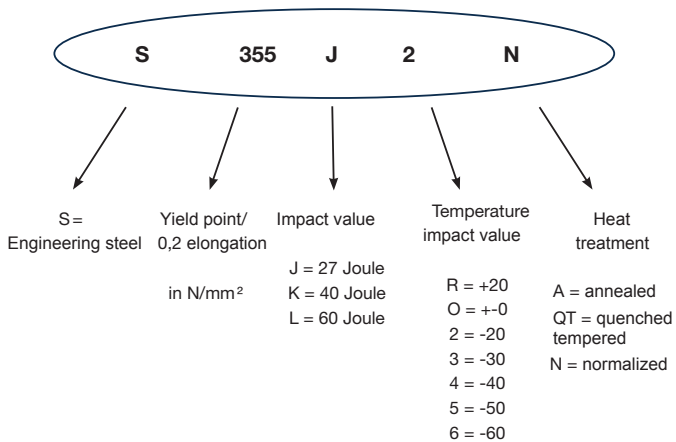
	Dutch	German	English	
C	Koolstof	Kohlenstoff	Carbon	%
Si	Silicium	Silicium	Silicon	%
Mn	Mangaan	Mangan	Mangat	%
P	Fosfor	Phosphor	Phosphorus	%
S	Zwavel	Schwefel	Sulphur	%
Cr	Chroom	Chrom	Chrome	%
Ni	Nikkel	Nickel	Nickel	%
Mo	Molybdeen	Molybdän	Molybdenum	%
Al	Aluminium	Aluminium	Aluminium	%

Old - new descriptions

Old	New	Dutch	German	English
G	+ A	Zachtgloeien	Weichgeglüht	Soft Annealing
GKZ	+ AC	Gegloeid tot Globulaire cementiet	GKZ Glühen	Annealed on Globular cementite
BG	+ FP	Ferriet-Perliet Structuur + hardheid	BG Glühen	Ferrite-pearlite Structure + Hardness range
S	+ SR	Spanningsarm	Entspannen	Stress releaved
BF	+ TH	Gloeien tot bepaalde trekvastheid / hardheid	BF Glühen	Treated to hardness range
V	+ QT	Veredelen	Vergüten	Quench and tempered
N	+ N	Normaliserend Gloeien	Normaliseren	Normalizing
SH	+ SH	Schillen	Schälen	Pealed
K	+ C	Getrokken	Ziehen	Cold Drawn
SL	+ SL	Slijpen	Schleifen	Ground
-	+ PL	Polijsten	Polieren	Polish



Structure of the quality indication on the example of "S355J2N"



Color coding

ENGINEERING STEEL		
C 15		(1.0401)
C 35		(1.0501)
C 45		(1.0503)
C 60		(1.0601)
S 355 JO / S 355 J2G 3 (St 52-3)		(1.0570)
15 C-Ni 6 +A (G)		(1.5919)
16 Mn Cr 5		(1.7131)

ENGINEERING STEEL		
18 Cr Ni Mo 7-6 +FP / +TH (17 Cr Ni Mo 6 G)		(1.6587)
25 Cr Mo 4 +QT (V)		(1.7218)
30 Cr Ni Mo 8 +QT (V)		(1.6580)
34 Cr Al Ni 7 +QT (V)		(1.8550)
34 Cr Ni Mo 6 +QT (V)		(1.6582)
42 Cr Mo (S)4 +QT (V)		(1.7225/ 1.7227)
51 Cr V 4 + A (50 Cr V 4 G)		(1.8159)

The relevant "Werkstoff" numbers are stated in brackets behind the color.

Construction steel

S235JRC+C/+SH/(St37-2 K/SH)

Color code: red

W-Nr. 1.0122	C	Mn	P	S	N
Chemical composition %	max. 0,17	max. 1,40	max. 0,040	max. 0,040	max. 0,012
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB
	from to	min. N/mm ²	N/mm ²	min. %	
Cold drawn +C (K)	5 - 10	355	470 - 840	8	
	10 - 16	300	420 - 770	9	
	16 - 40	260	390 - 730	10	
	40 - 63	235	380 - 670	11	
	63 - 100	215	360 - 640	11	
Peeled +SH	16 - 40		360 - 510		102 - 140
	40 - 63		360 - 510		102 - 140
	63 - 100		360 - 510		102 - 140
Standard	EN 10277-2 (was DIN 1652) 2008				

S235JRC+C/+SH/(St37-2 K/SH)

Color code: red



h9 ROUND	diameter in mm			
Ø 3 mm - Ø 12 mm Ø L = 3000 (-0/+200) mm Ø 10 mm - Ø 150 mm Ø L = 6000 (-0/+200) mm	3	14,98	26	80
	4	14,98	28	85
	5	15	29,98	90
	5,25	16	30	95
	6	16,98	32	100
	7	17	34,98	105
	7,10	18	35	110
	8	18,25	36	115
	8,90	19	38	120
	9	19,98	40	125
	10	20	45	130
	10,80	21	50	140
	11	21,90	55	150
	12	22	60	160
12,70	24	65	180	
13	24,98	70		
14	25	75		

S235JRC+C/(St37-2K)

Color code: red



h11 SQUARE	size in mm		
L=3000 (-0/+200) mm	5	18	50
	6	20	60
	7	22	65
	8	25	70
	10	28	75
	11	30	80
	12	32	90
	14	35	100
	15	40	
	16	45	

Bright steel, unalloyed S235JRC+C (ST37-2K/W.Nr. 1.0122)

In lengths of 3000 (-0/+200) mm.

Tolerances acc. EN 10278, tolerance h11.



width in mm	thickness in mm														
	2	3	4	5	6	8	10	12	15	20	25	30	35	40	50
6	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
8	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-
10	•	•	•	•	•	•	-	-	-	-	-	-	-	-	-
12	•	•	•	•	•	•	•	-	-	-	-	-	-	-	-
14	-	•	-	-	-	•	-	-	-	-	-	-	-	-	-
15	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-
16	•	•	•	•	•	•	•	•	-	-	-	-	-	-	-
18	-	•	•	•	•	-	•	•	-	-	-	-	-	-	-
20	•	•	•	•	•	•	o	•	•	-	-	-	-	-	-
22	-	•	•	•	•	•	•	-	•	-	-	-	-	-	-
25	•	•	•	•	•	•	o	•	•	•	-	-	-	-	-
28	-	-	-	•	•	-	-	-	-	-	-	-	-	-	-
30	•	•	•	o	o	•	o	•	o	o	•	-	-	-	-
32	-	-	-	-	•	•	•	•	•	•	-	-	-	-	-
35	-	•	•	•	o	•	o	•	o	o	o	-	-	-	-
40	-	•	•	•	•	•	o	•	o	o	o	•	•	-	-
45	-	•	•	•	•	•	•	•	•	•	•	•	•	-	-
50	-	•	•	•	•	•	o	•	•	o	o	o	o	•	-
55	-	-	-	-	•	•	•	•	•	•	-	-	-	-	-
60	-	•	•	•	•	•	o	o	•	o	o	o	•	•	•
65	-	-	-	-	•	•	•	•	•	•	•	-	•	-	-
70	-	•	•	•	•	•	o	•	o	o	o	•	•	o	•
75	-	-	-	•	•	•	•	•	•	•	•	-	-	-	-
80	•	•	•	•	•	•	o	•	o	o	o	o	-	o	•
90	-	-	•	•	•	•	o	•	•	•	•	•	-	•	•
100	-	-	-	•	•	•	o	•	o	o	o	o	•	o	o
110	-	-	-	•	-	-	•	-	•	•	•	-	-	-	-
120	-	-	-	•	•	•	•	•	•	•	•	•	-	•	•
125	-	-	-	-	-	•	•	•	•	•	•	•	-	•	-
130	-	-	-	-	-	•	•	•	•	•	•	•	-	-	-
140	-	-	-	-	•	•	•	•	•	•	•	-	-	-	-
150	-	-	-	•	•	•	•	•	•	•	•	•	-	•	-
160	-	-	-	-	-	•	•	•	•	•	•	-	-	-	•
180	-	-	-	-	-	•	•	•	•	•	•	•	-	•	-
200	-	-	-	-	•	•	•	•	•	•	•	•	-	•	•
250	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-
300	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-
400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•

- = on stock in S235JRC+C (St37-2K)
- o = on stock in C45C+C
- = no stock

Besides our standard range of S235JRC + C and C45C + C, we have the possibilities to offer the following qualities: S355J2C + C (St52-3K) | CK45K (key steel) / 11SMn (Pb) 30 + C (free cutting steel).

Bright angle steel S235JRC+C, sharp edged

In lengths of 3000 (-0/+500) mm.

Drawn acc. DIN 59370.

size mm	thickness in mm					
	2	3	4	5	6	8
L 10 x 10	•	•				
L 12 x 12		•				
L 15 x 15	•	•	•			
L 15 x 10		•				
L 20 x 20	•	•				
L 20 x 10	•	•	•	•		
L 25 x 25	•	•	•	•		
L 25 x 15		•	•	•		
L 30 x 30		•	•	•		
L 30 x 15		•				
L 30 x 20		•	•	•		
L 35 x 35		•	•	•		
L 40 x 40			•	•	•	
L 40 x 20		•	•	•		
L 45 x 45			•	•		
L 45 x 30			•	•	•	
L 50 x 50			•	•	•	
L 50 x 30		•	•	•	•	
L 60 x 60				•	•	
L 60 x 30			•	•	•	
L 60 x 40			•	•	•	
L 80 x 80					•	•
L 80 x 40					•	•

Bright triangle S235JRC+CBright drawn, sharp edged
unequal profile

h11 triangle	size in mm
Lengths 3000 (-0/+500) mm.	7 x 7 x 9,90
	10 x 10 x 14,14
	15 x 15 x 21,15
	20 x 20 x 28,28
	25 x 25 x 35,36
	30 x 30 x 42,43

Also available in hot rolled



S355J2C+C/+SH/St52-3K/SH

Color code: green

W-Nr. 1.0579	C	Mn	P	S	Cu
Chemical composition %	max. 0,20	max. 1,60	max. 0,030	max. 0,030	max. 0,55
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB
	from to	min. N/mm ²	N/mm ²	min. %	
Cold drawn +C (K)	5 - 10	520	630 - 950	6	
	10 - 16	450	580 - 850	7	
	16 - 40	350	500 - 770	8	
	40 - 63	335	500 - 770	9	
	63 - 100	315	470 - 740	9	
Peeled +SH	16 - 40		470 - 630		146 - 187
	40 - 63		470 - 630		146 - 187
	63 - 100		470 - 630		146 - 187
Standard	EN 10277-2 (was DIN 1652) 2008				

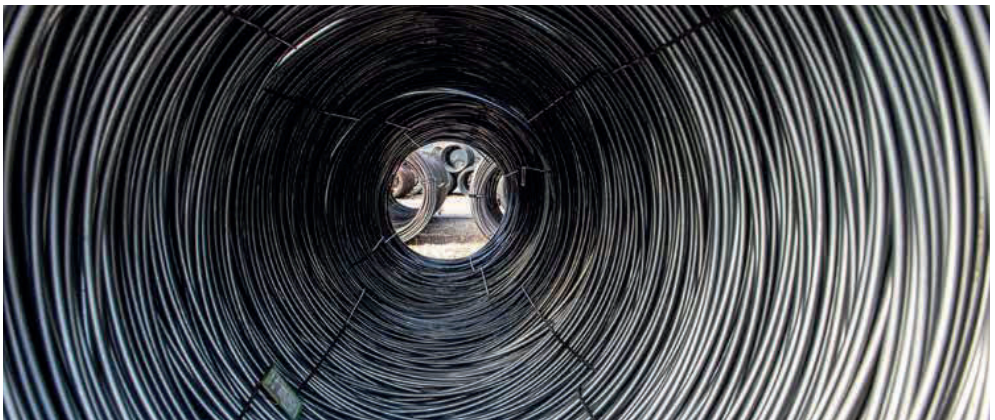
S355J2C+C/+SH/St52-3K/SH

Color code: green



h9 ROUND	diameter in mm			
L=6000 (-0/+200) mm	6*	19	36*	85*
	8*	20*	38*	90*
	8,90	21,9	40*	100*
	10*	22*	45*	110*
	10,80	24*	48	115
	12*	25*	50*	120*
	14*	26	55*	125
	14,58	27,6	60*	130
	15*	28*	65*	140
	16*	30*	70*	150
	18*	32*	75*	160
	18,25	35*	80*	

* = Sizes available with sulfur (S) 0.02-0.035% for better machinability



Carbon steel

C35+C/+SH

Color code: brown

W-Nr. 1.0501	C	Si	Mn	P	S
Chemical composition %	0,32 - 0,39	max. 0,40	0,50 - 0,80	max. 0,045	max. 0,045
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB
	from to	min. N/mm ²	N/mm ²	min. %	
Cold drawn +C (K)	5 - 10	510	650 - 1000	6	
	10 - 16	420	600 - 950	7	
	16 - 40	320	580 - 880	8	
	40 - 63	300	550 - 840	9	
	63 - 100	270	520 - 800	9	
Peeled +SH	16 - 100		520 - 700		154 - 207
Standard	EN 10277-2 (was DIN 1652) 2008				

Available on request in C35Pb + C / + SH, variant with 0.15 - 0.35% Pb, for better machinability.

C35+C/+SH

Color code: brown



C35+C

Color code: brown



h9 ROUND	diameter in mm		
L=6000 (-0/+200) mm	8	28	70
	10	30	75
	12	32	80
	14	35	85
	15	40	90
	16	42	100
	18	45	110
	19	48	120
	20	50	125
	22	55	130
	24	60	150
	25	65	

h11 HEXAGON	size in mm		
L=3000 (-0/+200) mm	14	32	70
	17	36	75
	19	41	80
	22	46	90
	24	50	
	27	55	
	30	60	

C45+C/+SH

Color code: blue

W-Nr. 1.0503	C	Si	Mn	P	S
Chemical composition %	0,42 - 0,50	max. 0,40	0,50 - 0,80	max. 0,045	max. 0,045
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB
	from to	min. N/mm ²	N/mm ²	min. %	
Cold drawn +C (K)	5 - 10	565	750 - 1050	5	
	10 - 16	500	710 - 1030	6	
	16 - 40	410	650 - 1000	7	
	40 - 63	360	630 - 900	8	
	63 - 100	310	580 - 850	8	
Peeled +SH	16 - 100		580 - 820		172 - 242
Standard	EN 10277-2 (was DIN 1652) 2008				

Available on request in C45Pb + C / + SH, variant with 0.15 - 0.35% Pb, for better machinability.

C45+C/+SH

Color code: blue

**C45+C/+SH**

Color code: blue



h9 ROUND	diameter in mm		
L=6000 (-0/+200) mm	5	25	65
	6	28	70
	8	30	75
	10	32	80
	12	35	85
	14	38	90
	15	40	100
	16	42	110
	18	45	120
	19	48	125
	20	50	130
	22	55	150
	24	60	160

h6 ROUND	diameter in mm		
L=6000 (-0/+200) mm	5	30*	85
	6	32	90
	8*	35*	100
	10*	40*	110
	12	42	120
	14	45	
	15*	50*	
	16	55	
	18	60	
	20*	65	
	22	70	
	25*	75	
	28	80	

* Available from stock with tolerance g6.

C45+C

Color code: blue



h11 HEXAGON	size in mm		
L=3000 (-0/+200) mm	14	32	70
	17	36	75
	19	41	80
	22	46	90
	24	50	
	27	55	
	30	60	

Free cutting steel

11SMn30+C/+SH

Color code: white

W-Nr. 1.0715	C	Si	Mn	P	S
Chemical composition %	max. 0,14	max. 0,05	max. 0,90 - 1,30	max. 0,11	0,27 - 0,33
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB
	from to	min. N/mm ²	N/mm ²	min. %	
Cold drawn +C (K)	5 - 10	440	510 - 810	6	
	10 - 16	410	490 - 760	7	
	16 - 40	375	460 - 710	8	
	40 - 63	305	400 - 650	9	
	63 - 100	245	360 - 630	9	
Peeled +SH	40 - 63		370 - 570		112 - 169
	63 - 100		360 - 520		107 - 154
Standard	EN 10277-3 (was DIN 1651) 2008				

Available on request in 11SMn37 + C / + SH, variant with 0.34 - 0.40% sulfur, for better machinability. (W-No. 1.0736)

11SMn30+C/+SH

Color code: white



h9 ROUND	diameter in mm						
L=3000 (-0/+200) mm	4	12	20	28	40	65	115
	5	12,70	21	29	42	70	120
	5,5	13	22	29,98	45	75	125
	6	14	23	30	46	80	130
	7	15	24	32	48	85	140
	8	16	24,98	33	50	90	150
	8,90	17	25	34	52	95	160
	9	18	25,40	35	54	100	180
	10	19	26	36	55	105	200
	11	19,98	27	38	60	110	

11SMn30+C

Color code: white



h11 SQUARE	size in mm			
L=3000 (-0/+200) mm	5	15	30	70
	6	16	32	80
	7	18	35	100
	8	20	40	
	10	22	45	
	12	25	50	
	14	28	60	

11SMn30+C

Color code: white



h11 HEXAGON	size in mm			
L=3000 (-0/+200) mm	6	14	27	55
	8	15	30	60
	9	16	32	65
	10	17	36	70
	11	19	41	75
	12	22	46	80
	13	24	50	

11SMnPb30+C/+SH

Color code: purple

W-Nr. 1.0718	C	Si	Mn	P	S	Pb
Chemical composition %	max. 0,14	max. 0,05	0,90 - 1,30	max. 0,11	0,27 - 0,33	0,20 - 0,35
Mechanical properties	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB	
Cold drawn +C (K)	from to	min. N/mm ²	N/mm ²	min. %		
	5 - 10	440	510 - 810	6		
	10 - 16	410	490 - 760	7		
	16 - 40	375	460 - 710	8		
	40 - 63	305	400 - 650	9		
Peeled +SH	40 - 63		370 - 570		112 - 169	
	63 - 100		360 - 520		107 - 154	
Standard	EN 10277-3 (was DIN 1651) 2008					

Available on request in 11SMnPb37 + C / + SH, variant with 0.34 - 0.40% sulfur, for better machinability (W-No. 1.0737).

11SMnPb30+C/+SH

Color code: purple



h9 ROUND	diameter in mm					
L=3000 (-0/+200) mm	3	9,52	19	32	50	100
	4	10	20	34	55	105
	4,5	11	21	35	58	110
	5	12	22	36	60	115
	5,5	12,7	23	38	65	120
	5,98	13	25	39	70	125
	6	14	26	40	75	130
	6,5	15	27	42	80	140
	7	16	28	45	85	150
	8	17	29	46	90	
	9	18	30	48	95	

11SMnPb30+C

Color code: purple



h11 SQUARE	size in mm	
L=3000 (-0/+200) mm	4	28
	6	32
	18	36
	22	45
	25	90

11SMnPb30+C

Color code: purple



h11 HEXAGON	size in mm			
L=3000 (-0/+200) mm	5	13	22	41
	6	14	22,22	46
	7	15	24	50
	8	16	27	55
	9	17	30	60
	10	18	32	65
	11	19	36	70
	12	20	38	75



Delivery program

Bright steel and free cutting steel

- Unalloyed and alloyed, drawn, peeled, polished, heat treated

Engineering steel

- Unalloyed and alloyed, hot rolled, forged, turned, heat treated

Stainless steel

- Bars: hot rolled/forged, drawn, ground (round, square, hexagon)
- Sheets: cold rolled (IIC, ground and/or with foil), hot rolled, tear plates, decorative sheets
- Flat bars: hot rolled, slitted, drawn
- Profiles: T, U and angles (cold rolled, extruded or hot rolled)
- Welded construction tubes: not polished or polished G.320
- Welded round tubes: not annealed or annealed, not polished or polished G.320, mirror polished
- Welded annealed tubes acc. ASTM A 312 / EN 10217-7 / EN 10357
- Seamless tubes acc. ASTM A 269 / A 312 en EN 10216-5
- Seamless hollow bars acc. EN 10216-5
- Getrokken draad en walsdraad

SB-Railing

- Stainless steel components for balustrades and railings
- UNIQ: aluminium clamping profiles for glass balustrades



Steel tubes

- Seamless or welded precision tubes
- Seamless or welded flame tube
- Seamless hydraulics tubes
- Seamless cylinder tubes
- Seamless boiler tubes
- Welded hollow sections
- Welded gas tubes

Aluminium

- Bars: round, flat, square
- Profiles: T, U, angle
- Tubes: round, square, rectangular
- Sheets: with or without foil
- Tear plates: 2- or 5-tears, pickled or not pickled
- Extruded profiles according to customers' drawing

Other materials, sizes and qualities on request.

A close-up photograph of several stacked metal profiles, likely aluminum or steel, in a warehouse setting. The profiles are arranged in a grid-like pattern, with some in the foreground and others receding into the background. The lighting is bright, highlighting the metallic surfaces and the geometric shapes of the profiles. A white text box is overlaid on the right side of the image.

IMS Nederland B.V.

Gildenweg 21
NL-3334 KC Zwijndrecht

T: +31 78 6230600
F: +31 78 6101030

www.ims-nederland.biz
info@ims-nederland.biz