

**Bright steel**

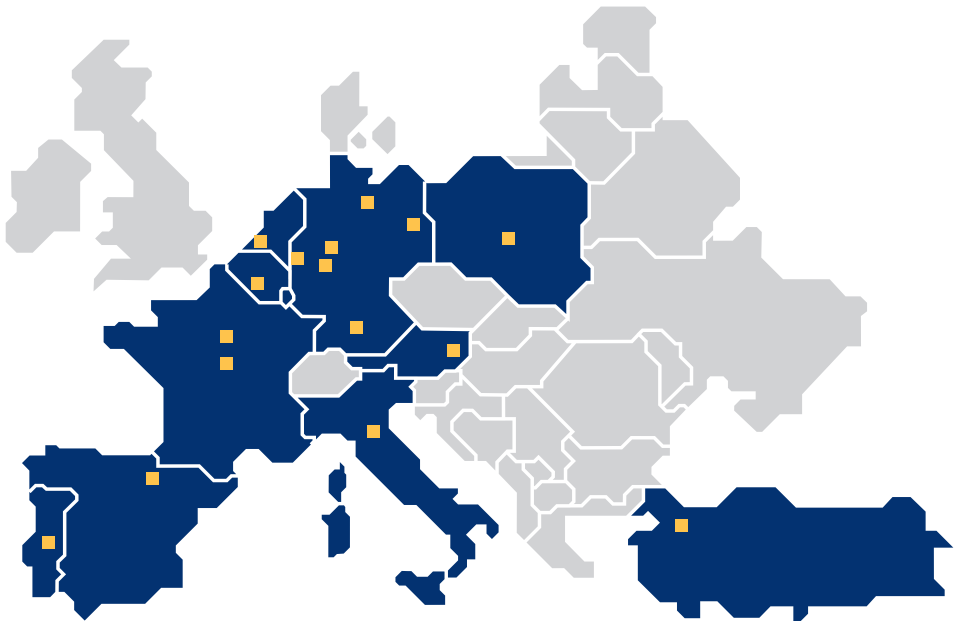
## IMS Nederland : your reliable partner for steel, stainless steel and aluminum since 1954

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





# Alloy steel

## 42CrMoS4+QT+C/SH

Color code: gold

W-Nr. 1.7227	C	Si	Mn	P	S	Cr	Mo
<b>Chemical composition %</b>	0,38 - 0,45	max. 0,40	0,60 - 0,90	max. 0,025	0,020 - 0,040	0,90 - 1,20	0,15 - 0,30
<b>Mechanical properties</b>	dia in mm	yield point Rp 0,2	tensile strength Rm	elongation A	hardness HB		
	van tot	min. N/mm <sup>2</sup>	N/mm <sup>2</sup>	min. %			
<b>Cold drawn +C (K)</b>	5 - 10	440	510 - 810	6			
	10 - 16	410	490 - 760	7			
	16 - 40	375	460 - 710	8			
<b>Peeled +SH</b>	16 - 40	750	1000 - 1200	11			
	40 - 100	650	900 - 1100	12			
<b>Standard</b>	EN 10277-5 (was DIN 1652) 2008						

Available on request in tolerance h6 (ground).

## 42CrMoS4+QT+C/SH

Color code: gold



## 42CrMoS4+QT+C

Color code: gold



h9 ROUND	size in mm			
Ø 8 - Ø 16 mm L=3000 (-0/+200) mm Ø 18 - Ø 100 mm L=6000 (-0/+200) mm	8	20	35	60
	10	22	36	65
	12	24	40	70
	15	25	42	75
	16	28	45	80
	18	30	50	90
	19	32	55	100

h11 HEXAGON	size in mm	
L=3000 (-0/+200) mm	13	32
	17	36
	19	41
	22	46
	24	50
	27	55
	30	

Steel and our environment

**100** % Recyclable

**100** % Sustainable

## Case hardening steel

### 16MnCr(S)5+C/SH

Color code: silver

W-Nr. 1.7131/1.7139	C	Si	Mn	P	S	Cr
<b>Chemical composition%</b>	0,14 - 0,19	max. 0,40	1,0 - 1,30	max. 0,025	0,020 - 0,040	0,80 - 1,10
<b>Mechanical properties</b>	dia in mm	tensile strength Rm	hardness HB(W)			
	van tot	N/mm <sup>2</sup>				
<b>Cold drawn +C (K) and/or peeled +SH</b>	5 - 10	max 820	245			
	10 - 16	max 820	240			
	16 - 40	max 780	230			
	40 - 100	max 720	215			
<b>Standard</b>	EN 10277-3 (was DIN 1651) 2008					

Available on request in tolerance h6 (ground).

### 16MnCr(S)5+C/SH











Color code: silver



h9 ROUND	diameter in mm			
L=6000 (-0/+200) mm	8	20	34	48
	10	22	35	50
	12	24	36	55
	14	25	38	60
	15	28	40	65
	16	30	42	70
	18	32	45	80



## Color coding

BRIGHT STEEL		
S 235 JR C +C/+SH (St 37 K/SH)		(1.0122)
S 355 J2 C +C/+SH (St 52-3 K/SH)		(1.0579)
C 35 +C/+SH		(1.0501)
C 45 +C/+SH		(1.0503)
16 Mn Cr 5 +C/+SH		(1.7131)
42 CR MO S 4 QT +C/+SH		(1.7227)
11 S Mn 30 +C/+SH (9 S Mn 28 K/SH)		(1.0715)
11 S Mn Pb 30 +C/+SH (9 S Mn Pb 28 K/SH)		(1.0718)
11 S Mn 37 +C/+SH (9 S Mn 36 K/SH)		(1.0736)
11 S Mn Pb 37 +C/+SH (9 S Mn Pb 36 K/SH)		(1.0737)

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

## Tolerances bright steel acc. EN10278



Diameter in mm	TOLERANCES						
	g6	h6	h7	h8	h9	h10	h11
Ø 1 - ≤ Ø 3	-	0/-0,006	0/-0,010	0/-0,014	0/-0,025	-	0/-0,060
Ø 3 - ≤ Ø 6	-	0/-0,008	0/-0,012	0/-0,018	0/-0,030	-	0/-0,075
Ø 6 - ≤ Ø 10	-0,005/-0,014	0/-0,009	0/-0,015	0/-0,022	0/-0,036	0/-0,058	0/-0,090
Ø 10 - ≤ Ø 18	-0,006/-0,017	0/-0,011	0/-0,018	0/-0,027	0/-0,043	0/-0,070	0/-0,110
Ø 18 - ≤ Ø 30	-0,007/-0,020	0/-0,013	0/-0,021	0/-0,033	0/-0,052	0/-0,084	0/-0,130
Ø 30 - ≤ Ø 50	-0,009/-0,025	0/-0,016	0/-0,025	0/-0,039	0/-0,062	0/-0,100	0/-0,160
Ø 50 - ≤ Ø 80	-0,010/-0,029	0/-0,019	0/-0,030	0/-0,046	0/-0,074	0/-0,120	0/-0,190
Ø 80 - ≤ Ø 120	-	0/-0,022	0/-0,035	0/-0,054	0/-0,087	0/-0,140	0/-0,220
Ø 120 - ≤ Ø 180	-	0/-0,025	0/-0,040	0/-0,063	0/-0,100	0/-0,160	0/-0,250



WIDTH mm	tolerance mm	THICKNESS mm	tolerance mm
5 - 6	-0,075	1,5 - 3	-0,060
8 - 10	-0,090	4 - 6	-0,075
12 - 18	-0,110	8 - 10	-0,090
20 - 30	-0,130	12 - 16	-0,110
32 - 50	-0,160	20 - 30	-0,130
55 - 80	-0,190	32 - 50	-0,250
90 - 100	-0,220		
120	-2,000		
125 - 140	-2,500		
150 - 160	± 3,0		
180 - 200	± 4,0		



SIZE mm	tolerance mm
3 - ≤6	0/-0,075
6 - ≤10	0/-0,900
10 - ≤18	0/-0,110
18 - ≤30	0/-0,130
30 - ≤55	0/-0,160
55 - ≤65	0/-0,190
65 - ≤80	0/-0,300
80 - ≤100	0/-0,350







## Delivery program

### Bright steel and free cutting steel

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

### Engineering steel

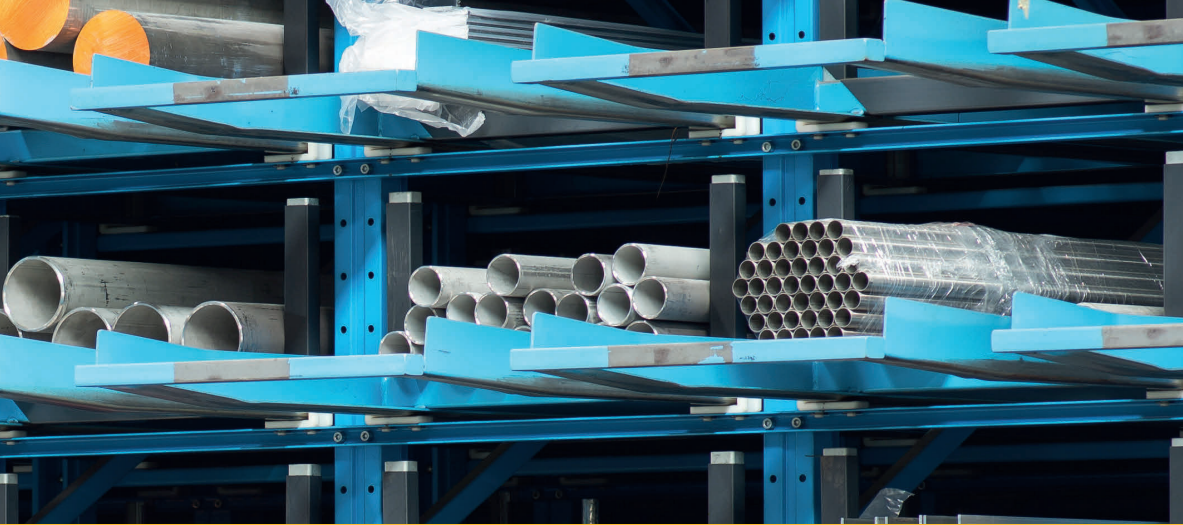
- Unalloyed and alloyed, hot rolled, forged, turned, heat treated

### 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.

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