

BRIGHT BARS TOLERANCE

BRIGHT STEEL PRODUCTS CLASSED TOLERANCES (UNI EN 10278:2002)

Diameter [mm]									
	H5	H6	H7	H8	H9	H10	H11	H12	K13*
Cold Drawn					R-S-F	R-S-F	R-H-S-F	R-H-S-F	R
Turned					R	R	R	R	R
Ground	R	R	R	R	R	R	R	R	R

R= Round / S= Square / F= Flat / H= Hexagon

The dimensional tolerances shall be chosen among those allowed in the table

BRIGHT STEEL BARS STANDARD DIMENSION TOLERANCES

	Cold Drawn Round	Cold Drawn Hexagon - Square - Flat	Turned	Ground
DIMENSIONAL TOLERANCE	h9	h11	K13	h9

If not differently agreed at time of inquiry / order, the dimension tolerances for bright steel bars shall be in accordance to values provided in the above table

BRIGHT STEEL BARS DIMENSION TOLERANCES (UNI EN 10278:2002)

Dimensional Tolerances

- › Bright drawn ISO h8 - h9 - h11
- › Centerless ground ISO h7
- › Centerless ground ISO h6, f6, g6 and other tolerances

Diameter [mm]	Ground Parts			Sized Parts		Common Drawn Parts			Turned
	H5	H6	H7	H8	H9	H10	H11	H12	K13*
$1 \leq \phi \leq 3$	+0 / -0,005	+0 / -0,006	+0 / -0,010	+0 / -0,014	+0 / -0,025	+0 / -0,040	+0 / -0,060	+0 / -0,100	-0 / + 0,14
$3 < \phi \leq 6$	+0 / -0,005	+0 / -0,008	+0 / -0,012	+0 / -0,018	+0 / -0,030	+0 / -0,048	+0 / -0,075	+0 / -0,120	-0 / + 0,18
$6 < \phi \leq 10$	+0 / -0,006	+0 / -0,009	+0 / -0,015	+0 / -0,022	+0 / -0,036	+0 / -0,059	+0 / -0,090	+0 / -0,150	-0 / + 0,22
$10 < \phi \leq 18$	+0 / -0,009	+0 / -0,011	+0 / -0,018	+0 / -0,027	+0 / -0,043	+0 / -0,070	+0 / -0,110	+0 / -0,180	-0 / + 0,27
$18 < \phi \leq 30$	+0 / -0,008	+0 / -0,013	+0 / -0,021	+0 / -0,033	+0 / -0,052	+0 / -0,084	+0 / -0,130	+0 / -0,210	-0 / + 0,33
$30 < \phi \leq 50$	+0 / -0,011	+0 / -0,016	+0 / -0,025	+0 / -0,039	+0 / -0,062	+0 / -0,100	+0 / -0,160	+0 / -0,250	-0 / + 0,39
$50 < \phi \leq 80$	+0 / -0,013	+0 / -0,019	+0 / -0,030	+0 / -0,046	+0 / -0,074	+0 / -0,120	+0 / -0,190	+0 / -0,300	-0 / + 0,46
$80 < \phi \leq 120$	+0 / -0,015	+0 / -0,022	+0 / -0,035	+0 / -0,054	+0 / -0,087	+0 / -0,140	+0 / -0,220	+0 / -0,350	-0 / + 0,54
$120 < \phi \leq 180$	-	+0 / -0,025	+0 / -0,040	+0 / -0,063	+0 / -0,100	+0 / -0,160	+0 / -0,250	+0 / -0,400	-0 / + 0,63
$180 < \phi \leq 200$	-	+0 / -0,029	+0 / -0,047	+0 / -0,072	+0 / -0,115	+0 / -0,185	+0 / -0,029	+0 / -0,460	-0 / + 0,72

Actual dimension of the bar shall be measured at least 150 mm from the end of the bar, in accordance to EN 10278.

*The table includes also the k13 tolerance uses for rough turned stainless steel products

This deviation is over the nominal dimension.

“WIDE FLATS” BRIGHT STEEL BARS DIMENSION TOLERANCES (UNI EN 10278:2002)

Width [mm]		Deviation [mm]	
From 0 to ≤ 100	h11		
From $> 100 \leq 150$	+0,5	+0,5	
From $> 150 \leq 200$	+1,00	-1,00	
From $> 200 \leq 300$	+2,00	-2,00	
From $> 300 \leq 400$	+2,50	-2,50	
Thickness [mm]		Deviation [mm]	
From 0 to ≤ 60	h11		
From $> 60 \leq 100$	h12		

BRIGHT STEEL BARS STRAIGHTNESS TOLERANCES

STRAIGHTNESS TOLERANCE COLD DRAWN PRODUCTS IN BARS (UNI EN 10278:2002)

Section	Steel Group	Nominal Diameter [mm]	Max. Deviation [mm]
ROUNDS	< 0,25% C	-	1,00
	≥ 0,25% C Alloy steels Quenched & tempered steels		1,50
	Stainless steels Tool steels		1,00
SQUARE / FLATS / HEXAGON	< 0,25% C	$d \leq 75$ mm	1,00
	≥ 0,25% C Alloy steels Quenched & tempered steels		2,00
	Stainless steels Tool steels		1,00
SQUARE / FLATS / HEXAGON	< 0,25% C	$d > 75$ mm	1,50
	≥ 0,25% C Alloy steels Quenched & tempered steels		2,50
	Stainless steels Tool steels		1,50