

# TOOLOX<sup>®</sup> ENGINEERING & TOOL STEEL DIMENSIONAL PROGRAM BARS

## Toolox round bar dimension range

Products	Ø (mm)
Toolox <sup>®</sup> 44	21 - 282

## Dimensions

Stock dimension Ø (mm)	Standard length (mm)
	Toolox <sup>®</sup> 44
21	5000
26	5000
31	5000
36	5000
41	5000
46	5000
51	5000
56	5000
61	5000
71	5000
81	5000
91	5000
101	5000
111	5000
121	5000
126	4800
131	4800
141	5000
151	3500
161	4200
172	3700
182	3300
202	4000
225	3200
242	4200
262	3600
282	4600

Length tolerance according to EN 10060 with tolerances -0/+200 mm.

## Diameters

Dimension Ø (mm)	Tolerances, Turned surfaces (mm)	
	Min	Max
21 - 23	0	+ 0.4
24 - 31	0	+ 0.5
32 - 41	0	+ 0.6
42 - 54	0	+ 0.8
55 - 75	0	+ 1.0
76 - 125	0	+ 1.0
126 - 220	0	+ 2.0
221 - 250	0	+ 3.0
> 250	0	+ 5.0

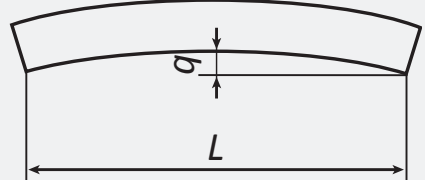
According to EN 10060 Limit deviation Precision for  $\text{Ø} \leq 71$  mm.  
SSAB specification for  $\text{Ø} \geq 81 - 282$  mm.

## Ovality

Tolerances for both rolled and turned according to EN 10060 meaning the deviation of roundness shall not exceed 75% of the diameter tolerance range.

## Straightness

Tolerances according to EN 10060. The deviation is considered as the maximum height of the arch, while using a calibrated 1 meter ruler. The maximum allowed deviation is 2mm/m.

Straightness, $q$	
	
Normal Ø	Tolerances
$q < d \leq 25$	Not fixed
$25 < d \leq 80$	$q \leq 0.4\%$ of L
$80 < d \leq 250$	$q \leq 0.25\%$ of L

## Surface conditions

Turned surface with:

maximal  $R_A$  2  $\mu\text{m}$  for  $\emptyset \leq 71$  mm.

maximal  $R_A$  3  $\mu\text{m}$  for  $\emptyset > 75 \leq 141$  mm.

maximal  $R_A$  16  $\mu\text{m}$  for  $\emptyset > 141$  mm.

Rolled surfaces can be supplied upon request.

Minimum order quantity 2 ton.

## Delivery condition

Toolox<sup>®</sup> bars are delivery with turned and oiled surface.

## Testing

Toolox<sup>®</sup> bars are ultrasonic tested according to EN 10308 with extra demands according to specification SSAB V6.

Mechanical properties are tested for each heat treatment batch. Bar hardness is measured on a milled surface, with indents positioned as impact test according to EN 10083. Impact testing according to EN 10083, EN ISO 148.

## Contact information

[www.ssab.com/contact](http://www.ssab.com/contact)