



[Download Data Sheet in pdf format](#)

Physical Properties SANS 920

Diameter in mm	Kgs/M	Rolling Tolerance %		Bend Test Mandrel Size
		On Individual Bars	On Batch Mass	3D
Y6	0.222	+/-8	+ 6 / -4	18mm
Y8	0.395	+/- 6	+/- 3.5	24mm
Y10	0.617	+/- 6	+/- 3.5	30mm
Y12	0.888	+/-4	+/- 2.5	36mm
Y16	1.580	+/-4	+/- 2.5	48mm
Y20	2.470	+/-4	+/- 2.5	60mm
Y25	3.850	+/-4	+/- 2.5	75mm
Y32	6.310	+/-4	+/- 2.5	96mm

Mechanical Properties (QC PR 03)

Particulars	SANS 920
Yield Stress (MPA) MINIMUM	450
Ultimate Tensile Strength (MPA)	>15% of YS
Elongation %	14

Chemical Properties

Chemical Element	SANS 920
Carbon (C) %	< 0.500
Silicon (Si) %	< 0.350
Manganese (Mn) %	< 1.000
Phosphorus (P)%	< 0.050
Sulphur (S) %	< 0.060
Chrome (Cr) %	< 0.300
Nickel (Ni) %	< 0.100
Copper (Cu) %	< 0.200
CEV	< 0.51

*CE % (m/m) = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

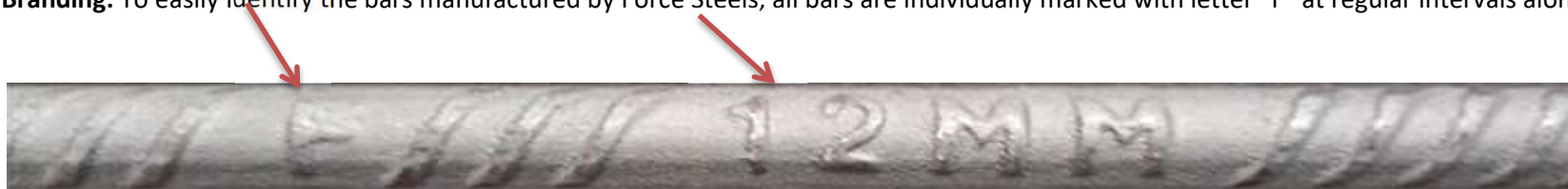


Length: Standard lengths produced are 6, 12 and 13 Mtrs. Other lengths can be produced on request in increments of 1M. There is length tolerance of -0 and +50mm.

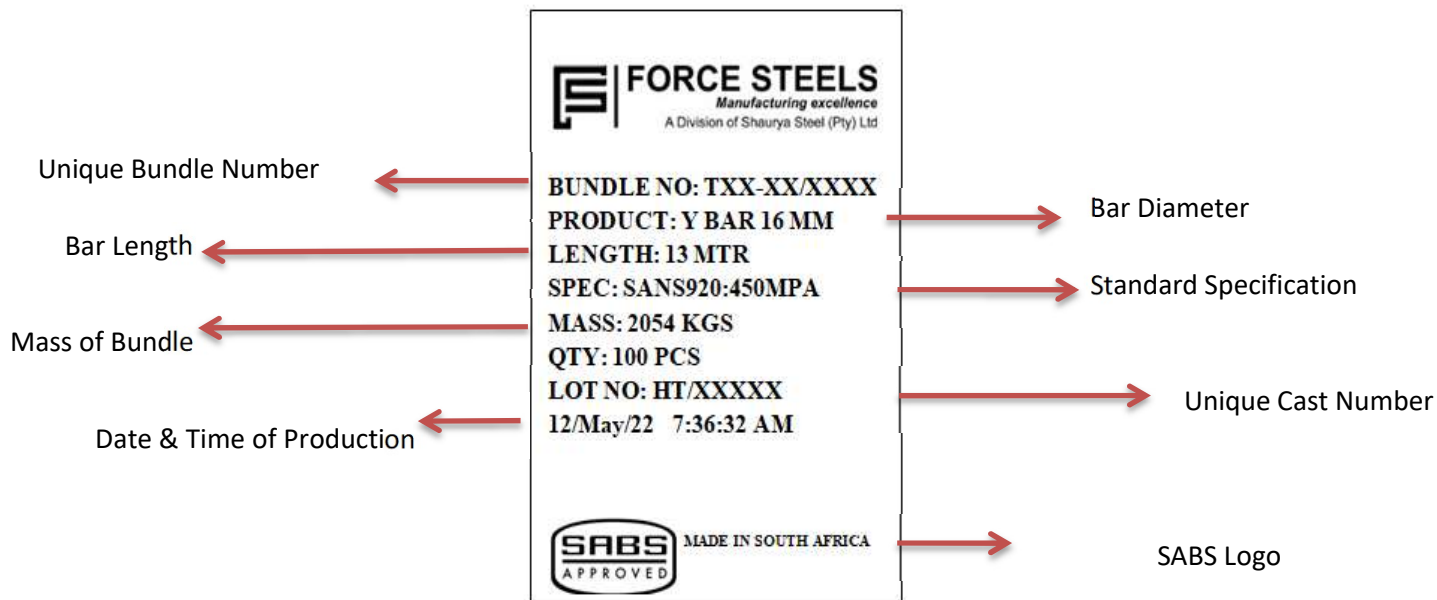
Certification: Force Steel is duly approved to put the SABS mark on all reinforcing steel bars. All material sold would be supplied with relevant Chemical and Mechanical test certificates.

Packing: All reinforcing steel 12 and 13m length size is packed in +/- 2MT Bundles and 6m length in +/- 1.5MT Bundles. Bundles come with identification tag providing information as regards the Size, Length, Grade and Batch number of the Bundle.

Branding: To easily identify the bars manufactured by Force Steels, all bars are individually marked with letter "F" at regular intervals along with



Labeling: All bundles are securely strapped with steel straps and come with water proof printed tags showing the below information. It is recommended that such tags are safely kept once the bundles are opened for Traceability purposes.





Reinforcing Bar

Physical Properties BS4449 B500B

Diameter in mm (d)	Kgs/M	Rolling Tolerance %		Bend Test Mandrel Size (Maximum)
		On Individual Bars	On Batch Mass	
Y6	0.222	+/-6	+/-6	4d
Y8	0.395	+/- 6	+/- 6	4d
Y10	0.617	+/- 4.5	+/- 4.5	4d
Y12	0.888	+/- 4.5	+/- 4.5	4d
Y16	1.580	+/- 4.5	+/- 4.5	4d
Y20	2.470	+/- 4.5	+/- 4.5	7d
Y25	3.850	+/- 4.5	+/- 4.5	7d
Y32	6.310	+/- 4.5	+/- 4.5	7d

Mechanical Properties

Particulars	BS4449 B500B
Yield Stress (MPA) Min	485 MPA
Ultimate Tensile Strength (MPA)/YIELD STRESS MINIMUM	1.08
AGT Min	5%

Chemical Properties (Product Analysis)

Chemical Element	BS4449 B 500 B
Carbon (C) %	< 0.24
Phosphorus (P)%	< 0.055
Sulphur (S) %	< 0.055
Copper (Cu) %	< 0.850
CEV	< 0.52

*CE % (m/m) = C + Mn/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15

Length: Standard lengths produced are 6, 12 an 13 Mtrs. Other lengths can be produced on request in increments of 1M. There is length



Packing: All reinforcing steel 12 and 13mts length size is packed in +/- 2MT Bundles and 6mts length in +/- 1.5MT Bundles. Bundles come

Fatigue Testing: Fatigue testing is being carried out by an independed Lab as is required by the BS4449 Standard. The relevant test results

Branding: To easily Identify the bars manufactured by Force Steels, all bars are individually marked with letter "F" at regular intervals



Labeling: All bundles are securely strapped with steel straps and come with water proof printed tags showing the below information. It is recommended that such tags are safely kept once the bundles are opened for Tracability purposes.

