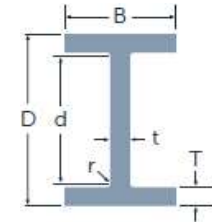




[Download Data Sheet in pdf format](#)

Physical Properties

IPE BEAM



Serial Size	Mass per meter	Mass per meter Variance	Depth of the section	Depth of Section Variance	Width of the section	Width of the section Variance	Web Thickness	Web Thickness Variance	Flange Thickness	Flange Thickness Variance	Root Radius
			D	D±	B	B±	t	t±	T	T±	r
	Kgs/Mtr	Kgs/Mtr	mm	mm	mm	mm	mm	mm	mm	mm	mm
100 x 55	8.1	± 2.5%	100	± 2.0	55	± 2.0	4.1	± 0.50	5.7	± 1.0	7
100 x 55 AA	6.72	± 2.5%	97.6	± 2.0	55	± 2.0	3.6	± 0.40	4.5	± 0.80	7
120 x 64	10.37	± 2.5%	120	± 2.0	64	± 2.0	4.4	± 0.50	6.3	± 1.0	7
120 x 64 AA	8.35	± 2.5%	117	± 2.0	64	± 2.0	3.8	± 0.40	4.8	± 0.80	7
140 x 73	12.894	± 2.5%	140	- 2 + 3	73	- 2 + 3	4.7	± 0.75	6.9	± 1.5	7
140 x 73 AA	10.054	± 2.5%	136.6	- 2 + 3	73	- 2 + 3	3.8	± 0.60	5.2	± 1.2	7
160 x 82	15.772	± 2.5%	160	- 2 + 3	82	- 2 + 3	5	± 0.75	7.45	± 1.5	9
160 x 82 AA	12.315	± 2.5%	156.4	- 2 + 3	82	- 2 + 3	4	± 0.60	5.6	± 1.2	9
180 x 91	18.799	± 2.5%	180	- 2 + 3	91	- 2 + 3	5.3	± 0.75	8	± 1.5	9
180 x 91 AA	14.94	± 2.5%	176.4	- 2 + 3	91	- 2 + 3	4.3	± 0.60	6.2	± 1.2	9
200 x 100	22.36	± 2.5%	200	± 3.0	100	± 3.0	5.6	± 0.75	8.5	± 1.5	12
200 x 100 AA	17.954	± 2.5%	196.4	± 3.0	100	± 3.0	4.5	± 0.60	6.7	± 1.2	12

Mechanical Properties (QC PC 06)

Particulars	CQ (Typical Values)	S355 JR
Yield Stress (MPA) MINIMUM	275	355
Ultimate Tensile Strength (MPA)	Not Specified	490-630
Elongation %	22	22



Chemical Properties

Chemical Element	CQ (Typical Values)	S355 JR
Carbon (C) %	< 0.300	< 0.270
Silicon (Si) %	< 0.600	< 0.600
Manganese (Mn) %	< 1.70	< 1.70
Phosphorus (P)%	< 0.045	< 0.045
Sulphur (S) %	< 0.045	< 0.045
Chrome (Cr) %		< 0.350
Nickel (Ni) %	< 0.100	< 0.100
Copper (Cu) %		< 0.600
CEV	< 0.51	< 0.45

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

** The Commercial Quality material has only been subjected to the chemical and mechanical properties and as such no assurance is given to any other testing procedures and

Grades:

All the IPE's are produced in S355Jr Grades

The grade needs to be specified at the time of ordering the material. Acceptance of any orders for grades is at the discretion of Force Steels.

Length:

-Standard lengths:

IPE's are produced in standard Lengths of 6mts, 9mts and 13 Mtrs.

Non Standard Lengths:

Lengths other than Standard Lengths can be produced on request in increments of 1M (Minimum 5.8 Mtrs).

Minimum order qty for non-standard lengths is 15 tons.

There is length tolerance of -0 and +50mm.

Supplied order qty for non standard lengths can be +-20%.

Tolerance: The tolerances are as mentioned under EN 10056-2 standard.

Minimum Order: A minimum order quantity of 1 Bundle (link to bundle size data sheet) per item is applicable.