



## TECHNICAL SPECIFICATIONS

**TYPE:**  
Hot-Rolled IPE beams

**STEEL GRADE:**  
- S235JR according to ELOT-EN 10025 (St 37-2 according to DIN 17100)  
- S275JR according to ELOT-EN 10025 (St 44-2 according to DIN 17100)

**FORM - DIMENSIONS:**  
Straight beams with height 100mm and 120mm

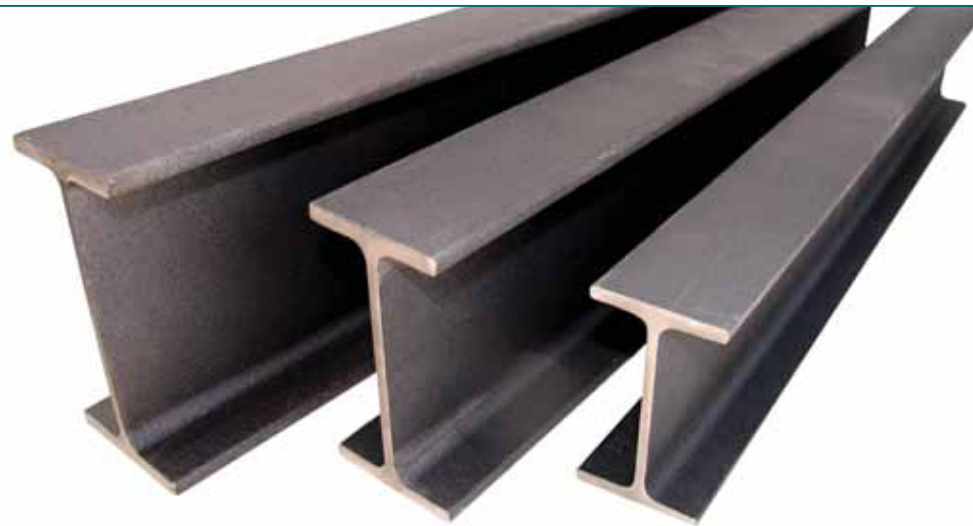
**LENGTH - TOLERANCE:**  
Beam length 6m - 12m with tolerance -0 / +100 mm

**PACKING - WEIGHT:**  
Bundles weighing approximately 2,000kg

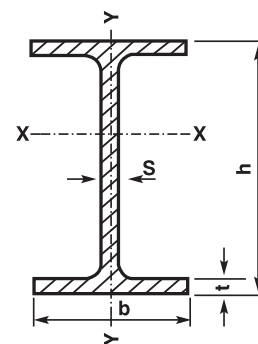
**DIMENSIONS - WEIGHT - TOLERANCES:**  
According to EN 10034 (DIN 1025)

## IPE

### Hot-Rolled I-section beams



I-section beams (IPE) are manufactured at SIDENOR's factory in Thessaloniki, at lengths of 6 and 12 metres and with section heights 100mm and 120mm. IPE's are used in metal constructions such as metal building frames, supporting structures for roofs, lofts, attics, etc.



## SALES OFFICES

[www.sidenor.gr](http://www.sidenor.gr)

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## STEEL CHEMICAL COMPOSITION & MECHANICAL PROPERTIES

STEEL GRADE	CHEMICAL COMPOSITION			MECHANICAL PROPERTIES		
	C (%) max	P (%) max	S (%) max	YIELD STRENGTH (N/mm <sup>2</sup> ) min	TENSILE STRENGTH (N/mm <sup>2</sup> )	ELONGATION 5d <sub>g</sub> , (%) min
S235JR (St 37-2)	0.170	0.040	0.040	235	360 - 510	26
S275JR (St 44-2)	0.210	0.040	0.040	275	410 - 560	23

## DIMENSIONS, WEIGHTS & TOLERANCES OF I-BEAMS

SYMBOL	DIMENSIONS (mm)								NOMINAL CROSS SECTION (cm <sup>2</sup> )	NOMINAL WEIGHT (kg/m)	NOMINAL SURFACE AREA (m <sup>2</sup> /m)	SECTION MODULUS	
	h (mm)	PERMISSIBLE VARIATION FOR h (mm)	b (mm)	PERMISSIBLE VARIATION FOR b (mm)	s (mm)	PERMISSIBLE VARIATION FOR s (mm)	t (mm)	PERMISSIBLE VARIATION FOR t (mm)				W <sub>x</sub> (cm <sup>3</sup> )	W <sub>y</sub> (cm <sup>3</sup> )
100	100	± 2.00	55	± 2.00	4.1	± 0.50	5.7	± 1.00	10.3	8.1	0.400	34.2	5.79
120	120		64		4.4		6.3		13.2	10.4	0.475	53.0	8.65