

IMEX 900

HIGH YIELD STRENGTH STEEL
(QUENCHED AND TEMPERED)

Chemical composition

C	Si	Mn	P	S	Cr	Ni	Mo	V + Nb	B
≤ 0.20	≤ 0.80	≤ 1.70	≤ 0.02	≤ 0.001	≤ 1.50	≤ 2.0	≤ 0.70	≤ 0.10	≤ 0.005

Mechanical properties in delivery condition

— **Mechanical and technological properties in the delivery condition.** Tensile test at room temperature-transverse test specimens.

Plate thickness (mm (in))	Ys (MPa)	UTS (MPa)	E (%)
≤ 50 (2)	890	940 - 1100	12
50 - 80 (2 - 3)	850	900 - 1100	12
80 - 100 (3 - 4)	830	880 - 1100	12

— **Applications:** This material is particularly used in welded steel structures in mechanical manufactured items, plant constructions, and chassis.

— **Delivery condition:** Water quenched & tempered.

— **Thickness range:** 6 - 100 mm.

— **Size range:** – Width: 1000 - 3000 mm;
– Length: 1000 - 6000 mm.

Processing informations

— **Cold bending:**

Cold forming of IMEX 900 should be carried out according to the following recommendations:

	Internal minimum radius	Die opening minimum
Transversal	3 x th	9 x th
Longitudinal	4 x th	12 x th

— **Hot forming:**

This grade is not suitable for hot forming.

— **Flame cutting:**

For flame cutting, the following minimum preheating temperatures are recommended: 50 °C for plate thickness up to 25 mm, 100 °C for plates thickness up to 50 mm and 150 °C for thicker plates.

General note

— If further informations are required, please request a copy of our technical guide.

Contact

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