

# IMEX 700

## HIGH YIELD STRENGTH STEEL QUENCHED AND TEMPERED

— Plates, obtained from quarto mill.

— **International standard:**  
EN 10025-6: 2004-11 (S 690 QL).

### Chemical composition

C	Si	Mn	Mo	Nb	Ni	Ti	S	P	V	N	B	Cr	Cu
≤ 0.20	≤ 0.80	≤ 1.7	≤ 0.70	≤ 0.06	≤ 2.00	≤ 0.05	≤ 0.01	≤ 0.02	≤ 0.12	≤ 0.015	≤ 0.005	≤ 1.50	≤ 0.50

### Mechanical properties in delivery condition

Thickness (mm)	Ys (MPa)	UTS (MPa)	E (%)
≤ 50	690	770 - 940	14
50 - 100	650	760 - 930	14
100 - 150	630	710 - 900	14

— **Impact tests (according to EN 10045-1):**

Testing	Minimum impact toughness values (J)	
	Longitudinal	Transversal
-40 °C	30	27

— **Fields of application:**

Mining, quarrying, construction and earthmoving, material handling...

— **Delivery condition:**

Water quenched and tempered.

— **Thickness range:**

8 - 120 mm.

— **Size range:**

- Width 1000 - 3000 mm ;
- Length up to 8000 mm.

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## Processing information

### — Cold bending:

The following table is valid for bending angles up to 90°  
(th = plate thickness):

	Internal minimum radius	Die opening minimum
Transversal	3 x th	10 x th
Longitudinal	4 x th	12 x th

### — Hot forming:

The grade is not suitable for hot forming.

### — Flame cutting:

All conventional oxy-gas or plasma methods can be used.  
Pre-heating temperatures according to thickness.

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## General note

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

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## Contact

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