

ISC590T – IS 513 Part 2 (2016) – TRIP- Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value
C (%)	≤0.25
Mn (%)	≤2.00
Si (%)	0.60–1.50
P (%)	≤0.020
S (%)	≤0.020
Al (%)	≤0.06
Ti (%)	≤0.15
Nb (%)	≤0.09
Yield Strength YS (MPa min)	590
Tensile Strength UTS (MPa min)	650
Elongation A80 (%) min	16

2. Equivalent / Alternative Grades

Grade	Standard	C%	Mn %	Si%	P%	S%	Al%	Ti%	Nb %	UTS (MPa)	YS (MPa)
EN Gr 590	EN 10338	≤0.25	≤2.00	0.60 – 1.50	≤0.020	≤0.020	≤0.06	≤0.15	≤0.09	650	590
ASTM Gr 590	ASTM A1008	≤0.25	≤2.00	0.60 – 1.50	≤0.020	≤0.020	≤0.06	≤0.15	≤0.09	670	590
JFS Gr 590	JFS A2001	≤0.25	≤2.00	0.60 – 1.50	≤0.020	≤0.020	≤0.06	≤0.15	≤0.09	680	590

3. Common Applications

- Crash-relevant structural parts
- Strength/weight optimised panels

4. Standard Conformance

Cold-reduced sheet/strip conforming to IS 513 Part 2 (2016).

5. Disclaimer

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