

IF390 – IS 513: Part 1 (2016) – Technical Datasheet

1. Chemical & Mechanical Properties

Property	Value
C (%)	≤ 0.01
Mn (%)	≤ 0.30
Si (%)	≤ 0.05
P (%)	≤ 0.020
S (%)	≤ 0.020
Al (%)	0.02 – 0.06
Ti (%)	0.10 – 0.20
Nb (%)	≤ 0.05
YS (MPa, min)	390
UTS (MPa, min)	440
El (%)	28

2. Equivalent / Alternative Grades

Grade	Standard	C%	Mn%	Si%	P%	S%	Al%	Ti%	Nb%	UTS/YS/El/BH
EN H380LAD	EN 10292	≤ 0.10	≤ 1.70	≤ 0.50	≤ 0.090	≤ 0.045	≥ 0.020	≤ 0.15	≤ 0.09	UTS 440 – 540; YS 380 – 460; El 24
JIS JSC390	JIS A2001	≤ 0.08	≤ 1.70	≤ 0.50	≤ 0.030	≤ 0.030	0.02 – 0.06	≤ 0.15	≤ 0.06	UTS 440 – 560; YS ≥ 390; El 26
ASTM A1008 HSLAS-F Grade 380	ASTM A1008	≤ 0.08	≤ 1.70	≤ 0.05	≤ 0.030	≤ 0.030	0.02 – 0.06	≤ 0.15	≤ 0.05	UTS 440 – 540; YS ≥ 380; El 24

3. Common Applications

- High-strength reinforcements
- Seat cross-members

4. Standard Conformance

Cold-reduced sheets/strip conforming to IS 513 : Part 1 : 2016.

5. Disclaimer

All chemical compositions, mechanical properties, dimensions and other technical data presented on this page are provided by Raunaq Steels Trading Pvt. Ltd. for **general reference only**. While we endeavour to ensure that the information is as accurate and up-to-date as possible, **no warranty, express or implied, is given** as to its completeness, correctness or fitness for any particular purpose. Raunaq Steels Trading Pvt. Ltd. **accepts no liability** for any loss or damage arising directly or indirectly from the use of, or reliance upon, the information contained herein.

For **authoritative** and **legally binding** specifications, users must refer to the **official publications** of the relevant standards—such as the BIS, ASTM, EN or JIS standards—available through their respective websites or published documents.