

Approved Manufacturer of Steel Plates, Strip, Sections & Bars

Manufacturer **Hunan Valin Xiangtan Iron & Steel Co., Ltd.**

Address Yuetang Street, Yuetang District, Xiangtan City, 411101, China

Type Semi-Finished Products

Steel Making

Plates

This approval is subject to compliance with the Rules for the Manufacture, Testing and Certification of Materials. The full details of the processes and grades to which this approval applies are given on subsequent pages of this certificate.

This certificate is issued to the named manufacturer, and is valid until the expiry date specified. Lloyd's Register is to be notified of any change that may affect the validity of this certificate, and reserves the right to cancel or withdraw this certificate.



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Lili Hou

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Steel making	B.O.S./Ingot/Con Cast	Grades	-	Units
-	-	As below	1.00	-
Semi-Finished Products	Slabs	Grades	Maximum Thickness	Units
-	-	carbon, carbon manganese	300.00	mm
-	-	Alloy	300.00	mm
-	-	High-nickel steel (for low temperature service)	300.00	mm
Plates	Normal Strength	Grades	Maximum Thickness	Units
As Rolled	-	B , A	40.00	mm
Normalized	Fine Grain Al+Nb	E, D, B, A	100.00	mm
Normalized	Fine Grain Al+Nb+Ti	E, D, B, A	150.00	mm
Normalized	Fine Grain Al	B , A	60.00	mm
Normalizing Rolled	Fine Grain Al	D, B, A	40.00	mm
TM+Acc	Fine Grain Al+Nb	E, D, B, A	40.00	mm
TM+Acc	Fine Grain Al	E, D, B, A	40.00	mm
Plates	Higher Strength	Grades	Maximum Thickness	Units
As Rolled	Fine Grain Al	AH32	35.00	mm
Normalized	Fine Grain Al+Nb+V+Ti	EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	150.00	mm
Normalized	Fine Grain Al+Nb+Ti	FH36, FH32, FH27S	60.00	mm
Normalized	Fine Grain Al+Nb+Ti	EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	100.00	mm
Normalizing Rolled	Fine Grain Al	DH36, AH36, DH32, AH32, DH27S, AH27S	40.00	mm



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Quenched and Tempered	Fine Grain Al+Nb+Ti	EH55, DH55, AH55, EH50, DH50, AH50, EH46, DH46, AH46, EH42, DH42, AH42	50.00	mm
Quenched and Tempered	Fine Grain Al+Nb+V+Ti +B	EH69, DH69, AH69, EH62, DH62, AH62	50.00	mm
TM+Acc	Fine Grain Al+Nb	EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	40.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	FH40, FH36, FH32, FH27S	40.00	mm
TM+Acc	Fine Grain Al	DH32, AH32, DH27S, AH27S	40.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	EH40, DH40, AH40, EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	90.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	EH47	90.00	mm
Thermo Mechanical	Fine Grain Al+Ti	EH32, DH32, AH32	40.00	mm
Thermo Mechanical	Fine Grain Al+Ti	EH36, DH36, AH36	40.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	FH36, EH36, DH36, AH36, FH32, EH32, DH32, AH32, FH27S, EH27S, DH27S, AH27S	60.00	mm
Quenched and Tempered	Fine Grain Al+Nb+V+Ti	EH69, DH69, AH69, EH62, DH62, AH62	90.00	mm
Quenched and Tempered	Fine Grain Al+Nb+Ti	EH55, DH55, AH55, EH50, DH50, AH50	90.00	mm

Plates	Crack arrest steel	Grades	Maximum Thickness	Units
TM+Acc	Fine Grain Al+Nb+Ti	EH47-BCA1	80.00	mm

Plates	Ferritic Low Temperature	Grades	Maximum Thickness	Units
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TM+Acc	Fine Grain Al+Nb+Ti	LTFH40, LTEH40, LTDH40, LTAH40	40.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	LTFH36, LTEH36, LTDH36, LTAH36, LTFH32, LTEH32, LTDH32, LTAH32, LTFH27S, LTEH27S, LTDH27S, LTAH27S	60.00	mm
Quenched and Tempered	-	9Ni	50.00	mm

Plates	Boiler and Pressure Vessel	Grades	Maximum Thickness	Units
Normalized	Fine Grain Al+Nb	410FG, 360FG	100.00	mm
Normalized	Fine Grain Al+Nb+V+Ti	510FG, 490FG, 460FG, 410FG, 360FG	100.00	mm
Normalized	Fine Grain Al+Nb+Ti	510FG, 490FG, 460FG, 410FG, 360FG	100.00	mm
Normalizing Rolled	Fine Grain Al	510FG, 490FG, 460FG, 410FG, 360FG	40.00	mm

Additional Remarks

Plate thicknesses greater than 100mm are approved via ingot casting route only.

Approved for Z25 & Z35 grades.

For grade AH62, AH69, DH62, DH69, EH62, EH69 Grain Refine Al+Nb+V+Ti+B in Quenched and Tempered condition, maximum thickness 50mm, maximum approved welding heat input in fabrication is 3.0 kJ/mm.

Approval covers the following grades for high heat input welding application (200 KJ/cm), company designation W200. Thickness 40 mm, Grain Refine Al + Ti. TMCP condition; AH32, DH32, EH32, AH36, DH36, EH36.

A small scale production crack arrest test method is not covered in the scope of the approval for crack arrest steels.



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LT grade plate >40mm thickness is only to be issued with LR certification for specific LR project applications. The toughness testing requirements, specific to the project, are to be identified with reference to a LR design appraisal document.

LT grade plate >40mm thickness is limited to applications with a minimum design temperatures of -20°C.

LT grades >40mm thickness are approved for application in the as welded condition only.



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