

Approved Manufacturer of Steel Plates, Strip, Sections & Bars

Manufacturer	Dong kuk Steel Mill Co., Ltd.
Address	25, Godaegongdan 1-gil, Songak-eup, Dangjin-si, Chungnam, 31719, Republic of Korea
Type	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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Senior Surveyor to Lloyd's Register
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Plates	Normal Strength	Grades	Maximum Thickness	Units
Normalizing Rolled	Fine Grain Al	D, B, A	50.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	E, D, B, A	83.00	mm
Normalized	Fine Grain Al	D, B, A	100.00	mm
Normalized	Fine Grain Al	E	83.00	mm
As Rolled	Fine Grain Al	B, A	100.00	mm
As Rolled	Fine Grain Al	D	35.00	mm
TM+Acc	Fine Grain Al	D, B, A	83.00	mm

Plates	Higher Strength	Grades	Maximum Thickness	Units
Normalizing Rolled	Fine Grain Al+Nb+Ti	DH36, AH36, DH32, AH32	50.00	mm
Normalized	Fine Grain Al+Nb+Ti	EH32, DH32, AH32	30.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	EH36	83.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	FH36, FH32	50.00	mm
Normalized	Fine Grain Al+V	EH32, DH32, AH32	70.00	mm
Normalized	Fine Grain Al+Nb+V+Ti	EH36, DH36, AH36	70.00	mm
As Rolled	Fine Grain Al+Nb+Ti	AH36, AH32	35.00	mm
As Rolled	Fine Grain Al+Nb+Ti	DH36, DH32	25.00	mm
TM+Acc	Fine Grain Al+Nb+Ti	EH40, DH40, AH40, DH36, AH36, EH32, DH32, AH32	83.00	mm
Thermo Mechanical	Fine Grain Al	AH40	15.00	mm

Plates	Boiler and Pressure Vessel	Grades	Maximum Thickness	Units
Normalizing Rolled	Fine Grain Al+Nb+Ti	490FG, 460FG, 410FG, 360FG	50.00	mm
Normalizing Rolled	Fine Grain Al	410FG, 360FG	50.00	mm
Normalized	Fine Grain Al+Nb+Ti	460FG, 410FG, 360FG	30.00	mm
Normalized	Fine Grain Al+V	460FG, 410FG, 360FG	70.00	mm



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Normalized	Fine Grain Al+Nb+V+Ti	510FG	70.00	mm
As Rolled	Fine Grain Al	410AR, 360AR	40.00	mm
As Rolled	Fine Grain Al+Nb+Ti	460AR, 410AR, 360AR	35.00	mm
Normalized	Fine Grain Al	410FG, 360FG	100.00	mm

Plates	Differential Thickness	Grades	Maximum Thickness	Units
As Rolled	Fine Grain Al	D, B, A	35.00	mm
Normalizing Rolled	Fine Grain Al	D, B, A	50.00	mm
As Rolled	Fine Grain Al+Nb+Ti	DH32, AH32	25.00	mm
Normalizing Rolled	Fine Grain Al+Nb+Ti	DH36, AH36, DH32, AH32, DH27S, AH27S	50.00	mm
Thermo Mechanical	Fine Grain Al+Nb+Ti	EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	60.00	mm

Plates	Tapered	Grades	Maximum Thickness	Units
As Rolled	Fine Grain Al	D, B, A	35.00	mm
Normalizing Rolled	Fine Grain Al	D, B, A	50.00	mm
As Rolled	Fine Grain Al+Nb+Ti	DH32, AH32	25.00	mm
Normalizing Rolled	Fine Grain Al+Nb+Ti	DH36, AH36, DH32, AH32, DH27S, AH27S	50.00	mm
Thermo Mechanical	Fine Grain Al+Nb+Ti	EH36, DH36, AH36, EH32, DH32, AH32, EH27S, DH27S, AH27S	60.00	mm

Plates	Ferritic Low Temperature	Grades	Maximum Thickness	Units
TM+Acc	Fine Grain Al+Nb+Ti	LTFH36, LTFH32	50.00	mm

Additional Remarks

Approval including AH32S (AH32 with low Mn limits of 0.81% to 0.97%; manufacturer designation of AH32-LMC) with maximum thickness 25mm, Al grain refined in Thermo-Mechanical Rolling condition.



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Plates in the Normalised supply condition Fine Grain Al+V are only accepted in the thickness range >30mm to 70mm.

Tapered plates are approved with a taper rate of between 0.1 and 15 mm/m and a maximum thickness differential of 15mm. Minimum taper length is 400mm.

Differential thickness plates are approved with a taper rate of between 2 and 50 mm/m and a maximum thickness differential of 10mm. Minimum taper length is 50mm, maximum taper length is 200mm.

Approval includes Z grade plates with specified through thickness properties when tested in accordance with LR Rules requirements.



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