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Certificate No: LR21398329WA Issue Date: 31/07/2021 Expiry Date: 30/07/2024

Approved Manufacturer of Steel Plates, Strip, Sections & Bars

Manufacturer Arcelor Mittal Warszawa Sp. z o.o.

Address ul. Kasprowicza 132, Warszawa, 01-949, Poland

Type Semi-Finished Products

Steel Making

Bars

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.

Approval Notes

Approval for semi finished products in steel types carbon, carbon-manganese and alloy, covers the supply of ingots, blooms and billets for processing into grades according to the Society's Rules for the Manufacture, Testing and Certification of Materials, Chapters 3 to 6. The final processing works is responsible for ordering steel which complies with their approved chemical composition and enables them to achieve the required mechanical properties.

The category "Machinery" indicates that the bar has been subject to a rolling reduction of at least 6:1 and with appropriate heat treatment can be suitable for use as a substitute for a forging, when supplied in accordance with LR Rules, Part 2, Chapter 5.



71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Li Xu

Lead Specialist - Fracture Mechanics and Fatigue Analysis to Lloyd's Register EMEA A member of the Lloyd's Register group



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The category "Structural" indicates that the bar has been subject to a rolling reduction of at least 3:1 and with appropriate heat treatment can be suitable for use as a structural round bar, when supplied in accordance with LR Rules Part 2, Chapter 3.



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Steel Making	E.A.F. / Ingot	Grades	Maximum Weight	Units
-	-	As below	25.00	Tonnes
Steel making	E.A.F. / Con Cast	Grades	Maximium Thickness	Units
-	-	As below	220.00	mm
Semi-Finished Products	Ingots (tonnes)	Grades	Maximum Weight	Units
-	-	Carbon	25.00	Tonnes
-	-	Carbon-manganese	25.00	Tonnes
-	-	Alloy	25.00	Tonnes
Semi-Finished Products	Blooms/Billets	Grades	Maximum Thickness	Units
As cast	-	Carbon	220.00	mm
As cast	-	Carbon-manganese	220.00	mm
As cast	-	Alloy	220.00	mm
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Bars	Structural	Grades	Maximum Thickness	Units
	Structural	•		Units mm
Bars	Structural - -	Grades	Maximum Thickness	
Bars As Rolled	Structural	Grades Carbon	Maximum Thickness 65.00	mm
Bars As Rolled As Rolled	Structural	Grades Carbon Carbon-manganese	Maximum Thickness 65.00 65.00	mm mm
Bars As Rolled As Rolled Normalized	-	Grades Carbon Carbon-manganese Carbon	Maximum Thickness 65.00 65.00 65.00	mm mm mm
Bars As Rolled As Rolled Normalized Normalized Quenched and	-	Grades Carbon Carbon-manganese Carbon Carbon-manganese	Maximum Thickness 65.00 65.00 65.00	mm mm mm mm
Bars As Rolled As Rolled Normalized Normalized Quenched and Tempered	- - -	Grades Carbon Carbon-manganese Carbon Carbon-manganese Alloy	Maximum Thickness 65.00 65.00 65.00 65.00	mm mm mm mm
Bars As Rolled As Rolled Normalized Normalized Quenched and Tempered Bars	- - -	Grades Carbon Carbon-manganese Carbon Carbon-manganese Alloy Grades	Maximum Thickness 65.00 65.00 65.00 65.00 65.00 Maximum Thickness	mm mm mm mm mm
Bars As Rolled As Rolled Normalized Normalized Quenched and Tempered Bars As Rolled	- - -	Grades Carbon Carbon-manganese Carbon Carbon-manganese Alloy Grades Carbon	Maximum Thickness 65.00 65.00 65.00 65.00 65.00 Maximum Thickness 65.00	mm mm mm mm mm
Bars As Rolled As Rolled Normalized Normalized Quenched and Tempered Bars As Rolled As Rolled	- - -	Grades Carbon Carbon-manganese Carbon Carbon-manganese Alloy Grades Carbon Carbon-manganese	Maximum Thickness 65.00 65.00 65.00 65.00 65.00 Maximum Thickness 65.00 65.00	mm mm mm mm mm



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