

Declaration of Performance

(according to regulation EU No 305/2011)

Unique identification of product type:
Number: LMB Section & Bar S450J0

Bars & Section S450J0 / 1.0590 according EN 10025-2: 2004

Intended use:
Welded, bolted and riveted structures

Manufacturer:
Liberty Merchant Bar plc
Liberty House, P O Box 15
Brigg Road, Scunthorpe
DN16 1XL United Kingdom

T: +44 (0) 1724 853333
F: +44 (0) 1724 403044

Website: <http://www.libertysteelscunthorpe.com/>

System of assessment and verification of constancy of performance of the product:
System 2+

Scope as detailed in Certificate of Conformity of
 Factory Production Control No: **0038/CPR/20060002/A**

Notified factory production control certification body No. 0038 performed the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment, and evaluation of factory production control and issued the certificate of conformity of the factory production control

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.



Steve Unwin – Managing Director
 Liberty Merchant Bar plc

Date: 29/09/2017

Essential characteristic	Performance		Harmonised specification		
Tolerances on dimensions and shape	Flat Bar Equal & Unequal Angle Rounds Squares PFC I & H Sections	EN10058 EN 10056-1 & 2 EN 10060 EN 10059 EN 10279 EN 10034	EN10025-1 2004		
Yield strength (longitudinal)	Nominal thickness (mm)	Values Min (MPa)			
	>	≤			
	-	16		450	
	16	40		430	
	40	63		410	
	63	80		390	
Tensile strength (longitudinal)	Nominal thickness (mm)	Values (MPa)			
	≥	≤		min	max
	3	100		550	720
	Elongation (longitudinal)	Nominal thickness (mm)	Values min (%; 5.65√s ₀)		
>	≤				
-	100	17			
Impact strength (longitudinal)	J0	27J at 0°C			
Weldability CEV	Nominal thickness (mm)	Values max (%)			
	>	≤			
	-	30	0.47		
	30	100	0.49		
Durability	Nominal thickness (mm)	Values max (%)			
	-	≤40	C: 0.20 Si: 0.55 Mn: 1.70 P: 0.030 S: 0.030 N: 0.025 Cu: 0.55		
	>40	C: 0.22 Si: 0.55 Mn: 1.70 P: 0.030 S: 0.030 N: 0.025 Cu: 0.55			



0038

EN 10025-1 – 2004

Bar and Section S450J0 / 1.0590

To be used in welded, bolted and riveted structures

Elongation:
 Tensile Strength:
 Yield Strength: EN10025-2
 Impact Strength:
 Weldability:
 Durability:

Dangerous Substances: No Performance Determined

CE Marking Notified Body:
 Lloyds Register Verification Limited
 71 Fenchurch Street, London, EC3M 4BS
 Tel:+44 (0)207 423 2428
 Email : ecdirectives@lr.org
 Website : www.lr.org

Liberty Merchant Bar