



LIBERTY

Declaration of Performance  
(according to regulation EU No 305/2011)

No. LO-L-SM-4/02-CPR-19-1

1) Code of the product type: **1.8825**

Type: Sections/Bars **S420M** according **EN 10025-4**

Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

To be used in welded, bolted and riveted structures

2) LIBERTY OSTRAVA a.s.  
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System of assessment and verification of constancy of performance of the product:  
System 2+

Notified factory production control certification body No. 1020 Technical and Test Institute for Construction Prague (TZUS) 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 certificates of conformity of the factory production control.

The performance of the product identified in point 1 is in conformity with the declared performance in the table.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 2. Signed for and on behalf of the manufacturer by:

David Božoň  
Director of Rolling Mills

Date: 19.08.2019

Essential characteristic		Performance		Harmonized technical specification	
Tolerances on dimensions and shape	Angles		EN10056-2		EN 10025-1:2004
	I and H sections		EN 10034		
	Tapered Flange I		EN 10024		
	UPE, UPN		EN 10279		
	Flat / Square / Round / T bars		EN 10058/EN 10059/EN 10060/EN 10055		
Yield strength	Nominal thickness (mm)		Values (MPa)		
	>	≤	min		
		16	420		
	16	40	400		
	40	63	390		
	63	80	380		
	80	100	370		
Tensile strength	Nominal thickness (mm)		Values (MPa)		
	>	≤	min	max	
		40	520	680	
	40	63	500	660	
	63	80	480	640	
	80	100	470	630	
	100	140	460	620	
Elongation	Nominal thickness (mm)		Values (%)		
	>	≤	min		
	140	19			
Impact strength	Nominal thickness (mm)		Values (J)		
	>	≤	min		
	140	40 at -20°C			
Weldability (CEV)	Nominal thickness (mm)		Values (%)		
	>	≤	max		
		16	0,43		
	16	40	0,45		
	40	63	0,46		
	63	0,47			
Durability (Chemical composition)	Nominal thickness (mm)		Values (%)		
	>	≤	min	max	
		140		C : 0,18 Ti : 0,05 Mn : 1,70 Cr : 0,30 Si : 0,50 Mo : 0,20 P : 0,035 Ni : 0,80 S : 0,030 Cu : 0,55 Nb : 0,05 N : 0,025 V : 0,12	
			Al* : 0,02		
* If sufficient other nitrogen binding elements are present, the minimum aluminium requirement does not apply.					