



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

- No. LO-L-SM-5/02-CPR-20-1  
Code of the product type: **1.8965**
- 1) Type: **Sections/Bars S355J2W according EN 10025-5**  
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
- LIBERTY OSTRAVA a.s.  
Vratimovska 689/117  
719 00 Ostrava Kuncice  
Czech Republic  
Tel. +420 59 733 1111  
www.libertyostrava.cz
- 2) System of assessment and verification of constancy of performance of the product:  
System 2+
- 3) 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 points 1 and 2 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 3. Signed for and on behalf of the manufacturer by:

David Božoň  
Director of Rolling Mills

Date: 02.03.2020

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	355	
40	345		
Tensile strength	Nominal thickness (mm)	Values (MPa)	
	>	min	
	=3	470	
Elongation	Nominal thickness (mm)	Values (%)	
	>	min	
	=3	22	
40	21		
Impact strength	Nominal thickness (mm)	Values (J)	
	>	min	
	63	27 at -20°C	
Weldability	Nominal thickness (mm)	Values (%)	
	>	NPD	
	16		
40			
Durability (Chemical composition)	Nominal thickness (mm)	Values (%)	
	>	min	
	40	max	
		C : 0,16 S : 0,035	
		Si : 0,50 N* :	
		P : 0,035	
		Mn : 1,50	
		Cu : 0,55	
		Cr : 0,80	
*The max. value for nitrogen does not apply, if the chemical composition shows a minimum total Al content of 0,020% or if sufficient other N binding elements are present. Cr content can be reduced to 0,37% if the Si content is min. 0,15%.			
Addition of nitrogen binding elements: the steels shall contain at least one of the following elements: Al total ≥ 0,020%, Nb: 0,015 - 0,060%, V: 0,02-0,12%, Ti: 0,02 - 0,10%. If these elements are used in combination, at least one of them shall be present with the minimum content indicated.			
CEV max. 0,52%			
The steels may show a Ni content of max. 0,65%. The steels may contain max. 0,30% Mo and max. 0,15% Zr.			
Fully killed steel containing nitrogen binding element in amounts sufficient to bind the available nitrogen (for example min. 0,02% Al)			