



## DECLARATION OF PERFORMANCE

No. DoP LO-L-SM-5/01-CPR-22-1

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|--|--|
| UNIQUE IDENTIFICATION CODE OF THE PRODUCT – TYPE:  |  |
| <b>Long hot rolled products of structural steel grade S355J0W (1.8959)</b>   |  |
| <ul style="list-style-type: none"><li>- Flat bars width 30 - 170 mm and thickness 10 - 60 mm</li><li>- IPN beams 180 - 220</li><li>- IPE beams 180 - 220</li><li>- UPN channels 50 - 220</li><li>- Equal angles L 40x40 up to L 150x150, thickness 3 - 18 mm</li><li>- Unequal angles L 100x65 up to L 140x90, thickness 7 - 14 mm</li></ul> |  |
| INTENDED USE:  | Metal structures or mixed metal and concrete structures  |
| MANUFACTURER:  | LIBERTY OSTRAVA a.s.<br>Vratimovská 689/117, 719 00 Ostrava Kunčice, Česká republika<br>Tel. +420 59 733 1111<br><a href="https://libertysteelgroup.com/cz">https://libertysteelgroup.com/cz</a> |
| SYSTEM/S OF AVCP:  | System 2+  |
| HARMONISED STANDARD:   | EN 10025-1:2004  |
| NOTIFIED BODY/IES:   | Technický a zkušební ústav stavební Praha, s.p.<br>Prosecká 811/76y, Praha 9 – Prosek<br>No. 1020  |

DECLARED PERFORMANCES:

| Essential characteristic             |  | Performance |                                    | Harmonized technical specification |
|--------------------------------------|--|-------------|------------------------------------|------------------------------------|
| Tolerances on dimensions and shape   | Angles   |             | EN10056-1, 2                       |                                    |
|                                      | IPN and H sections   |             | EN 10365, EN 10034                 |                                    |
|                                      | Tapered Flange IPE   |             | EN 10365, EN 10024                 |                                    |
|                                      | UPE, UPN   |             | EN 10365, ČSN 425571, EN 10279     |                                    |
|                                      | Flat bars  |             | EN 10058                           |                                    |
| Yield strength                       | Nominal thickness(mm)  |             | Values (MPa)                       |                                    |
|                                      | >  | ≤           | min                                |                                    |
|                                      |  | 16          | 355                                |                                    |
|                                      | 16   | 40          | 345                                |                                    |
|                                      | 40   | 63          | 335                                |                                    |
| Tensile strength                     | Nominal thickness(mm)  |             | Values (MPa)                       |                                    |
|                                      | >  | ≤           | min                                | max                                |
|                                      | =3   | 100         | 470                                | 630                                |
|                                      |  |             |                                    |                                    |
| Elongation                           | Nominal thickness(mm)  |             | Values (%)                         |                                    |
|                                      | >  | ≤           | min                                |                                    |
|                                      | =3   | 40          | 22                                 |                                    |
|                                      | 40   | 63          | 21                                 |                                    |
| Impact strength                      | Nominal thickness(mm)  |             | Values (J)                         |                                    |
|                                      | >  | ≤           | min                                |                                    |
|                                      |  | 63          | 27 at 0°C                          |                                    |
| Weldability                          | Nominal thickness(mm)  |             | Values (%)                         |                                    |
|                                      | >  | ≤           | NPD                                |                                    |
|                                      |  | 16          |                                    |                                    |
|                                      | 16   | 40          |                                    |                                    |
|                                      | 40   | 63          |                                    |                                    |
|                                      |  |             |                                    |                                    |
| Durability<br>(Chemical composition) | Nominal thickness(mm)  |             | Values (%)                         |                                    |
|                                      | >  | ≤           | min                                | max                                |
|                                      |  | 40          |                                    | C: 0,16<br>Si: 0,50<br>P: 0,040    |
|                                      |  |             | Mn: 0,50<br>Cu: 0,25<br>Cr: 0,40** | Mn: 1,50<br>Cu: 0,55<br>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. The N binding elements shall be mentioned in the inspection document. Cr content can be reduced to 0.37% if the Si content is min. 0.15%. |             |                                    |                                    |
|                                      | CEV max. 0,52%<br>The steels may show a Ni content of max. 0,65%. The steels may contain max. 0,30% Mo and max. 0,15% Zr.  |             |                                    |                                    |
|                                      |  |             |                                    |                                    |

EN 10025-1:2004

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.

Signed for and on behalf of the manufacturer by:

David Božon



At Ostrava, on 8th of April 2022