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

No. LO-001-CPR2020-01-06

1) Code of the product type: **1.0039**

2) Type: Hot finished structural hollow sections (seamless tubes) **S235JRH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**		
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**		
		16	**235**		
	16	**40**	**225**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		100	**360**	**510**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**26**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**27 at 20°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		16		**0,37**	
	16	**40**		**0,39**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,22** **Mn : 1,50** **N : 0,011**	**P : 0,050** **S : 0,050**

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

No. LO-002-CPR2020-01-06

1) Code of the product type: **1.0149**

2) Type: Hot finished structural hollow sections (seamless tubes) **S275J0H according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 1and 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**275**			
	16	**40**	**265**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		3	**430**	**580**		
	3	**100**	**410**	**560**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
		40	**23**			
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**27 at 0°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,41**		
	16	**40**		**0,43**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		40		**C : 0,22** **Mn : 1,60** **N : 0,011**	**P : 0,045** **S : 0,045**	

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

No. LO-003-CPR2020-01-06

1) Code of the product type: **1.0138**

2) Type: Hot finished structural hollow sections (seamless tubes) **S275J2H according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**		
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**		
		16	**275**		
	16	**40**	**265**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		3	**430**	**580**	
	3	**100**	**410**	**560**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**23**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**27 at -20°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		16		**0,41**	
	16	**40**		**0,43**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,22** **Mn : 1,60**	**P : 0,040** **S : 0,040**

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

No. LO-004-CPR2020-01-06

1) Code of the product type: **1.0493**

2) Type: Hot finished structural hollow sections (seamless tubes) **S275NH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**275**			
	16	**40**	**265**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**370**	**510**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**24**	**22**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**40 at -20°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		65		**0,40**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,35** **Al_{tot} : 0,015**	**C : 0,22** **Mn : 0,60** **S : 0,035** **V : 0,10** **Cr : 0,35** **Mo : 0,13** **N : 0,017**	**Si : 0,45** **P : 0,040** **Nb : 0,060** **Ti : 0,04** **Ni : 0,35** **Cu : 0,39**	

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

No. LO-005-CPR2020-01-06

1) Code of the product type: **1.0497**

2) Type: Hot finished structural hollow sections (seamless tubes) **S275NLH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**275**			
	16	**40**	**265**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**370**	**510**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**24**	**22**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**27 at -50°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		65		**0,40**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,35** **Al_{tot} : 0,015**	**C : 0,22** **Mn : 0,60** **S : 0,030** **V : 0,10** **Cr : 0,35** **Mo : 0,13** **N : 0,017**	**Si : 0,45** **P : 0,035** **Nb : 0,060** **Ti : 0,04** **Ni : 0,35** **Cu : 0,39**	

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

No. LO-006-CPR2020-01-06

1) Code of the product type: **1.0547**

2) Type: Hot finished structural hollow sections (seamless tubes) **S355J0H according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**		
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**		
		16	**355**		
	16	**40**	**345**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		3	**510**	**680**	
	3	**100**	**470**	**630**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**22**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**27 at 0°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		16		**0,45**	
	16	**40**		**0,47**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,25** **Mn : 1,70** **Si : 0,60**	**P : 0,045** **S : 0,045** **N : 0,011**

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

No. LO-007-CPR2020-01-06

1) Code of the product type: **1.0576**

2) Type: Hot finished structural hollow sections (seamless tubes) **S355J2H according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s.	Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**		
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**		
		16	**355**		
	16	**40**	**345**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		3	**510**	**680**	
	3	**100**	**470**	**630**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**22**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**27 at -20°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		16		**0,45**	
	16	**40**		**0,47**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,25** **Mn : 1,70** **Si : 0,60**	**P : 0,040** **S : 0,040**

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

No. LO-008-CPR2020-01-06

1) Code of the product type: **1.0539**

2) Type: Hot finished structural hollow sections (seamless tubes) **S355NH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**355**			
	16	**40**	**345**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**470**	**630**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**22**	**20**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**40 at -20°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,43**		
	16	**65**		**0,45**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,85** **Al_{tot} : 0,015**	**C : 0,22** **Mn : 1,75** **S : 0,035** **V : 0,14** **Cr : 0,35** **Mo : 0,13** **N : 0,022**	**Si : 0,55** **P : 0,040** **Nb : 0,060** **Ti : 0,04** **Ni : 0,55** **Cu : 0,39**	

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

No. LO-009-CPR2020-01-06

1) Code of the product type: **1.0549**

2) Type: Hot finished structural hollow sections (seamless tubes) **S355NLH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality **Straightness** **Mass**		**2%** **0,2% of total length and 3mm/1m** **-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**355**			
	16	**40**	**345**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**470**	**630**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**22**	**20**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**27 at -50°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,43**		
	16	**65**		**0,45**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,85** **Al_{tot} : 0,015**	**C : 0,20** **Mn : 1,75** **S : 0,030** **V : 0,14** **Cr : 0,35** **Mo : 0,13** **N : 0,022**	**Si : 0,55** **P : 0,035** **Nb : 0,060** **Ti : 0,04** **Ni : 0,55** **Cu : 0,39**	

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

No. LO-022-CPR2020-01-06

1) Code of the product type: **1.0512**

2) Type: Hot finished structural hollow sections (seamless tubes) **S355K2H according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský — Q-Engineer – LO a.s

Michal Kolář — Q/A manager – LO a.s.

Date. 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**		
	Ovality		**2%**		
	Straightness		**0,2% of total length and 3mm/1m**		
	Mass		**-6% / +8% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**		
		16	**355**		
	16	**40**	**345**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		3	**510**	**680**	
	3	**100**	**470**	**630**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**22**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**40 at -20°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		16		**0,45**	
	16	**40**		**0,47**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,25** **P : 0,040** **Mn : 1,70** **S : 0,040** **Si : 0,60**	

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

No. LO-023-CPR2020-01-06

1) Code of the product type: **1.8750**

2) Type: Hot finished structural hollow sections (seamless tubes) **S420NH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s	Q/A manager – LO a.s.

Date. 06.01. 2020

Essential characteristic	**Performance**					**Harmonised technical specification**
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality		**2%**			
	Straightness		**0,2% of total length and 3mm/1m**			
	Mass		**-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**420**			
	16	**40**	**400**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**520**	**680**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**19**	**17**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**40 at -20°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,50**		
	16	**65**		**0,52**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,95** **Al_{tot} : 0,015**	**C : 0,25** **Mn : 1,80** **S : 0,035** **V : 0,22** **Cr : 0,35** **Mo : 0,13** **N : 0,027**	**Si : 0,65** **P : 0,040** **Nb : 0,060** **Ti : 0,04** **Ni : 0,85** **Cu : 0,77**	

LIBERTY

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

No. LO-024-CPR2020-01-06

1) Code of the product type: **1.8751**

2) Type: Hot finished structural hollow sections (seamless tubes) **S420NLH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s	Q/A manager – LO a.s.

Date. 06.01. 2020

Essential characteristic	Performance					Harmonised technical specification
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality		**2%**			
	Straightness		**0,2% of total length and 3mm/1m**			
	Mass		**-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**420**			
	16	**40**	**400**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**520**	**680**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**19**	**17**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**27 at -50°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,50**		
	16	**65**		**0,52**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,95** **Al_{tot} : 0,015**	**C : 0,25** **Mn : 1,80** **S : 0,030** **V : 0,22** **Cr : 0,35** **Mo : 0,13** **N : 0,027**	**Si : 0,65** **P : 0,035** **Nb : 0,060** **Ti : 0,04** **Ni : 0,85** **Cu : 0,77**	

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

No. LO-025-CPR2020-01-06

1) Code of the product type: **1.8953**

2) Type: Hot finished structural hollow sections (seamless tubes) **S460NH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s	Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	**Performance**					**Harmonised technical specification**
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality		**2%**			
	Straightness		**0,2% of total length and 3mm/1m**			
	Mass		**-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**460**			
	16	**40**	**440**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**540**	**720**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**17**	**15**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**40 at -20°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,53**		
	16	**65**		**0,55**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,95** **Al_{tot} : 0,015**	**C : 0,25** **Mn : 1,80** **S : 0,035** **V : 0,22** **Cr : 0,35** **Mo : 0,13** **N : 0,027**	**Si : 0,65** **P : 0,040** **Nb : 0,060** **Ti : 0,04** **Ni : 0,85** **Cu : 0,77**	

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

No. LO-026-CPR2020-01-06

1) Code of the product type: **1.8956**

2) Type: Hot finished structural hollow sections (seamless tubes) **S460NLH according to EN 10210:2019**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s	Q/A manager – LO a.s.

Date. 06.01. 2020

Essential characteristic	**Performance**					**Harmonised technical specification**
Tolerances on dimensions and shape			**Values**			**EN 10210-2:2019**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**			
	Wall thickness		**- 10% (loc. -12,5%) / +8% mass**			
	Ovality		**2%**			
	Straightness		**0,2% of total length and 3mm/1m**			
	Mass		**-6% / +8% for particular lengths**			
Yield strength	**Nominal thickness (mm)**		**Values**			**EN 10210-1:2019**
	>	**≤**	***R*eH min (MPa)**			
		16	**460**			
	16	**40**	**440**			
Tensile strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	***R*m min (MPa)**	**max (MPa)**		
		65	**540**	**720**		
Elongation	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**min (%)**			
			longit.	**transv.**		
		65	**17**	**15**		
Impact strength	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**KV2Lmin (J)**			
		40	**27 at -50°C**			
Weldability CEV	**Nominal thickness (mm)**		**Values**			
	>	**≤**		**max (%)**		
		16		**0,53**		
	16	**65**		**0,55**		
Durability	**Nominal thickness (mm)**		**Values**			
	>	**≤**	**in (%)**	**max (%)**		
		65	**Mn : 0,95** **Al_{tot} : 0,015**	**C : 0,25** **Mn : 1,80** **S : 0,030** **V : 0,22** **Cr : 0,35** **Mo : 0,13** **N : 0,027**	**Si : 0,65** **P : 0,035** **Nb : 0,060** **Ti : 0,04** **Ni : 0,85** **Cu : 0,77**	

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

No. LO-010-CPR2020-01-06

1) Code of the product type: **1.0039**

2) Type: Cold formed welded structural hollow sections (SAWH tubes) **S235JRH according to EN 10219:2006**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10219-2:2006**
	Outside diameter		**±1%, min ±0,5 and max ± 10mm**		
	Wall thickness		**For D≤406,4mm: T≤5mm ±10% and T>5mm ±5mm; for D<406,4mm: ±10% and max ±2mm**		
	Ovality **Straightness** **Mass**		**2%, for D/T≥100 must be agreed** **0,20% of total length and 3mm/1m** **±-6% for particular lengths**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10219-1:2006**
	>	**≤**	***R*eH min (MPa)**		
		16	**235**		
	16	**40**	**225**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	***R*m min (MPa)**	**max (MPa)**	
		40	**360**	**510**	
Elongation	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**min (%)**		
		40	**24**		
Impact strength	**Nominal thickness (mm)**		**Values**		
	>	**≤**	**KV2Lmin (J)**		
		40	**27 at 20°C**		
Weldability CEV	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**0,35**	
Durability	**Nominal thickness (mm)**		**Values**		
	>	**≤**		**max (%)**	
		40		**C : 0,19** **Mn : 1,50** **N : 0,011**	**P : 0,050** **S : 0,050**

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

No. LO-011-CPR2020-01-06

1) Code of the product type: **1.0149**

2) Type: Cold formed welded structural hollow sections (SAWH tubes) **S275J0H according to EN 10219:2006**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10219-2:2006
	Outside diameter		±1%, min ±0,5 and max ± 10mm		
	Wall thickness		For D≤406,4mm: T≤5mm ±10% and T>5mm ±5mm; for D<406,4mm: ±10% and max ±2mm		
	Ovality Straightness Mass		2%, for D/T≥100 must be agreed 0,20% of total length and 3mm/1m ±-6% for particular lengths		
Yield strength	Nominal thickness (mm)		Values		EN 10219-1:2006
	>	≤	ReH min (MPa)		
		16	275		
	16	40	265		
Tensile strength	Nominal thickness (mm)		Values		
	>	≤	Rm min (MPa)	max (MPa)	
		40	410	560	
Elongation	Nominal thickness (mm)		Values		
	>	≤	min (%)		
		40	20		
Impact strength	Nominal thickness (mm)		Values		
	>	≤	KV2Lmin (J)		
		40	27 at 0°C		
Weldability CEV	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		0,40	
Durability	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		C : 0,22 Mn : 1,60 N : 0,011	P : 0,045 S : 0,045

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

No. LO-012-CPR2020-01-06

1) Code of the product type: **1.0138**

2) Type: Cold formed welded structural hollow sections (SAWH tubes) **S275J2H according to EN 10219:2006**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10219-2:2006
	Outside diameter		±1%, min ±0,5 and max ± 10mm		
	Wall thickness		For D≤406,4mm: T≤5mm ±10% and T>5mm ±5mm; for D<406,4mm: ±10% and max ±2mm		
	Ovality Straightness Mass		2%, for D/T≥100 must be agreed 0,20% of total length and 3mm/1m ±-6% for particular lengths		
Yield strength	Nominal thickness (mm)		Values		EN 10219-1:2006
	>	≤	*Re*H min (MPa)		
		16	275		
	16	40	265		
Tensile strength	Nominal thickness (mm)		Values		
	>	≤	*Rm* min (MPa)	max (MPa)	
		40	410	560	
Elongation	Nominal thickness (mm)		Values		
	>	≤	min (%)		
		40	20		
Impact strength	Nominal thickness (mm)		Values		
	>	≤	KV2Lmin (J)		
		40	27 at -20°C		
Weldability CEV	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		0,40	
Durability	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		C : 0,22 Mn : 1,60 N : 0,011	P : 0,040 S : 0,040

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

No. LO-013-CPR2020-01-06

1) Code of the product type: **1.0547**

2) Type: Cold formed welded structural hollow sections (SAWH tubes) **S355J0H according to EN 10219:2006**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10219-2:2006
	Outside diameter		±1%, min ±0,5 and max ± 10mm		
	Wall thickness		For D≤406,4mm: T≤5mm ±10% and T>5mm ±5mm; for D<406,4mm: ±10% and max ±2mm		
	Ovality Straightness Mass		2%, for D/T≥100 must be agreed 0,20% of total length and 3mm/1m ±-6% for particular lengths		
Yield strength	Nominal thickness (mm)		Values		EN 10219-1:2006
	>	≤	*Re*H min (MPa)		
		16	355		
	16	40	345		
Tensile strength	Nominal thickness (mm)		Values		
	>	≤	*Rm* min (MPa)	max (MPa)	
		40	470	630	
Elongation	Nominal thickness (mm)		Values		
	>	≤	min (%)		
		40	20		
Impact strength	Nominal thickness (mm)		Values		
	>	≤	KV2Lmin (J)		
		40	27 at 0°C		
Weldability CEV	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		0,45	
Durability	Nominal thickness (mm)		Values		
	>	≤		max (%)	
		40		C : 0,24 P : 0,045 Mn : 1,60 S : 0,045 Si : 0,60 N : 0,011	

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

No. LO-014-CPR2020-01-06

1) Code of the product type: **1.0576**

2) Type: Cold formed welded structural hollow sections (SAWH tubes) **S355J2H according to EN 10219:2006**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

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

Notified factory production control certification body No. 0045 TÜV NORD 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 in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date: 06.01. 2020

Essential characteristic	Performance						Harmonised technical specification
Tolerances on dimensions and shape			Values				EN 10219-2:2006
	Outside diameter		±1%, min ±0,5 and max ± 10mm				
	Wall thickness		For D≤406,4mm: T≤5mm ±10% and T>5mm ±5mm; for D<406,4mm: ±10% and max ±2mm				
	Ovality Straightness Mass		2%, for D/T≥100 must be agreed 0,20% of total length and 3mm/1m ±-6% for particular lengths				
Yield strength	Nominal thickness (mm)		Values				EN 10219-1:2006
	>	≤	*R*eH min (MPa)				
		16	355				
	16	40	345				
Tensile strength	Nominal thickness (mm)		Values				
	>	≤	*R*m min (MPa)	max (MPa)			
		40	470	630			
Elongation	Nominal thickness (mm)		Values				
	>	≤	min (%)				
		40	20				
Impact strength	Nominal thickness (mm)		Values				
	>	≤	KV2Lmin (J)				
		40	27 at -20°C				
Weldability CEV	Nominal thickness (mm)		Values				
	>	≤		max (%)			
		40		0,45			
Durability	Nominal thickness (mm)		Values				
	>	≤		max (%)			
		40		C : 0,24 Mn : 1,60 Si : 0,60	P : 0,040 S : 0,040		

LIBERTY

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

No. LO-015-CPR2020-01-06

1) Code of the product type: **1.0252**

2) Type: Non-alloy seamless steel tubes **L235 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský	**Michal Kolář**
Q-Engineer – LO a.s.	Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			**Values**		**EN 10224:2002 + A1:2005**
	Outside diameter		**±1% or min ±0,5 mm**		
	Wall thickness		**EN 10224:2002 + A1:2005, table 7**		
	Out of roundness		**2% max for D/T≤100**		
	Straightness		**0,2% L**		
Yield strength	**Nominal thickness (mm)**		**Values**		**EN 10224:2002 + A1:2005**
	>	**≤**	***R*eH min (MPa)**		
		16	**235**		
	16		**225**		
Tensile strength	**Nominal thickness (mm)**		**Values**		
	≥	**≤**	***R*m min (MPa)**	**max (MPa)**	
	2,0	**25,0**	**360**	**500**	
Elongation	**Nominal thickness (mm)**		**Values**		
	≥	**≤**	**long. min (%)**	**transv. min (%)**	
	2,0	**25,0**	**25**	**23**	
Flattening test	**Nominal thickness (mm)**		**Test**		
	>	**≤**			
	2,0	**25,0**	**no cracks**		
Reaction to fire	**Nominal thickness (mm)**		**Mandated class as per 96/303/EEC**		
	≥	**≤**			
	2,0	**25,0**	**Class A1**		
Tightness	**Nominal thickness (mm)**		**Test**		
	≥	**≤**	**Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1**		
	2,0	**25,0**			
Dangerous substances	**Nominal thickness (mm)**		**Values**		
	≥	**≤**	**Any dang. substances in excess of the max. permitted levels specified in relevant European standard**		
	2,0	**25,0**			
Durability	**Nominal thickness (mm)**		**Values**		
	≥	**≤**		**max (%)**	
	2,0	**25,0**		**C : 0,18** **P : 0,035** **Mn : 1,30** **S : 0,030** **Si : 0,40**	

LIBERTY

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

No. LO-016-CPR2020-01-06

1) Code of the product type: **1.0260**

2) Type: Non-alloy seamless steel tubes **L275 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/177
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10224:2002 + A1:2005
	Outside diameter		±1% or min ±0,5 mm		
	Wall thickness		EN 10224:2002 + A1:2005, table 7		
	Out of roundness		2% max for D/T≤100		
	Straightness		0,2% L		
Yield strength	Nominal thickness (mm)		Values		EN 10224:2002 + A1:2005
	>	≤	*R*eH min (MPa)		
		16	275		
	16		265		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	25,0	430	570	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	long. min (%)	transv. min (%)	
	2,0	25,0	21	19	
Flattening test	Nominal thickness (mm)		Test		
	>	≤			
	2,0	25,0	no cracks		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	25,0			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1		
	2,0	25,0			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	25,0			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	25,0		C : 0,22 Mn : 1,50 Si : 0,45	P : 0,035 S : 0,030

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

No. LO-017-CPR2020-01-06

1) Code of the product type: **1.0419**

2) Type: Non-alloy seamless steel tubes **L355 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Micha Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10224:2002 + A1:2005
	Outside diameter		±1% or min ±0,5 mm		
	Wall thickness		EN 10224:2002 + A1:2005, table 7		
	Out of roundness Straightness		2% max for D/T≤100 0,2% L		
Yield strength	Nominal thickness (mm)		Values		EN 10224:2002 + A1:2005
	>	≤	*R*eH min (MPa)		
		16	355		
	16		345		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	25,0	500	650	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	long. min (%)	transv. min (%)	
	2,0	25,0	21	19	
Flattening test	Nominal thickness (mm)		Test		
	>	≤			
	2,0	25,0	no cracks		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	25,0			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1		
	2,0	25,0			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	25,0			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	25,0		C : 0,24 Mn : 1,70 Si : 0,60	P : 0,035 S : 0,030

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

No. LO-018-CPR2020-01-06

1) Code of the product type: **1.0252**

2) Type: Non-alloy welded steel tubes **L235 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10224:2002 + A1:2005
	Outside diameter		±0,75%, max ± 6,0 mm		
	Wall thickness		±7,5%		
	Out of roundness Straightness		2% max for D/T≤100, for D/T>100 must be agreed 0,2% L		
Yield strength	Nominal thickness (mm)		Values		EN 10224:2002 + A1:2005
	>	≤	*R*eH min (MPa)		
		16	235		
	16		225		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	25,0	360	500	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	long. min (%)	transv. min (%)	
	2,0	25,0	25	23	
Bending test	Nominal thickness (mm)		Test		
	>	≤			
	2,0	25,0	no cracks		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	25,0			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1		
	2,0	25,0			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	25,0			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	25,0		C : 0,18 Mn : 1,30 Si : 0,40	P : 0,035 S : 0,030

LIBERTY

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

No. LO-019-CPR2020-01-06

1) Code of the product type: **1.0260**

2) Type: Non-alloy welded steel tubes **L275 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10224:2002 + A1:2005
	Outside diameter		±0,75%, max ± 6,0 mm		
	Wall thickness		±7,5%		
	Out of roundness Straightness		2% max for D/T≤100, for D/T>100 must be agreed 0,2% L		
Yield strength	Nominal thickness (mm)		Values		EN 10224:2002 + A1:2005
	>	≤	*R*eH min (MPa)		
		16	275		
	16		265		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	25,0	430	570	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	long. min (%)	transv. min (%)	
	2,0	25,0	21	19	
Bending test	Nominal thickness (mm)		Test		
	>	≤			
	2,0	25,0	no cracks		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	25,0			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1		
	2,0	25,0			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	25,0			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	25,0		C : 0,22 Mn : 1,50 Si : 0,45	P : 0,035 S : 0,030

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

No. LO-020-CPR2020-01-06

1) Code of the product type: **1.0419**

2) Type: Non-alloy welded steel tubes **L355 according to EN 10224:2002 + A1:2005**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 4

The initial type testing was performed by the manufacturer whereas LO a.s. performs permanent surveillance, assessment, and evaluation of factory production control.

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10224:2002 + A1:2005
	Outside diameter		±0,75%, max ± 6,0 mm		
	Wall thickness		±7,5%		
	Out of roundness Straightness		2% max for D/T≤100, for D/T>100 must be agreed 0,2% L		
Yield strength	Nominal thickness (mm)		Values		EN 10224:2002 + A1:2005
	>	≤	*R*eH min (MPa)		
		16	355		
	16		345		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	25,0	500	650	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	long. min (%)	transv. min (%)	
	2,0	25,0	21	19	
Bending test	Nominal thickness (mm)		Test		
	>	≤			
	2,0	25,0	no cracks		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	25,0			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 7MPa/5s or EMT in acc. with EN 10246-1		
	2,0	25,0			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	25,0			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	25,0		C : 0,24 Mn : 1,70 Si : 0,60	P : 0,035 S : 0,030

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

No. LO-021-CPR2020-01-06

1) Code of the product type: **1.0026**

2) Type: Non-alloy steel tubes **S195T according to EN 10255:2004 + A1:2007**

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

To be used in welded structures

3) Liberty Ostrava a.s.
Vratimovská 689/117
719 00 Ostrava - Kunčice - Czech Republic
Tel: +420 595 682 501
Fax:+420 596 237 980

System of assessment and verification of constancy of performance of the product:
System 3

The initial type testing was performed by notified test laboratory and manufacturer whereas the internal factory production control is under permanent surveillance and assessment of the manufacturer. In addition, the certification body No. 0045 TÜV NORD issued certificate of conformity with requirements acc. to DIN EN 10255:2004+A1:2007

The performance of the product identified in point 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:

Radim Svěchovský
Q-Engineer – LO a.s.

Michal Kolář
Q/A manager – LO a.s.

Date : 06.01. 2020

Essential characteristic	Performance				Harmonised technical specification
Tolerances on dimensions and shape			Values		EN 10255:2004 + A1:2007
	Outside diameter		EN 10255:2004 + A1:2007, Table 2		
	Wall thickness		+12,5% / -12,5%		
	Out of roundness Straightness Mass		Included in diameter tolerance 0,002L EN 10255:2004 + A1:2007, Table 2		
Yield strength	Nominal thickness (mm)		Values		EN 10255:2004 + A1:2007
	≥	≤	*R*eH min (MPa)		
	2,0	5,4	195		
Tensile strength	Nominal thickness (mm)		Values		
	≥	≤	*R*m min (MPa)	max (MPa)	
	2,0	5,4	320	520	
Elongation	Nominal thickness (mm)		Values		
	≥	≤	min (%)		
	2,0	5,4	20		
Reaction to fire	Nominal thickness (mm)		Mandated class as per 96/303/EEC		
	≥	≤	Class A1		
	2,0	5,4			
Tightness	Nominal thickness (mm)		Test		
	≥	≤	Hydrostatic test at a minimum of 5MPa/5s or EMT in acc. With EN 10246-1		
	2,0	5,4			
Dangerous substances	Nominal thickness (mm)		Values		
	≥	≤	Any dang. substances in excess of the max. permitted levels specified in relevant European standard		
	2,0	5,4			
Durability	Nominal thickness (mm)		Values		
	≥	≤		max (%)	
	2,0	5,4		C : 0,20 Mn : 1,40	P : 0,035 S : 0,030