

(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.

frid

Date : 06.01. 2020

Essential characteristic		Performance			Harmonised technical specification	
Tolerances on				Values		
dimensions and	Outside	e diameter	±1%, min ±	0,5 and max	± 10mm	
shape	Wall t	hickness	- 10% (loc.	-12,5%) / +8%	% mass	
	0	/ality		2%		EN 10210-2:2019
	Strai	ghtness	0,2% of tota	I length and	3mm/1m	
	N	lass		for particular		
Yield strength	Nomina	l thickness		Values		
	(1	nm)				
	>	≤	ReH min (MPa)			
		16	235			
	16	40	225			
Tensile strength	Nomina	l thickness		Values		
	(1	nm)				
	>	≤	<i>R</i> m min (MPa)	max	(MPa)	
		100	360	5	10	
Elongation	Nominal thickness			Values		
	(1	nm)				
	>	≤	min (%)			
		40	26			
Impact strength	Nomina	l thickness		Values		
	(1	nm)				EN 10210-1:2019
	>	≤	KV2Lmin (J)			
		40	27 at 20°C			
Weldability CEV	Nomina	l thickness		Values		
	(1	nm)				
	>	≤			(%)	
		16		,	37	
	16	40		0,	39	
Durability	Nomina	l thickness	Values			
	(1	nm)				
	>	≤			< (%)	
		40		C : 0,22	P : 0,050	
				Mn : 1,50	S : 0,050	
	1	1	1	N : 0,011		



(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 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.

frid

Date : 06.01. 2020

Essential characteristic			Performance			Harmonised technical specification
Tolerances on			Values			
dimensions and	Outside	e diameter	±1%, min ±	0,5 and max	± 10mm	
shape	Wall t	nickness	- 10% (loc.	-12,5%) / +8%	% mass	EN 10210-2:2019
	0\	ality		2%		EN 10210-2.2019
		ghtness		I length and 3		
		lass	-6% / +8% 1	or particular	lengths	
Yield strength		thickness nm)		Values		
	>	<u> </u>	ReH min (MPa)			
		16	275			
	16	40	265			
Tensile strength		thickness nm)		Values		
	> ('	≤	<i>R</i> m min (MPa)	max ((MPa)	
	-	3	430	58		
	3	100	410		60	
Elongation	Nomina	thickness		Values		
U	(r	nm)				
	>		min (%)			
		40	23			
Impact strength		thickness nm)		Values		EN 10210-1:2019
	> `	Í≤	KV2Lmin (J)			
		40	27 at 0°C			
Weldability CEV		thickness nm)		Values		
	>			max	(%)	
		16		0,4	. ,	
	16	40	-	0,4		
Durability	Nomina	thickness		Values		
	(r	nm)				
	>			max		
		40	1	C : 0,22	P:0,045	
				Mn : 1,60 N : 0,011	S : 0,045	



(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.

frid

Date : 06.01. 2020

Essential characteristic			Performance			Harmonised technical specification	
Tolerances on			Values				
dimensions and	Outside	e diameter	±1%, min ±0,5 and max ± 10mm		± 10mm		
shape	Wall t	hickness	- 10% (loc.	-12,5%) / +89	% mass	EN 10210-2:2019	
	01	/ality		2%		EN 10210-2:2019	
	Strai	ghtness		I length and			
		lass	-6% / +8% 1	or particular	lengths		
Yield strength		l thickness nm)		Values			
	>	, _≤	ReH min (MPa)				
		16	275				
	16	40	265				
Tensile strength		l thickness nm)		Values			
	> (.	≤	<i>R</i> m min (MPa)	max	(MPa)		
		3	430		80		
	3	100	410	5	60		
Elongation	Nomina	thickness		Values			
•	(1	nm)					
	>	≤	min (%)				
		40	23				
Impact strength		l thickness nm)		Values		EN 10210-1:2019	
	> `	, 	KV2Lmin (J)				
		40	27 at -20°C				
Weldability CEV		thickness nm)		Values			
	,	≤		max	K (%)		
		16	1		41		
	16	40	1	,	43		
Durability	Nomina	thickness		Values			
· · · · ·	(1	nm)					
	>	, ≤		max	K (%)		
		40	1	C : 0,22	P : 0,040		
				Mn : 1,60	S : 0,040		



(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.

frid

Date : 06.01. 2020

Performance				Harmonised technica	
				specification	
Wall th	nickness	- 10% (loc.	-12,5%) / +8%	∕₀ mass	EN 10210-2:2019
			2%		EN 10210-2.2013
		-6% / +8% f		lengths	
			Values		
(r	nm)				
>					
		-			
-		265			
			Values		
· · · ·	,				
>					
		370		10	
		Values			
			1 (2/)		
>	≤		min (%)		
		longit.	trar	nsv.	
	65	24	2	2	
Nominal thickness			Values		
(r	nm)				EN 10210-1:2019
~	ч	KV2Lmin (J)			
	40	40 at -20°C			
Nominal thickness		Values			
(r	nm)				
>	≤				
	65		,	40	
		Values			
(r	nm)				
>	≤	in (%)			
	65				
ĺ		Al _{tot} : 0,015			
ĺ					
1					
			Cr : 0,35 Mo : 0,13	Ni : 0,35 Cu : 0,39	
	Wall th Ov Straig M Nominal (r > 16 Nominal (r > Nominal (r > Nominal (r >	16 16 16 16 40 Nominal thickness (mm) > ≤ 65 Nominal thickness (mm) > 65 Nominal thickness (mm) > 40 Nominal thickness (mm) > 40 Nominal thickness (mm) > ≤ 65 Nominal thickness (mm)	Outside diameter $\pm 1\%$, min \pm Wall thickness- 10% (loc.Ovality0,2% of totaMass-6% / +8% fNominal thickness (mm)-6% / +8% f> \leq ReH min (MPa)162751640265Nominal thickness (mm)<	Outside diameterValuesOutside diameter $\pm 1\%$, min ± 0.5 and maxWall thickness -10% (loc. $-12,5\%$) / $\pm 8\%$ Ovality 2% Straightness $0,2\%$ of total length and 3 Mass -6% / $\pm 8\%$ for particularNominal thicknessValues(mm) 16 275 16 40 265 Nominal thicknessValues(mm) 25 $2 \leq ReH min (MPa)$ max $2 \leq Rm min (MPa)$ max $3 \leq S$ $Rm min (MPa)$ $2 \leq Rm min (MPa)$ max $3 \leq S$ $Rm min (MPa)$ $3 \leq S$ S	ValuesOutside diameter $\pm 1\%$, min ± 0.5 and max ± 10 mmWall thickness -10% (loc. $-12,5\%$) / $+8\%$ massOvality 2% Straightness $0,2\%$ of total length and 3mm/1mMass -6% / $+8\%$ for particular lengthsNominal thicknessValues(mm)16 265 16Nominal thicknessValues(mm)265Nominal thicknessValues(mm) 510 ≥ 4 Rm min (MPa) $\Rightarrow \leq 8$ Rm min (MPa) 65 370 510 510 Nominal thicknessValues(mm) 10 dgit. $\Rightarrow \leq 10$ 10 dgit. 65 24 22 Nominal thickness(mm) 40 $\Rightarrow \leq 4$ 22 Nominal thickness $Values$ (mm) 40 $\Rightarrow \leq 5$ $Max (\%)$ $\Rightarrow \leq 65$ $0,40$ Nominal thickness $0,40$ mm $2 \leq 1n (\%)$ $\Rightarrow \leq 1n (\%)$ $max (\%)$ $\Rightarrow \leq 1n (\%)$ $0,40$ Nominal thickness $0,22$ (mm) $2 \leq 0.22$ $\Rightarrow 1n (\%)$ $10,05$ $8 \in 0,015$ $10,015$ $8 \in 0,035$ $10,040$ $8 \in 0,035$ $10,040$ $8 \in 0,035$ $10,040$ $8 \in 0,035$ $10,040$



(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.

frid

Date : 06.01. 2020

Essential characteristic		Performance			Harmonised technical specification	
Tolerances on				Values		specification
dimensions and	Outoida	diameter	±10/ min ±	0,5 and max	+ 10mm	
shape		nickness				
Snape			- 10% (IOC.	-12,5%) / +8%	% mass	EN 10210-2:2019
		ality		2%		
		ghtness		I length and		
		ass	-6% / +8% t	or particular	lengths	
Yield strength		thickness nm)		Values		
	>	ч	ReH min (MPa)			
		16	275			
	16	40	265			
Tensile strength		thickness nm)		Values		
	>	, ≤	<i>R</i> m min (MPa)	max	(MPa)	
		65	370		10	
Elongation	Nominal thickness		Values			
Liongation	(mm)			Values		
	> ≤			min (%)		
			longit.	trar	nsv.	
		65	24	-	2	
Impact strength	Nominal thickness			Values		
	(r	nm)				EN 10210-1:2019
	>	≤	KV2Lmin (J)			
		40	27 at -50°C			
Weldability CEV	Nominal thickness (mm)		Values			
	> (.	≤		max	x (%)	
		65	1		40	
Durability	Nomina	thickness		Values	-	
,	(r	nm)	Values			
	>	≤	in (%)	max	x (%)	
	-	65	Mn : 0,35	C : 0,22	Si: 0,45	
		••	Al _{tot} : 0,015	Mn : 0,60	P: 0.035	
				S : 0,030	Nb : 0,060	
				V:0,10	Ti : 0,04	
				Cr : 0,35	Ni : 0,35	
				Mo : 0,13	Cu : 0,39	
	1			N : 0,017		



(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

Liberty Ostrava a.s. Vratimovská 689/117 719 00 Ostrava - Kunčice - Czec

3)

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification
Tolerances on			Values		
dimensions and	Outside	e diameter	±1%, min ±	0,5 and max ± 10mm	
shape	Wall t	hickness	- 10% (loc.	12,5%) / +8% mass	EN 10210-2:2019
		vality		2%	EN 10210-2.2019
	Strai	ghtness		al length and 3mm/1m	
		lass	-6% / +8% 1	for particular lengths	
Yield strength		l thickness mm)		Values	
	>) 	ReH min (MPa)		
	-	16	355		
	16	40	345		
Tensile strength	Nomina	I thickness		Values	
.	(mm)			
	>		Rm min (MPa)	max (MPa)	
		3	510	680	
	3	100	470	630	
Elongation	Nomina	l thickness		Values	
	(mm)			
	>	≤	min (%)		
		40	22		
Impact strength		l thickness mm)		Values	EN 10210-1:2019
	>	≤	KV2Lmin (J)		
		40	27 at 0°C		
Weldability CEV		l thickness mm)		Values	
	>	Í≤		max (%)	
		16		0,45	
	16	40		0,47	
Durability	Nomina	I thickness		Values	
-	(mm)			
	>	≤		max (%)	
		40		C: 0,25 P: 0,045	
				Mn : 1,70 S : 0,045	
				Si:0,60 N:0,011	



(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 Q-Engineer – LO a.s.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification	
Tolerances on				Values	•	
dimensions and	Outside	e diameter	±1%, min ±0,5 and max ± 10mm			
shape	Wall t	hickness	- 10% (loc.	12,5%) / +8% mass	EN 10210-2:2019	
	0	/ality		2%	EN 10210-2:2019	
	Strai	ghtness		al length and 3mm/1m		
		lass	-6% / +8% 1	for particular lengths		
Yield strength		l thickness nm)		Values		
	>		ReH min (MPa)			
		16	355			
	16	40	345			
Tensile strength		l thickness nm)		Values		
	> `	Í≤	<i>R</i> m min (MPa)	max (MPa)		
		3	510	680		
	3	100	470	630		
Elongation	Nomina	thickness		Values		
	(1	nm)				
	>	≤	min (%)			
		40	22			
Impact strength		l thickness nm)		Values	EN 10210-1:2019	
	>	_ ≤	KV2Lmin (J)			
		40	27 at -20°C			
Weldability CEV		l thickness nm)		Values		
	>	, ≤		max (%)		
		16		0,45		
	16	40	1	0,47		
Durability	Nomina	l thickness		Values		
-	(1	nm)				
	>	≤		max (%)		
		40		C : 0,25 P : 0,040 Mn : 1,70 S : 0,040 Si : 0,60		



(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.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification
Tolerances on				Values	
dimensions and	Outside	e diameter			
shape		hickness		-12,5%) / +8% mass	
onapo		vality	- 10 /8 (100.	2%	EN 10210-2:2019
		ghtness	0.2% of tota	I length and 3mm/1	
		Jass		or particular lengths	
Yield strength		l thickness	-0 /0 / +0 /0	Values	
neid strength		mm)		values	
	> ('		<i>R</i> eH min (MPa)		
		16	355		
	16	40	345		
Tensile strength	Nomina	I thickness mm)	040	Values	
	() >) ≤	Rm min (MPa)	max (MPa)	
	-	65	470	630	
Elongation	Nomina	Nominal thickness		Values	
Liongation	(mm)				
	> ≤			min (%)	
			longit.	transv.	
		65	22	20	
Impact strength	Nominal thickness			Values	
	(<u>mm)</u>			EN 10210-1:2019
	>	≤	KV2Lmin (J)		EN 10210-1:2019
		40	40 at -20°C		
Weldability CEV	Nomina	l thickness		Values	
	(1	mm)			
	>	≤		max (%)	
		16		0,43	
	16	65		0,45	
Durability	Nomina	I thickness		Values	
-	(1	mm)			
	>	≤	in (%)	max (%)	
		65	Mn : 0,85	C: 0,22 Si: 0	
			Al _{tot} : 0,015	Mn:1,75 P:0	
				S:0,035 Nb:0	
				V:0,14 Ti:0	
				Cr: 0,35 Ni: 0	
				Mo: 0,13 Cu:	0,39
				N : 0,022	



(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.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification
Tolerances on			Values		
dimensions and	Outside	e diameter	+1% min +	0,5 and max ± 10mm	
shape		hickness		-12,5%) / +8% mass	
		vality	1070 (100.	2%	EN 10210-2:2019
		ghtness	0.2% of tota	I length and 3mm/1n	
		lass		or particular lengths	
Yield strength		l thickness	-0/07 +0/01	Values	
neia strength		mm)		Values	
	>		ReH min (MPa)		
	-	16	355		
	16	40	345		
Tensile strength		l thickness mm)		Values	
	>	Í ≤	Rm min (MPa)	max (MPa)	
		65	470	630	
Elongation	Nominal thickness (mm)			Values	
	> ≤			min (%)	
			longit.	transv.	
		65	22	20	
Impact strength	Nominal thickness (mm)			Values	
	>	Í≤	KV2Lmin (J)		EN 10210-1:2019
		40	27 at -50°C		
Weldability CEV	Nominal thickness (mm)			Values	
	>	Í≤		max (%)	
		16	1	0,43	
	16	65	1	0,45	
Durability		l thickness mm)		Values	
	>	≤	in (%)	max (%)	
		65	Mn : 0,85	C: 0,20 Si: 0	,55
			Al _{tot} : 0,015	Mn: 1,75 P: 0,	
				S:0,030 Nb:0	,060
				V:0,14 Ti:0	,04
				Cr: 0,35 Ni: 0	
				Mo:0,13 Cu:0),39
				N : 0,022	



	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:	
3)	To be used in welded structures 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+	
	tified factory production control certification body No. 0045 TÜV NORD performed the initial inspection of the anufacturing 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	e 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 sponsibility of the manufacturer identified in point 3. Signed for and on behalf of the manufacturer by:	
	Radim Svěchovský Michal Kolář	

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

Performance

Outside diameter

Values

±1%, min ±0,5 and max ± 10mm

Si : 0,60

Harmonised technical

specification

Essential

characteristic

Tolerances on

dimensions and

Q-Engineer – LO a.s

Q/A manager – LO a.s.

Invall

Date. 06.01. 2020



Declaration of Performance (according to regulation EU No 305/2011) No. LO-023-CPR2020-01-06 Code of the product type: 1.8750 1) Type: Hot finished structural hollow sections (seamless 2) 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 Performance characteristic	Harmonised technical specification
Tolerances on Value	
	EN 10210-2:2019
Ovality 2%	
Straightness 0,2% of total length	
Mass -6% / +8% for parti	
Yield strength Nominal thickness Value	S
(mm)	
> ≤ <i>R</i> eH min	
(MPa)	
16 40 400	
Tensile strength Nominal thickness Values	S
(mm)	
	max (MPa)
(MPa) 65 520	680
Elongation Nominal thickness Values	S
(mm)	()
> ≤ min (%	· ·
longit.	transv.
65 19	17
Impact strength Nominal thickness Value	
(mm)	EN 10210-1:2019
> ≤ KV2Lmin (J)	
40 40 at -20°C	
Weldability CEV Nominal thickness Value	s
(mm)	
> <	max (%)
16	0,50
16 65	0,52
Durability Nominal thickness Value	s
(mm)	
> ≤ in (%)	max (%)
	0,25 Si: 0,65
Al _{tot} : 0,015 Mn : 1	
	,035 Nb : 0,060
V:0	
Cr : 0),35 Ni : 0,85
Mo : (0,13 Cu : 0,77
N : 0,	027



– • •		
	of Performance ation EU No 305/2011)	Essenti character
No. LO-02	24-CPR2020-01-06	Tolerance
1) Code of the	product type: 1.8751	dimension shape
	ctural hollow sections (seamless ccording to EN 10210:2019	
accordance with the app	the construction product, in licable harmonised technical seen by the manufacturer:	Yield stre
To be used in	welded structures	
Vratin 719 00 Ostrava - Tel: +4	ty Ostrava a.s. novská 689/117 Kunčice - Czech Republic 120 595 682 501 120 596 237 980	Tensile stro
performance	nd verification of constancy of e of the product: stem 2+	Elongati
TÜV NORD performed manufacturing plant and of fa continuous surveillance, a factory production contro	ontrol certification body No. 0045 I the initial inspection of the actory production control and the assessment, and evaluation of ol and issued the certificate of ctory production control.	Impact stre
	uct identified in point 1 and 2 is in red performance in the table.	Weldability
responsibility of the manufac	nance is issued under the sole sturer identified in point 3. Signed of the manufacturer by:	Durabili
Radim Svěchovský	Michal Kolář	
Q-Engineer – LO a.s	Q/A manager – LO a.s.	
Juiall.	L	

En

Essential	r		Performance		Harmonised technical
characteristic			Ferrormance		specification
Tolerances on				Values	specification
dimensions and	Outside	diameter	+1% min +(),5 and max ± 10m	m
shape		nickness		-12,5%) / +8% mas	s
		ality		2%	EN 10210-2:2019
		ghtness	0.2% of total	length and 3mm/1	m
		ass		or particular length	
Yield strength	Nominal	thickness		Values	
-	(n	nm)			
	>	≤	<i>R</i> eH min (MPa)		
		16	420		
	16	40	400		
Tensile strength	-	thickness		Values	
		nm)			
	>	<u></u>	<i>R</i> m min (MPa)	max (MPa)	
		65	520	680	
Elongation	Nominal	thickness		Values	
-	(n	nm)			
	>	≤		min (%)	
			longit.	transv.	
		65	19	17	
Impact strength	Nominal	thickness		Values	
	(n	nm)			EN 10210-1:2019
	>	≤	KV2Lmin (J)		
		40	27 at -50°C		
Weldability CEV	Nominal	thickness		Values	
	(n	nm)		-	
	>	≤		max (%)	
		16		0,50	
	16	65		0,52	
Durability		thickness nm)		Values	
	>	≤	in (%)	max (%)	
		65	Mn : 0,95	C:0,25 Si:0,	
			Al _{tot} : 0,015	Mn:1,80 P:0,0	
				S: 0,030 Nb: 0,	
				V:0,22 Ti:0,	
				Cr:0,35 Ni:0, Mo:0,13 Cu:0	
				N : 0,027	,
	•				

Date. 06.01. 2020



	Declaration of Pe (according to regulation		E cha
	No. LO-025-CF	PR2020-01-06	Tole
1)	Code of the prode	uct type: 1.8953	dime
2)	Type: Hot finished structural tubes) S460NH accord		
	Intended use or uses of the c accordance with the applicab specification, as foreseen	le harmonised technical	Yie
	To be used in weld	ed structures	
3)	Liberty Os Vratimovsk 719 00 Ostrava - Kund Tel: +420 5 Fax:+420 5	á 689/117 šice - Czech Republic 95 682 501	Tens
	System of assessment and ve performance of the System	ne product:	E
	otified factory production control TÜV NORD performed the i anufacturing plant and of factory continuous surveillance, asses factory production control and conformity of the factory	nitial inspection of the y production control and the sment, and evaluation of issued the certificate of	Impa
Th	e performance of the product id conformity with the declared p		Weld
	This declaration of performance sponsibility of the manufacturer for and on behalf of the	identified in point 3. Signed	
	Radim Svěchovský	Michal Kolář	
Q-I	Engineer – LO a.s	Q/A manager – LO a.s.	
	fridel.	fr	

Essential characteristic			Performance	•		Harmonised technical specification
Tolerances on				Values		•
dimensions and	Outside	diameter	±1%, min ±0),5 and max	t ± 10mm	
shape	Wall th	nickness	- 10% (loc.			
-	Ov	ality	· · · ·	2%		EN 10210-2:2019
		ghtness	0,2% of total	length and	l 3mm/1m	
		ass	-6% / +8% fo			
Yield strength	Nominal	thickness		Values		
-	(n	nm)				
	^	≤	<i>R</i> eH min (MPa)			
		16	460			
	16	40	440			
Tensile strength		thickness nm)		Values		
	۸	≤	<i>R</i> m min (MPa)	max	(MPa)	
		65	540	72	20	
Elongation		thickness nm)	Values			
	^	≤		min (%)		
			longit.	trar	isv.	
		65	17	1	5	
Impact strength	Nominal	thickness		Values	-	
J		nm)				EN 10210-1:2019
	>	_ ≤	KV2Lmin (J)			
		40	40 at -20°C			
Weldability CEV	Nominal	thickness		Values		
-	(n	nm)				
	^	≤		max	: (%)	
		16		0,	53	
	16	65		0,	55	
Durability	Nominal	thickness		Values		
	(n	nm)				
	>	≤	in (%)	max		
		65	Mn : 0,95	C : 0,25	Si : 0,65	
			Al _{tot} : 0,015	Mn : 1,80	P:0,040	
					Nb: 0,060	
				V : 0,22 Cr : 0,35	Ti : 0,04 Ni : 0,85	
				Mo : 0,13		
				N : 0,027	Su . 0,77	
		I		,		

Date : 06.01. 2020



Declaration of Performance	Ess
(according to regulation EU No 305/2011)	chara
No. LO-026-CPR2020-01-06	Tolera
1) Code of the product type: 1.8956	dimen s
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:	Yield
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	Tensile
Fax:+420 596 237 980	
System of assessment and verification of constancy of performance of the product: System 2+	Elor
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.	Impac
The performance of the product identified in point 1 and 2 is in conformity with the declared performance in the table.	Welda
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:	Du
Radim Svěchovský Michal Kolář	
Q-Engineer – LO a.s Q/A manager – LO a.s.	
Guiafl. La	

Essential			Performance		Harmonised technical	
characteristic					specification	
Tolerances on				Values		
dimensions and	Outside	diameter	±1%, min ±0	,5 and max ± 10mm		
shape	Wall th	nickness	- 10% (loc.	-12,5%) / +8% mass	EN 10210-2:2019	
	Ov	ality		2%	EN 10210-2.2019	
	Straig	phtness	0,2% of total	length and 3mm/1m		
	М	ass	-6% / +8% fo	or particular lengths		
Yield strength	Nominal	thickness		Values		
	(n	nm)				
	>	≤	<i>R</i> eH min			
			(MPa)			
		16	460			
	16	40	440			
Tensile strength	Nominal	thickness		Values		
	(n	nm)				
	>	≤	<i>R</i> m min	max (MPa)		
			(MPa)			
		65	540	720		
Elongation		thickness		Values		
	(n	nm)				
	>	≤		min (%)		
			longit.	transv.		
		65	17	15		
Impact strength	Nominal	thickness		Values		
	(n	nm)			EN 10210-1:2019	
	>	≤	KV2Lmin (J)			
		40	27 at -50°C			
Weldability CEV	Nominal	thickness		Values		
•	(n	nm)				
	>			max (%)		
		16		0,53		
	16	65		0,55		
Durability	Nominal	thickness		Values		
	(n	nm)				
	>		in (%)	max (%)		
		65	Mn : 0,95	C: 0,25 Si: 0,65		
			Al _{tot} : 0,015	Mn: 1,80 P: 0,035		
				S: 0,030 Nb: 0,060		
				V: 0,22 Ti: 0,04		
				Cr: 0,35 Ni: 0,85		
				Mo: 0,13 Cu: 0,77		
			1	N : 0,027		

Date. 06.01. 2020



(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

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification		
Tolerances on dimensions and							
shape	Wall t	hickness	For D≤406,4r T>5mm ±5mm; f	nm: T≤5mm :	±10% and	EN 10219-2:2006	
	0	/ality	2%, for D/T	≥100 must be al length and			
	N	ghtness lass		particular lei			
Yield strength		l thickness nm)		Values			
	>	<u>≤</u> 16	ReH min (MPa) 235				
	16	40	225				
Tensile strength		l thickness nm)		Values			
	>	≤	<i>R</i> m min (MPa)		(MPa)		
		40	360	-	10		
Elongation		l thickness nm)		Values			
	>	≤	min (%)				
		40	24				
Impact strength		l thickness mm)		Values		EN 10219-1:2006	
	>	≤	KV2Lmin (J)				
		40	27 at 20°C				
Weldability CEV		thickness		Values			
	>	≤			(%)		
		40		-)	35		
Durability		l thickness nm)		Values			
	>	≤		max	(%)		
		40		C : 0,19 Mn : 1,50 N : 0,011	P : 0,050 S : 0,050		



(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

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance	Performance		
Tolerances on	l l					
dimensions and	Outside	diameter	±1%. min ±	0,5 and max ± 10mm		
shape				mm: T≤5mm ±10% and		
				or D<406,4mm: ±10% and		
	Wall th	nickness		nax ±2mm	EN 10219-2:2006	
	Ov	ality	2%, for D/T	≥100 must be agreed		
	Straig	phtness	0,20% of tot	al length and 3mm/1m		
	M	ass		particular lengths		
Yield strength	Nominal	thickness		Values		
	(n	nm)				
	۲ ۲	×	ReH min (MPa)			
		16	275			
	16	40	265			
Tensile strength	Nominal thickness		Values			
	(n	nm)				
	>	≤	<i>R</i> m min (MPa)	max (MPa)		
		40	410	560		
Elongation	Nominal	thickness		Values		
	(n	nm)				
	>	5	min (%)			
		40	20			
Impact strength	Nominal	thickness		Values	EN 10219-1:2006	
	(n	nm)			211 10210 112000	
	>	≤	KV2Lmin (J)			
		40	27 at 0°C			
Weldability CEV		thickness nm)		Values		
	>	, 		max (%)		
		40		0,40		
Durability	Nominal	thickness		Values		
•	(n	nm)				
	>	S		max (%)		
		40	1	C : 0,22 P : 0,045		
				Mn : 1,60 S : 0,045		
				N : 0,011		



(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

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance		Harmonised technical specification		
Tolerances on			Values				
dimensions and	Outside	diameter	±1%, min ±	0,5 and max :	± 10mm		
shape			For D≤406,4r	nm: T≤5mm ±	±10% and		
			T>5mm ±5mm; f	or D<406,4m	m: ±10% and	EN 40240 2-2000	
	Wall th	nickness	r	nax ±2mm		EN 10219-2:2006	
	Ov	ality	2%, for D/T	≥100 must be	e agreed		
	Straig	ghtness	0,20% of tota	al length and	3mm/1m		
	м	ass	±-6% for	particular ler	ngths		
Yield strength	Nominal	thickness		Values			
	(n	nm)					
	>	≤	ReH min (MPa)				
		16	275				
	16	40	265				
Tensile strength	Nominal thickness			Values			
	(n	nm)) max (MPa)			
	>	≤	<i>R</i> m min (MPa)				
		40	410	50	60		
Elongation	Nominal	thickness		Values			
	(n	nm)					
	>	Ч	min (%)				
		40	20				
Impact strength	Nominal thickness			Values		EN 10219-1:2006	
	(n	nm)				EN 10213-1.2000	
	>	Ч	KV2Lmin (J)				
		40	27 at -20°C				
Weldability CEV	Nominal	thickness		Values			
	(n	nm)					
	>	Ч		max	k (%)		
		40		0,	40		
Durability	Nominal	thickness		Values			
	(n	nm)					
	>	Ч			k (%)		
		40		C : 0,22	P:0,040		
				Mn : 1,60	S : 0,040		
				N : 0,011			



(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

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance	Harmonised technical specification			
Tolerances on				Values			
dimensions and	Outside	diameter	±1%, min ±	0,5 and max	± 10mm		
shape			For D≤406,4r	nm: T≤5mm :	±10% and		
•			T>5mm ±5mm; f				
	Wall th	nickness	'n	nax ±2mm		EN 10219-2:2006	
	Ov	ality	2%, for D/T	≥100 must be	e agreed		
	Straig	htness	0,20% of tota	al length and	3mm/1m		
	м	ass		particular le			
Yield strength	Nominal	thickness		Values	•		
Ū	(n	nm)					
	>	<u> </u>	ReH min (MPa)				
		16	355				
	16	40	345				
Tensile strength	Nominal	thickness		Values			
•	(n	nm)					
	>	<u> </u>	Rm min (MPa)	max (MPa)			
		40	470	6	30		
Elongation	Nominal	thickness		Values			
	(n	nm)					
	>	≤	min (%)				
		40	20				
Impact strength	Nominal	thickness	Values		EN 10219-1:2006		
	(n	nm)				EN 10219-1.2000	
	>	5	KV2Lmin (J)				
		40	27 at 0°C				
Weldability CEV	Nominal	thickness	Values				
-	(n	nm)					
	>	5		max	< (%)		
		40		0,	45		
Durability	Nominal	thickness		Values			
	(n	nm)					
	>	≤		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 Type: Cold formed welded structural hollow sections 2) (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 Michal Kolář

Q-Engineer – LO a.s.

Q/A manager – LO a.s.

fridall



Essential characteristic				Harmonised technical specification		
Tolerances on dimensions and shape	Outside	diameter	±1%, min ± For D≤406,4r	Values 0,5 and max :	·	
Shape	Wall ti	nickness	T>5mm ±5mm; f	or D<406,4m nax ±2mm	m: ±10% and	EN 10219-2:2006
	Straig	ality ghtness ass	0,20% of tota	≥100 must be al length and particular lei	3mm/1m	
Yield strength	Nominal	thickness nm)		Values	igins	
	> 16	<u>≤</u> 16 40	ReH min (MPa) 355			
Tensile strength	Nominal	40 thickness nm)	345	Values		
	>	, 	<i>R</i> m min (MPa) 470		(MPa) 30	
Elongation		thickness nm)		Values		
	>	<u>≤</u> 40	min (%) 20			
Impact strength		thickness nm)		Values		EN 10219-1:2006
	>	≤ 40	KV2Lmin (J) 27 at -20°C			
Weldability CEV		thickness nm)		Values		
	>	<u>≤</u> max (%) 40 0,45				
Durability Nominal thickness Values (mm)						
	>	<u>≤</u> 40	-	max C : 0,24 Mn : 1,60 Si : 0,60	c (%) P : 0,040 S : 0,040	

Date: 06.01. 2020



			characteristic		
	Declaration of	Performance	Tolerances on		
	(according to regulation		dimensions and	Outside	diamete
	(6 6	,	shape		nickness
	No. LO-015-	CPR2020-01-06			oundnes
1)	Code of the pro	oduct type: 1.0252	Madd a transmith		ghtness
		steel tubes L235 according	Yield strength		thicknes nm)
2)		2002 + A1:2005		،ر ح	iiiii) ≤
					16
	Intended use or uses of the			16	10
	accordance with the application		Tensile strength	-	thicknes
	specification, as foresee		0	(r	nm)
	To be used in we	lded structures		~	ĸ
3)		Ostrava a.s.		2,0	25,0
		ská 689/117	Elongation		thicknes
		nčice - Czech Republic			nm)
		595 682 501 596 237 980		≥	<u>≤</u>
	Fax.+420	590 237 980	Flattening test	2,0	25,0 thicknes
			Flattening test		nm)
	System of assessment and			, <	,
	performance o Syste			2,0	25,0
			Reaction to fire	Nominal	thicknes
Т		formed by the manufacturer			nm)
	whereas LO a.s. performs ssessment, and evaluation of			≥	≤
d				2,0	25,0
The		identified in point 1 and 2 is in	Tightness		thicknes
	conformity with the declared	I performance in the table.		(r ≥	nm)
-	This declaration of performar	ice is issued under the sole		<u>∠</u> 2,0	≦ 25,0
		er identified in point 3. Signed	Dangerous	,	thicknes
	for and on behalf of the	ne manufacturer by:	substances		nm)
	Dadim Svěabovaký	Michal Kolář		≥	Í≤
Q-	Radim Svěchovský Engineer – LO a.s.	Q/A manager – LO a.s.		2,0	25,0
	0	3	Durability	Nominal	thicknes
ſ	M A	1	,		nm)
l	hurd				
	amad 5 .	41		2,0	25,0
	1	7 ~			

Essential characteristic			Performance			Harmonised technical specification
Tolerances on				Values		
dimensions and	Outside	e diameter	+1% (or min ±0,5 m		
shape		hickness		002 + A1:200		EN 10224:2002 + A1:2005
		oundness		ax for D/T≤1		
		ghtness	27011	0,2% L		
Yield strength		I thickness		Values		
neia strength		mm)		Values		
	> (-		ReH min (MPa)			
	-	16	235			
	16		225			
Tensile strength		l thickness	220	Values		
renshe strength		mm)		Values		
	≥ (.		<i>R</i> m min (MPa)	max	(MPa)	
	2.0	25,0	360		00	
Elongation		I thickness	500	Values	00	
Liongation		mm)				
	≥	≤	long. min (%)		min (%)	
	2,0	25,0	25	2	23	
Flattening test	Nomina	l thickness		Test		
	(1	mm)				
	>	≤				
	2,0	25,0		no cracks		
Reaction to fire	Nomina	l thickness	Mandated cla	ass as per 96	6/303/EEC	EN 10224:2002 + A1:2005
	(1	mm)		-		EN 10224.2002 + A1.2003
	≥	≤				
	2,0	25,0		Class A1		
Tightness	Nomina	I thickness		Test		
•	(1	mm)				
	≥		Hydrostatic test	at a minimur	n of 7MPa/5s	
	2,0	25,0	or EMT in a	acc. with EN	10246-1	
Dangerous	Nomina	I thickness		Values		
substances	(1	mm)				
	≥		Any dang. sub	stances in ex	cess of the	
	2,0	25,0		ted levels sp		
	-	-	relevant l	European sta	ndard	
Durability	Nomina	l thickness		Values		
		mm)				
	2	≤		max	< (%)	
	2,0	25,0		C : 0,18	P:0,035	
				Mn : 1,30	S : 0,030	
				Si : 0,40		

Date : 06.01. 2020



Declaration of Performance (according to regulation EU No 305/2011) No. LO-016-CPR2020-01-06 1) Code of the product type: 1.0260 Type: Non-alloy seamless steel tubes L275 according 2) 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 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				Values	
dimensions and	Outside	diameter			
shape				EN 10224:2002 + A1:20	
		oundness		ax for D/T≤100	
		ghtness	27011	0.2% L	
Yield strength		thickness		Values	
neia strength		nm)		Values	
	> `	, 	ReH min (MPa)		1
		16	275		
	16		265		
Tensile strength	Nomina	thickness		Values	-
i oliono oli oligili		nm)			
	≥ (<i>R</i> m min (MPa)	max (MPa)	
	2.0	25,0	430	570	-
Elongation	, -	thickness		Values	-
		nm)			
		<u> </u>	long. min (%)	transv. min (%)	1
	2.0	25.0	21	19	-
Flattening test		thickness	Test		-
		nm)			
	> `	, ́≤			
	2.0	25.0		no cracks	-
Reaction to fire	1-	thickness		ass as per 96/303/EEC	EN 10224:2002 + A1:20
		nm)			EN 10224:2002 + A1:20
	≥ `	, 			-
	2,0	25,0		Class A1	
Tightness	Nomina	thickness	Test		-
0	(1	nm)			
	≥		Hydrostatic test	at a minimum of 7MPa/5s	5
	2,0	25,0	or EMT in a	acc. with EN 10246-1	
Dangerous	Nomina	thickness	Values		-
substances	(1	nm)			
	≥	<u> </u>		stances in excess of the	
	2,0	25,0	max. permit	ted levels specified in	
			relevant	European standard	_
Durability		thickness		Values	
	· · ·	nm)			_
	≥	≤		max (%)	_
	2,0	25,0		C:0,22 P:0,035	
				Mn : 1,50 S : 0,030	
				Si : 0,45	



			Essential characteristic		
	Declaration of (according to regulation)		Tolerances on dimensions and shape		
	No. LO-017-0	CPR2020-01-06	Shape	Out of ro	ound
1)	Code of the pro	duct type: 1.0419	Yield strength	Straig Nominal	
•	Type: Non-alloy seamless	steel tubes L355 according	field strength		nm)
2)		2002 + A1:2005		>	
	Intended use or uses of the accordance with the applica specification, as foresee	ble harmonised technical	Tensile strengtl		
	To be used in we	•		· · · · ·	nm)
2)				≥ 2,0	
3)	Vratimov 719 00 Ostrava - Ku	Dstrava a.s. ská 689/117 nčice - Czech Republic	Elongation	Nominal (m	thic nm)
		595 682 501 596 237 980		≥ 2,0	
	System of assessment and v		Flattening test	Nominal	thic nm)
	performance of			>	
	Syste			2,0	
Tł	ne initial type testing was per whereas LO a.s. performs		Reaction to fire		thic nm)
а	ssessment, and evaluation of			2,0	
The	performance of the product conformity with the declared	identified in point 1 and 2 is in performance in the table.	Tightness	Nominal	thic nm)
-	This declaration of norfarmon	'		≥	
	This declaration of performan	er identified in point 3. Signed		2,0	
100	for and on behalf of th		Dangerous substances		thic nm)
	Radim Svěchovský	Micha Kolář		≥ 2,0	
Q-	Engineer – LO a.s.	Q/A manager – LO a.s.		2,0	
C	0 0.1		Durability		thic nm)
C	fridal !!			≥	
		4 h		2,0	

Essential characteristic			Performance			Harmonised technical specification
Tolerances on				Values		
dimensions and	Outside	e diameter	±1% or min ±0,5 mm			
shape		hickness		002 + A1:200		EN 10224:2002 + A1:2005
onapo		oundness		ax for D/T≤1		EN 10224.2002 + A1.2003
		ghtness	2 /0 11	0,2% L	00	
Yield strength		I thickness		Values		
neid strengtn		mm)		values		
	>	≤	ReH min (MPa)			
		16	355			
	16		345			
Tensile strength	Nomina	l thickness		Values		
J	(mm)				
	≥ `	, ́≤	Rm min (MPa)	max	(MPa)	
	2,0	25,0	500		50	
Elongation	Nomina	I thickness		Values		
U	(1	mm)				
	≥ `	Ĺ≤	long. min (%)	transv.	min (%)	
	2.0	25,0	21		9	
Flattening test	Nomina	I thickness		Test	-	
· · · · · · · · · · · · · · · · · · ·		mm)				
	> `	Í ≤				
	2.0	25.0		no cracks		
Reaction to fire	Nomina	I thickness	Mandated cl	ass as per 96	5/303/EEC	
		mm)				EN 10224:2002 + A1:2005
	≥ (
	2.0	25.0	_	Class A1		
Tightness	,-	I thickness		Test		
righthess		mm)		1051		
			Hydrostatic test	at a minimur	m of 7MPa/5s	
	2,0	25,0		acc. with EN		
Dangerous		I thickness		Values		
substances		mm)	T aldeo			
•••••••	≥ (.		Any dang. substances in excess of the			
	2,0	25.0		ted levels sp		
	2,0	20,0	relevant European standard			
Durability	Nomina	l thickness	Values			
,		mm)		14400		
		≤		max	K (%)	
	2,0	25,0	-	C: 0,24	P:0,035	
	_,-			Mn : 1,70	S : 0,030	
				Si : 0,60	,	

Date : 06.01. 2020



Declaration of Performance (according to regulation EU No 305/2011) No. LO-018-CPR2020-01-06 1) Code of the product type: 1.0252 Type: Non-alloy welded steel tubes L235 according to 2) 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				Values		
dimensions and	Outside	e diameter	±0,75%, max ± 6,0 mm			
shape	Wall thickness			±7.5%		
•			2% max for D/T<	100, for D/T>100 must be	EN 10224:2002 + A1:2005	
	Out of roundness			agreed		
	Straightness			0,2% L		
Yield strength		l thickness		Values		
neia sa engai		nm)		Values		
	,,	, 	ReH min (MPa)			
	-	16	235			
	16	10	235			
Town the stress with			220	Malaaa		
Tensile strength		l thickness nm)		Values		
	,, ≥	, ≤	<i>R</i> m min (MPa)	max (MPa)		
	2,0	25,0	360	500		
Elongation		thickness	500	Values		
Liongation		nm)		values		
	,, ≥		long. min (%)	transv. min (%)		
	2.0	<u>≤</u> 25.0	25	23		
Bending		thickness	23	Test		
test		nm)		Test		
1631	,, >	, 				
	2.0	25,0		no cracks		
Reaction to fire	1-	thickness		ass as per 96/303/EEC		
Reaction to me		nm)	Wanualeu Cia	ass as per 50/505/EEC	EN 10224:2002 + A1:200	
	,, ≥	≤				
	2,0	<u>≤</u> 25.0	_	Class A1		
Tinktusse	,	25,0 thickness				
Tightness				Test		
		nm)		at a minimum of 7MDa/Fa		
	2	≤		at a minimum of 7MPa/5s		
	2,0	25,0	OF EIVIT IN a	acc. with EN 10246-1		
Dangerous		l thickness		Values		
substances	•	nm)	Any dang. substances in excess of the			
	2	≤		stances in excess of the ted levels specified in		
	2,0	25,0		European standard		
Durability	Nemina	l thickness	relevant	Values		
Durability				values		
	() ≥	nm)		max (%)		
	20					
	2,0	25,0		C: 0,18 P: 0,035 Mn: 1,30 S: 0,030		



Declaration of Performance (according to regulation EU No 305/2011) No. LO-019-CPR2020-01-06 1) Code of the product type: 1.0260 Type: Non-alloy welded steel tubes L275 according to 2) 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.

Essential

characteristic specification Tolerances on Values dimensions and Outside diameter ±0.75%, max ± 6.0 mm shape Wall thickness ±7,5% EN 10224:2002 + A1:2005 2% max for D/T≤100, for D/T>100 must be Out of roundness agreed 0,2% L Straightness Yield strength Nominal thickness Values (mm) > ReH min (MPa) < 16 275 16 265 **Tensile strength** Nominal thickness Values (mm) N Rm min (MPa) max (MPa) ≤ 2.0 25.0 430 570 Nominal thickness Values Elongation (mm) transv. min (%) ≥ long. min (%) ≤ 2,0 25,0 21 19 Bending Nominal thickness Test (mm) test > ≤ 2.0 25.0 no cracks Nominal thickness Reaction to fire Mandated class as per 96/303/EEC EN 10224:2002 + A1:2005 (mm) N ≤ 2.0 25.0 Class A1 Tightness Nominal thickness Test (mm) Hydrostatic test at a minimum of 7MPa/5s ≥ ≤ or EMT in acc. with EN 10246-1 2.0 25,0 Dangerous Nominal thickness Values substances (mm)Any dang. substances in excess of the ≥ ≤ max, permitted levels specified in 2,0 25,0 relevant European standard Durability Nominal thickness Values (mm) ≥ max (%) \leq 2,0 25,0 C: 0,22 P:0.035 Mn : 1,50 S:0.030 Si:0,45

Performance

Harmonised technical

Date : 06.01. 2020



	Declaration of Pe (according to regulation	
	No. LO-020-CF	PR2020-01-06
1)	Code of the produ	uct type: 1.0419
2) ^{Ty}	/pe: Non-alloy welded stee EN 10224:200	el tubes L355 according to 12 + A1:2005
acc	ended use or uses of the c ordance with the applicabl specification, as foreseen l	e harmonised technical
	To be used in weld	ed structures
3)	Liberty Os Vratimovsk 719 00 Ostrava - Kund Tel: +420 59 Fax:+420 59	á 689/117 šice - Czech Republic 95 682 501
Syst	tem of assessment and ve performance of th System	ne product:
wh	itial type testing was perfo nereas LO a.s. performs pe ssment, and evaluation of f	ermanent surveillance,
	formance of the product id formity with the declared p	entified in point 1 and 2 is in erformance in the table.
	declaration of performance sibility of the manufacturer for and on behalf of the	identified in point 3. Signed
	adim Svěchovský ineer – LO a.s.	Michal Kolář Q/A manager – LO a.s.
Gri	saft.	fr

Date : 06.01. 2020

Essential characteristic			Performance	Harmonised technical specification	
Tolerances on				Values	•
dimensions and	Outside	diameter	±0,75%, max ± 6,0 mm		
shape	Wall thickness			±7,5%	
		oundness	2% max for D/T≤	100, for D/T>100 must be agreed	EN 10224:2002 + A1:200
		phtness		0.2% L	
Yield strength		thickness		Values	
noia on origin		nm)		Talabo	
	>		ReH min (MPa)		
		16	355		
	16		345		
Tensile strength	-	thickness	040	Values	
renalie arengen		nm)		Values	
	≥ `	, S	<i>R</i> m min (MPa)	max (MPa)	
	2,0	25,0	500	650	
Elongation		thickness		Values	
) ≥	nm) ≤	long. min (%)	transv. min (%)	
	2.0	25,0	21	19	
Bending	1-	thickness	21	Test	
test		nm)	1031		
	>	≤			
	2.0	25.0		no cracks	
Reaction to fire	1-	thickness		ass as per 96/303/EEC	
		nm)			EN 10224:2002 + A1:200
	≥ `	, 			
	2.0	25,0		Class A1	
Tightness	_,-	thickness		Test	
rightiooo		nm)			
		, ≤	Hydrostatic test	at a minimum of 7MPa/5s	
	2.0	25,0		acc. with EN 10246-1	
Dangerous	1-	thickness		Values	
substances		nm)			
	≥ `	, 	Any dang. substances in excess of the		
	2,0	25.0		ted levels specified in	
	, -	- , -	relevant l	European standard	
Durability	Nominal	thickness		Values	
-	(r	nm)			
	≥	٤		max (%)	
	2,0	25,0	1	C: 0,24 P: 0,035	
				Mn : 1,70 S : 0,030	
				Si : 0,60	



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)

3)

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

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.

frid

Date : 06.01. 2020

Essential characteristic			Performance			Harmonised technical specification
Tolerances on				Values		•
dimensions and	Outside	e diameter	EN 10255:2004 + A1:2007, Table 2			
shape					,	EN 10255:2004 + A1:2007
•	Out of roundness			Included in diameter tolerance		
		ghtness		0.002L		
	Mass		EN 10255:2	004 + A1:2007	Table 2	
Yield strength		thickness		Values	,	
·····	(1	nm)		141400		
	≥ `	, ́ ≤	<i>R</i> eH min			
		_	(MPa)			
	2,0	5.4	195			
Tensile strength	,	thickness		Values		
· · · · · · · · · · · · · · · · · · ·		nm)				
	≥ `	, 	<i>R</i> m min	max (MPa)	
		_	(MPa)		,	
	2,0	5,4	320	52	20	
Elongation	Nomina	thickness	Values			
•	(1	nm)				
	≥ .		min (%)			
	2,0	5,4	20			
Reaction to fire	Nomina	thickness	Mand	ated class as p	ber	
	(1	nm)	96/303/EEC			
	≥ `	Ĺ				EN 10255:2004 + A1:200
	2,0	5,4		Class A1		
Tightness	Nomina	thickness	Test			
U	(1	nm)				
	≥ `	Í≤	Hydrostatic test at a minimum of 5MPa/5s			
	2,0	5,4		acc. With EN 1		
Dangerous	Nomina	thickness	Values			
substances	(1	nm)				
	≥ `	, S	Any dang, su	bstances in ex	cess of the	
	2,0	5,4	max. permitted levels specified in			
	_,-	-,-		European star		
Durability	Nomina	thickness		Values		
-	(1	nm)				
	_ ≥	Í≤		max	(%)	
	-					
	2,0	5,4		C : 0,20	P:0,035	