

Declaration of performance CE/ UKCA

DOP certification number: TKMN003

1. Product name and identification code:

Steel tubes, cold formed, EN10219-1:2006; EN10219-2:2019

Shape and sections	Dimensions	Steel grade
Round	Diameter 21,3 to 1219 mm Thickness 2 to 25 mm	S235JRH, S275J0H, S275J2H, S355J0H, S355J2H
Square	Dimensions 20x20 to 400x400 mm Thickness 2 to 16 mm	S235JRH, S275J0H, S275J2H, S355J0H, S355J2H
Rectangular	Dimensions 40x20 to 400x300 mm Thickness 2 to 16 mm	S235JRH, S275J0H, S275J2H, S355J0H, S355J2H
Oval	Dimensions 120x60 to 480x240mm Thickness 3,2 to 12 mm	S235JRH, S275J0H, S275J2H, S355J0H, S355J2H

2. Name and production address:

ThyssenKrupp Materials Nederland B.V.
Taylorweg 7
5466 AE Veghel (NL)

3. Application

to be used in metal structures or in composite metal and concrete structures.

4. System for assessing and verifying the consistent performance of the product:

System 2+

5. Notify and Approve body:

CE: KIWA, NL notified body NR.0620

Assessment and evaluation of factory production control for system 2+

UKCA: CARES, UK approved body No. 1244.

Assessment and evaluation of factory production control for system 2+, by KIWA.

6. Declared performances

The approved body No.1244 has certified the factory production control according to the 2+system. It continuously monitors, evaluates and confirm the factory production control and has issued the certificate of the factory production control,

The product performance as defined in point 1 corresponds to the performance as declared in point 6. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011 (CE) and in accordance with regulation (EU) No 302/2011, (retained EU law EUR 305/2011) as amended by the Construction Products (amendment etc.)(EU Exit) Regulations 2019 and the Construction Products (amendment etc.)(EU Exit) Regulations 2020, under the sole responsibility of the manufacturer mentioned above. In accordance with the Construction Products Regulation. The Declaration of Performance TKMN001 for EN10025 is located on: <https://www.thyssenkrupp-materials.nl/nl/kwaliteit-en-milieu/kwaliteit-en-veiligheid/>

Main features	Performance	Designated technical specification																																																	
Dimension- and shape tolerances	According to EN 10219-1: 2006 and EN10219-2:2019,chapter 6	EN10219-1:2006 & EN10219-2: 2019																																																	
Breaking strain (%)	<table><tr><th>Type and Value</th><th>Minimum extension (A)</th></tr><tr><td>S235JRH</td><td>24% (a)</td></tr><tr><td>S275J0H</td><td rowspan="4">20% (b)</td></tr><tr><td>S275J2H</td></tr><tr><td>S355J0H</td></tr><tr><td>S355J2H</td></tr></table> (a) for thickness > 3mm and section sizes D/T < 15 (round) and (B+H)/2T < 12,5 (square and rectangular), the minimum extension is reduced by 2. For thickness ≤ 3mm, the minimum value for elongation is 17%. (b) for section sizes D/T < 15 (round) and (B+H)/2T < 12,5 (square and rectangular), the minimum extension is reduced by 2.		Type and Value	Minimum extension (A)	S235JRH	24% (a)	S275J0H	20% (b)	S275J2H	S355J0H	S355J2H																																								
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Tensile strength (MPa)	<table><tr><th>Type and Value</th><th>Thickness < 3 mm</th><th>Thickness ≥ 3 ≤ 40 mm</th></tr><tr><td>S235JRH</td><td>360-510</td><td>360-510</td></tr><tr><td>S275J0H</td><td>430-580</td><td>410-560</td></tr><tr><td>S275J2H</td><td rowspan="3">510-680</td><td rowspan="4">470-630</td></tr><tr><td>S355J0H</td></tr><tr><td>S355J2H</td></tr></table>	Type and Value	Thickness < 3 mm	Thickness ≥ 3 ≤ 40 mm	S235JRH	360-510	360-510	S275J0H	430-580	410-560	S275J2H	510-680	470-630	S355J0H	S355J2H																																				
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Minimum yield strength (MPa)	<table><tr><th>Type and Value</th><th>Thickness <16 mm</th></tr><tr><td>S235JRH</td><td>235</td></tr><tr><td>S275J0H</td><td>275</td></tr><tr><td>S275J2H</td><td rowspan="3">355</td></tr><tr><td>S355J0H</td></tr><tr><td>S355J2H</td></tr></table>		Type and Value	Thickness <16 mm	S235JRH	235	S275J0H	275	S275J2H	355	S355J0H	S355J2H																																							
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Impact resistance (J)	<table><tr><th rowspan="2">Type and Value</th><th colspan="3">Test temperature</th></tr><tr><th>-20°C</th><th>0°C</th><th>20°C</th></tr><tr><td>S235JRH</td><td>-</td><td>-</td><td>27</td></tr><tr><td>S275J0H</td><td>-</td><td>27</td><td>-</td></tr><tr><td>S275J2H</td><td>27</td><td>-</td><td>-</td></tr><tr><td>S355J0H</td><td>-</td><td>27</td><td>-</td></tr><tr><td>S355J2H</td><td>27</td><td>-</td><td>-</td></tr></table>	Type and Value	Test temperature			-20°C	0°C	20°C	S235JRH	-	-	27	S275J0H	-	27	-	S275J2H	27	-	-	S355J0H	-	27	-	S355J2H	27	-	-																							
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Weld ability	<table><tr><th>Type and Value</th><th>CEV % Max.</th></tr><tr><td></td><td>Normal thickness (mm) ≤40</td></tr><tr><td>S235JRH</td><td>0,35</td></tr><tr><td>S275/J0H/J2H</td><td>0,40</td></tr><tr><td>S355/J0H/J2H</td><td>0,45</td></tr></table>	Type and Value	CEV % Max.		Normal thickness (mm) ≤40	S235JRH	0,35	S275/J0H/J2H	0,40	S355/J0H/J2H	0,45																																								
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Signed for and on behalf of the manufacturer:

R.C.M. Custers
QHSE Manager
Veghel, 24-10-2022

