

Declaration of Performance

DOP cert number: TKMN002

1. Product name and identification code :

Steel hollow section, EN 10210- 1&2 : 2006

Type:

Shape of cross sections	Dimensions	Steel designation
Circular	Diameter 48.3 to 457 mm Thickness 4 to 16 mm	S235JRH, S275J0H, S355J0H, S355J2H, S355K2H, S355NH, S355NLH
Square	Dimension 40x40 to 400x400 mm Thickness 4 to 16 mm	S235JRH, S275J0H, S355J0H, S355J2H, S355K2H, S355NH, S355NLH
Rectangular	Dimension 60x40 to 500x300 mm Thickness 4 to 16 mm	S235JRH, S275J0H, S355J0H, S355J2H, S355K2H, S355NH, S355NLH
Elliptical	Dimension 120x60 to 480x240 mm Thickness 4 to 14.2 mm	S235JRH, S275J0H, S355J0H, S355J2H, S355K2H, S355NH, S355NLH

2. Name and Manufactures address :

ThyssenKrupp Materials Nederland B.V.

Taylorweg 7
5466 AE Veghel
(NL)

3. Intended use :

To be used in Fabricated, Bolted and Riveted Structures

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

System 2+

5. Notified body:

KIWA, notified body No. 0620

Assessment and evaluation of factory production control for the system 2+

Factory Production Control certificate 0620_CPR-86515/01, issued on 9th January 2015.

The performance of the product identified in point 1 are in line with the performance declared in point 6.

This declaration of performance is issued under the sole responsibility of the manufacturer indicated in point 2.



ThyssenKrupp Materials Nederland

6. Declared performance:

Essential characteristics	Performance	Harmonised technical specification																																											
Dimensional and shape tolerances	According to EN 10210-1 & 2 : 2006, chapter 6	EN 10210-1&2: 2006																																											
Elongation (%)	<table border="1"> <thead> <tr> <th>Grade</th> <th>Minimal Elongation (A)</th> </tr> </thead> <tbody> <tr><td>S235JRH</td><td>26%</td></tr> <tr><td>S275J0H</td><td>23%</td></tr> <tr><td>S355J0H</td><td>22%</td></tr> <tr><td>S355J2H</td><td>22%</td></tr> <tr><td>S355K2H</td><td>22%</td></tr> <tr><td>S355NH</td><td>22%</td></tr> <tr><td>S355NLH</td><td>22%</td></tr> </tbody> </table>		Grade	Minimal Elongation (A)	S235JRH	26%	S275J0H	23%	S355J0H	22%	S355J2H	22%	S355K2H	22%	S355NH	22%	S355NLH	22%																											
Grade	Minimal Elongation (A)																																												
S235JRH	26%																																												
S275J0H	23%																																												
S355J0H	22%																																												
S355J2H	22%																																												
S355K2H	22%																																												
S355NH	22%																																												
S355NLH	22%																																												
Tensile strength (MPa)	<table border="1"> <thead> <tr> <th>Grade</th> <th>Thickness < 3 mm</th> <th>Thickness ≥ 3 mm</th> </tr> </thead> <tbody> <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>S355J0H</td><td>510-680</td><td>470-630</td></tr> <tr><td>S355J2H</td><td>510-680</td><td>470-630</td></tr> <tr><td>S355K2H</td><td>510-680</td><td>470-630</td></tr> <tr><td>S355NH</td><td colspan="2">470-630</td></tr> <tr><td>S355NLH</td><td colspan="2">470-630</td></tr> </tbody> </table>	Grade	Thickness < 3 mm	Thickness ≥ 3 mm	S235JRH	360-510	360-510	S275J0H	430-580	410-560	S355J0H	510-680	470-630	S355J2H	510-680	470-630	S355K2H	510-680	470-630	S355NH	470-630		S355NLH	470-630																					
Grade	Thickness < 3 mm	Thickness ≥ 3 mm																																											
S235JRH	360-510	360-510																																											
S275J0H	430-580	410-560																																											
S355J0H	510-680	470-630																																											
S355J2H	510-680	470-630																																											
S355K2H	510-680	470-630																																											
S355NH	470-630																																												
S355NLH	470-630																																												
Yield Strength (MPa)	<table border="1"> <thead> <tr> <th>Grade</th> <th>Thickness ≤ 16 mm</th> </tr> </thead> <tbody> <tr><td>S235JRH</td><td>235</td></tr> <tr><td>S275J0H</td><td>275</td></tr> <tr><td>S355J0H</td><td>355</td></tr> <tr><td>S355J2H</td><td>355</td></tr> <tr><td>S355K2H</td><td>355</td></tr> <tr><td>S355NH</td><td>355</td></tr> <tr><td>S355NLH</td><td>355</td></tr> </tbody> </table>	Grade	Thickness ≤ 16 mm	S235JRH	235	S275J0H	275	S355J0H	355	S355J2H	355	S355K2H	355	S355NH	355	S355NLH	355																												
Grade	Thickness ≤ 16 mm																																												
S235JRH	235																																												
S275J0H	275																																												
S355J0H	355																																												
S355J2H	355																																												
S355K2H	355																																												
S355NH	355																																												
S355NLH	355																																												
Impact Strength (J)	<table border="1"> <thead> <tr> <th rowspan="2">Grade</th> <th colspan="4">Test temperature</th> </tr> <tr> <th>-50 °C</th> <th>-20 °C</th> <th>0 °C</th> <th>20 °C</th> </tr> </thead> <tbody> <tr><td>S235JRH</td><td>-</td><td>-</td><td>-</td><td>27</td></tr> <tr><td>S275J0H</td><td>-</td><td>-</td><td>27</td><td>-</td></tr> <tr><td>S355J0H</td><td>-</td><td>-</td><td>27</td><td>-</td></tr> <tr><td>S355J2H</td><td>-</td><td>27</td><td>-</td><td>-</td></tr> <tr><td>S355K2H</td><td>-</td><td>40</td><td>-</td><td>-</td></tr> <tr><td>S355NH</td><td>-</td><td>40</td><td>-</td><td>-</td></tr> <tr><td>S355NLH</td><td>27</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Grade	Test temperature				-50 °C	-20 °C	0 °C	20 °C	S235JRH	-	-	-	27	S275J0H	-	-	27	-	S355J0H	-	-	27	-	S355J2H	-	27	-	-	S355K2H	-	40	-	-	S355NH	-	40	-	-	S355NLH	27	-	-	-
Grade	Test temperature																																												
	-50 °C	-20 °C	0 °C	20 °C																																									
S235JRH	-	-	-	27																																									
S275J0H	-	-	27	-																																									
S355J0H	-	-	27	-																																									
S355J2H	-	27	-	-																																									
S355K2H	-	40	-	-																																									
S355NH	-	40	-	-																																									
S355NLH	27	-	-	-																																									
Weldability	Conform chapter 6.5, 6.7.1 and tables A.2 and B.2 of 10210-1:2006																																												
Durability	Conform chapter 6.7.2 of 10210-1:2006																																												

Signed for and on behalf of the manufacturer:

A.W.G. Enzerink
 Manager QHSE
 Veghel, 14th January 2015