	<b>Qualification Test Record for 1.4410 bars Ø 20 to 75 mm NORSOK M-650</b>	QTR N° : SMQ 822824
		Rev. N° : A
		Date : 18/02/2020
		Page : 1 / 8

<i>Manufacturer name address/Web page:</i>	<b>UGITECH S.A.</b> Avenue Paul Girod, F-73403 UGINE Cedex, France      www.ugitech.com
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<i>Reference standard</i>	<b>NORSOK M-650 Rev. 4</b>
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<i>Material designation and MDS No.:</i>	<b>Grade and specification: Type 25Cr duplex</b> <b>STAINLESS STEEL DUPLEX 1.4410 (EN 10088) X2CrNiMoN25-7-4</b> <b>ASTM A479 Grade UNS S 32750</b>  <b>In compliance with the requirements of NORSOK MDS D57, Rev. 6.</b>
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<i>Manufacturing summary doc. No.:</i>	<b>Flow chart: Synoptique AF 98</b>	<i>Rev. No.:</i> <b>dated 30/04/2018</b>
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<i>Products and manufacturing process:</i>	<u><b>Melting process:</b></u> Electric arc furnaces Refining AOD Continuous cast Heat from Ugine Melting shop  <u><b>Hot rolling process:</b></u> Bars diameter Ø 20 to 75 mm
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<i>Mandatory conditions and sub-contractors:</i>	<u><b>Condition:</b></u> TT4 furnaces n° 26 or n° 27 for solution heat treatment Temperature 1060°C to 1100°C, water + polymer quenching Time between furnace and quenching ≤ 90 s Temperature of water + polymer bath ≤ 70°C
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<i>Other information:</i>	
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<i>Qualification expires:</i>	<b>February, 2025</b>
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<b>Tested and Qualified Thickness and Weight</b>					
<i>Products and manufacturing process:</i>	<i>Test record No.</i>	<i>Tested thickness mm (bar OD)</i>	<i>Qualified thickness mm (bar OD)</i>	<i>Test bar weight kg</i>	<i>Qualified weight kg</i>
<b>Bars diameter Ø 20 to 75 mm</b>	<b>PRJ1110012761-1/2</b>	<b>75 mm</b>	<b>20 – 75 mm</b>	<b>n/a</b>	<b>n/a</b>

<b>Qualification/acceptance signatures</b>		
<i>Manufacturer:</i>  <b>UGITECH</b>	<i>Prepared by/Date:</i> <b>O. MARTEL</b> <b>18/02/2020</b> 	<i>Checked by/Date:</i> <b>G. PELLISSIER</b> <b>18/02/2020</b> 

The manufacturer and this QTR are evaluated and found to be in compliance with the requirements of NORSOK M-650 for supply of the above listed products and materials.  
*This acceptance does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the essential variables of NORSOK M-650.*

<i>Qualified/Accepted by:</i> <b>Lloyd's Register EMEA,</b> <b>Tour Swiss Life</b> <b>1, boulevard Vivier Merle</b> <b>Fr-69443 Lyon cedex 03</b>	<i>Signature/Date:</i> 	
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UGITECH



**Qualification Test Record for 1.4410  
bars Ø 75,01 to 120 mm  
NORSOK M-650**

QTR N° : SMQ 822823

Rev. N° : A

Date : 18/02/2020

Page : 1 / 8

Manufacturer name  
address/Web page:

**UGITECH S.A.**

Avenue Paul Girod, F-73403 UGINE Cedex, France

www.ugitech.com

Reference standard

NORSOK M-650 Rev. 4

Material designation  
and MDS No.:

Grade and specification: Type 25Cr duplex

STAINLESS STEEL DUPLEX 1.4410 (EN 10088) X2CrNiMoN25-7-4

ASTM A479 Grade UNS S 32750

In compliance with the requirements of NORSOK MDS D57, Rev. 6.

Manufacturing summary  
doc. No.:

Flow chart: Synoptique AF 98Flow chart: Synoptique AF 98

Products and  
manufacturing process:

Melting process:

Electric arc furnaces

Refining AOD

Continuous cast Heat from Ugine Melting shop

Hot rolling process:

Bars diameter Ø 75,01 to 120 mm

Mandatory conditions  
and sub-contractors:

Condition:

TT4 furnaces n° 26 or n° 27 for solution heat treatment

Ø &gt; 75 mm : temperature 1090°C to 1130°C, water quenching

Time between furnace and quenching ≤ 90 s

Temperature of water bath ≤ 50°C

Other information:

Qualification expires:

February, 2025

### Tested and Qualified Thickness and Weight

Products and manufacturing process:	Test record No.	Tested thickness mm (bar OD)	Qualified thickness mm (bar OD)	Test bar weight kg	Qualified weight kg
Bars diameter Ø 75,01 to 120 mm	SMQ 4780 rev. C	120 mm	75,01 - 120 mm	n/a	n/a

### Qualification/acceptance signatures

Manufacturer:

**UGITECH**Prepared by/Date: **O.MARTEL**  
18/02/2020

Checked by/Date: **G. PELLISSIER**  
18/02/2020

The manufacturer and this QTR are evaluated and found to be in compliance with the requirements of NORSOK M-650 for supply of the above listed products and materials.

*This acceptance does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the essential variables of NORSOK M-650.*

Qualified/Accepted by:

**Lloyd's Register EMEA,  
Tour Swiss Life  
1, boulevard Vivier Merle  
Fr-69443 Lyon cedex 03**

Signature/Date:

