



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122990 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV3183720910

Quantity: 25

PRODUCT

Brand: ESAB
Description: OK Tigrod 308LSi 2.4x1000 5kg
Item number: **161224R150**

CLASSIFICATIONS

EN ISO 14343-A W 19 9 L Si
SFA/AWS A5.9 ER308LSi
Werkstoffnummer ~1.4316

CHEMICAL COMPOSITION

**Actual results
acc to EN 10204 - 3.1**

Wire/strip

Auxiliary:

C	0.02%
Si	0.72%
Mn	2.0%
P	0.02%
S	0.01%
Cr	19.6%
Ni	9.7%
Mo	0.08%
Cu	0.10%
N	0.08%
Ferrite FN	8

MECHANICAL PROPERTIES

**Typical data
acc to EN 10204 - 2.2**

Standard:
Auxiliary:
Condition:

TENSILE

<u>Rp0.2</u>	<u>Rm</u>	<u>A4-A5</u>
450 MPa	620 MPa	36 %

IMPACT

<u>Temp</u>	<u>KV</u>
-60 °C	85 J
-196 °C	100 J

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236 , 3800 CE Amersfoort , Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Mikael Mimer

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122991 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334057853

Quantity: 4

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.0mm 250kg
Item number: **1251109320**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.08%
Si	0.84%
Mn	1.46%
P	0.010%
S	0.017%
Cr	0.04%
Ni	0.02%
Mo	0.01%
Cu	0.10%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122992 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334057845

Quantity: 56

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 0.8mm 15kg
Item number: **1251087700**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.08%
Si	0.86%
Mn	1.49%
P	0.011%
S	0.018%
Cr	0.05%
Ni	0.01%
Mo	< 0.01%
Cu	0.11%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236 , 3800 CE Amersfoort , Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122993 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV316053943

Quantity: 27

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.0mm 18kg
Item number: **1251107710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.07%
Si	0.89%
Mn	1.51%
P	0.011%
S	0.015%
Cr	0.05%
Ni	0.02%
Mo	< 0.01%
Cu	0.14%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122994 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334056828

Quantity: 56

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.0mm 18kg
Item number: **1251107710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.07%
Si	0.91%
Mn	1.52%
P	0.013%
S	0.016%
Cr	0.06%
Ni	0.02%
Mo	< 0.01%
Cu	0.11%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122995 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334057845

Quantity: 28

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.0mm 18kg
Item number: **1251107710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.08%
Si	0.86%
Mn	1.49%
P	0.011%
S	0.018%
Cr	0.05%
Ni	0.01%
Mo	< 0.01%
Cu	0.11%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122996 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334058911

Quantity: 56

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.0mm 18kg
Item number: **1251107710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.07%
Si	0.89%
Mn	1.49%
P	0.015%
S	0.012%
Cr	0.06%
Ni	0.03%
Mo	0.01%
Cu	0.13%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236 , 3800 CE Amersfoort , Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122997 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV325311124

Quantity: 5

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.2mm 18kg
Item number: **1251127710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.07%
Si	0.84%
Mn	1.54%
P	0.013%
S	0.019%
Cr	0.04%
Ni	0.02%
Mo	< 0.01%
Cu	0.14%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122998 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV333057848

Quantity: 56

PRODUCT

Brand: ESAB
Description: OK Autrod 12.51 1.2mm 18kg
Item number: **1251127710**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21 (EN 439)
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.07%
Si	0.89%
Mn	1.49%
P	0.015%
S	0.016%
Cr	0.06%
Ni	0.01%
Mo	< 0.01%
Cu	0.10%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

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Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23122999 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV333824623

Quantity: 5

PRODUCT

Brand: ESAB
Description: OK Tigrod 12.64 1.6x1000mm 5kg
Item number: **126416R150**

CLASSIFICATIONS

EN ISO 636-A W 46 3 W4Si1
EN ISO 636-A W4Si1
SFA/AWS A5.18 ER70S-6

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: I1
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
525 MPa	595 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.09%
Si	0.92%
Mn	1.72%
P	0.011%
S	0.007%
Cr	0.03%
Ni	0.01%
Mo	< 0.01%
Cu	0.05%
V	< 0.01%
Al	< 0.01%
Ti+Zr	0.01%

COMMENTS

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23123000 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV334058918B

Quantity: 56

PRODUCT

Brand: ESAB
Description: OK AristoRod 12.50 1.0mm 18kg
Item number: **1A50106910**

CLASSIFICATIONS

EN ISO 14341-A G 3Si1
EN ISO 14341-A G 38 3 C1 3Si1
EN ISO 14341-A G 42 4 M21 3Si1
SFA/AWS A5.18 ER70S-6
CAN/CSA-ISO 14341 B-G 49A 3 C G6
JIS Z 3312 YGW 12 (C1), (items ending with H)

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard: EN
Auxiliary: M21
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
470 MPa	560 MPa	26 %

IMPACT

<u>Temp</u>	<u>KV</u>
-30 °C	70 J
-40 °C	60 J

COMMENTS

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.08%
Si	0.84%
Mn	1.48%
P	0.014%
S	0.013%
Cr	0.05%
Ni	0.02%
Mo	0.01%
Cu	0.07%
V	< 0.01%
Al	< 0.001%
Ti+Zr	0.01%

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23123001 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV33400C5MC1

Quantity: 100

PRODUCT

Brand: ESAB
Description: OK Tigrod 316LSi 2.0x1000 5kg
Item number: **163220R150**

CLASSIFICATIONS

EN ISO 14343-A W 19 12 3 L Si
SFA/AWS A5.9 ER316LSi
Werkstoffnummer ~1.4430

MECHANICAL PROPERTIES

Typical data
acc to EN 10204 - 2.2

Standard:
Auxiliary:
Condition:

TENSILE

<u>Rp0.2</u>	<u>Rm</u>	<u>A4-A5</u>
450 MPa	600 MPa	35 %

IMPACT

<u>Temp</u>	<u>KV</u>
+20 °C	175 J
-110 °C	150 J

COMMENTS

CHEMICAL COMPOSITION

Actual results
acc to EN 10204 - 3.1

Wire/strip

Auxiliary:

C	0.02%
Si	0.99%
Mn	1.7%
P	0.02%
S	0.01%
Cr	18.2%
Ni	11.9%
Mo	2.6%
Cu	0.08%
N	0.055%
Ferrite FN	7

Product supplied under a QA Programme fulfilling the EN ISO 9001 standard.

This certificate is produced electronically and is valid without signature.

Please refer any queries to:

Esab Nederland BV - P.O. Box 2236, 3800 CE Amersfoort, Nederland

Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Mikael Mimer

Product Manager



INSPECTION CERTIFICATE (3.1) - Chemical analysis TEST REPORT (2.2) - Mechanical properties

Date: 2013-09-17

Certificate number: **EC23123002 rev. 0**

Our order: 683465
Our reference: Nicole Javaux France
Customer number: NLB00152
Customer order date: 20130912

Your order: **20031148054**
Your reference:
Your fax number:
Your e-mail:

Invoice address
ZEVIJ B.V. LASAULEC CENTRAAL HVEEN
POSTBUS 447
4900 AK OOSTERHOUT

Receiver of certificate

Delivery address
LASAULEC CENTRAAL B.V.
Lidhr. 400
KUPER 2
8447 GK HEERENVEEN

DELIVERY

Lot number: PV308050042

Quantity: 2

PRODUCT

Brand: ESAB
Description: OK Gasrod 98.70 3.0x1000mm 5kg
Item number: **987030R150**

CLASSIFICATIONS

EN 12536 OII
SFA/AWS A5.2 R60

CHEMICAL COMPOSITION

**Actual results
acc to EN 10204 - 3.1**

Wire/strip

Auxiliary:

C	0.09%
Si	0.19%
Mn	0.98%
P	0.009%
S	0.013%
Cr	0.06%
Ni	< 0.1%
Mo	< 0.1%
Cu	0.08%
V	< 0.01%

MECHANICAL PROPERTIES

**Typical data
acc to EN 10204 - 2.2**

Standard:
Auxiliary:
Condition:

TENSILE

<u>ReL</u>	<u>Rm</u>	<u>A4-A5</u>
325 MPa	415 MPa	22 %

COMMENTS

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Validation - Chemical Analysis

Milan Macek

Quality Manager

Validation - Others

Per-Erik Andersson

Product Manager