



| | | Lasmethodebeschrijving FABRAP - TRAINING | | | | WPS Nr.: 002-GJS Rev.: 0 Blz x/y: 1/2 Datum: 15-05-19 QC-Lead: GEJO | | | | | | | | | | | | | |
|--|-----------------------|---|-----------------|--|-----------------------|---|--------------|---|------------------|---------------|-----|---|------------------|---------------|-----|---|--|--|--|
| Klantnaam: GEJOsft Projectnaam: FABRAP - TRAINING Ordernummer Klant: 0 Ordernummer Fabrikant: 1987-2019 | | | | Lasnaadvorm QW-402 WL23/1 | | | | | | | | | | | | | | | |
| Toepassing: Nvt Proces-(sen) EN: 141 Proces-(sen) ASME: GTAW LMK Nr: FRT-001 Tekening / Object Nr: Nvt. | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Nr</th> <th>Basismateriaal QW-403</th> <th>Dikte Range QW-403</th> <th>Pijpdiameter</th> </tr> <tr> <td>1</td> <td>TP316L/ASTM-A312</td> <td>1,50-14,28 mm</td> <td>NVT</td> </tr> <tr> <td>2</td> <td>TP316L/ASTM-A312</td> <td>1,50-14,28 mm</td> <td>NVT</td> </tr> </table> | | | | Nr | Basismateriaal QW-403 | Dikte Range QW-403 | Pijpdiameter | 1 | TP316L/ASTM-A312 | 1,50-14,28 mm | NVT | 2 | TP316L/ASTM-A312 | 1,50-14,28 mm | NVT | Las volgorde QW-402 WL23/5 | | | |
| Nr | Basismateriaal QW-403 | Dikte Range QW-403 | Pijpdiameter | | | | | | | | | | | | | | | | |
| 1 | TP316L/ASTM-A312 | 1,50-14,28 mm | NVT | | | | | | | | | | | | | | | | |
| 2 | TP316L/ASTM-A312 | 1,50-14,28 mm | NVT | | | | | | | | | | | | | | | | |
| Laskantvoorbewerking: Grinding / Brushing Schoonmaken voor/tijdens lassen: Grinding / Brushing Opbouw: Zie Naadvorm Voorbereiding tegenlaag: Both Voorbewerking tegenlaag: N.A. | | | | | | | | | | | | | | | | | | | |
| VOORWARMEN; TEMPERATUREN QW-406 Voorwarm-/werkstuktemp, min (°C): 10 Methode: Prop. Brander/ Burner Controle: Digital temperature meter Tussenlaag-(max)Handhaaftemp(°C): 150 /- Controle: Digital temperature meter | | | | | | | | | | | | | | | | | | | |
| Ref. Code: ASME IX | | LASVOLGORDE | | | | | | | | | | | | | | | | | |
| Betreft | | GL/Root | VL/Fill | - | - | - | - | | | | | | | | | | | | |
| Snoernummer | | A1 | A2 +n | - | - | - | - | | | | | | | | | | | | |
| Laspositie QW-405 | | ALL | ALL | - | - | - | - | | | | | | | | | | | | |
| Lasproces QW-408.126 | | GTAW | GTAW | - | - | - | - | | | | | | | | | | | | |
| Lastoevoegmateriaal merk QW-527 | | LINCOLN | LINCOLN | - | - | - | - | | | | | | | | | | | | |
| Lastoevoegmateriaal type QW-527 | | LNT-316LSI | LNT-316LSI | - | - | - | - | | | | | | | | | | | | |
| Diameter lastoevoegmateriaal QW-404.129 | | 2,0 | 2,0 | - | - | - | - | | | | | | | | | | | | |
| Laspoeder merk QW-527 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Laspoeder type QW-527 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Beschermgas type QW-408.124 | | I1 | I1 | - | - | - | - | | | | | | | | | | | | |
| Beschermgas samenstelling (%) QW-408.124 | | 99,996% Argon | 99,996% Argon | - | - | - | - | | | | | | | | | | | | |
| Gasdebiet, min-max (L/min) QW-408.126 | | 8 - 12 | 8 - 12 | - | - | - | - | | | | | | | | | | | | |
| Cup diameter (mm) QW-533 | | 10,00 | 10,00 | - | - | - | - | | | | | | | | | | | | |
| Plasmagas samenstelling QW-531 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Gasdebiet min-max (L/min) QW-408.126 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Wolframelectrode (ASME) QW-409.135 | | Wla 15/EWLa-1.5 | Wla 15/EWLa-1.5 | - | - | - | - | | | | | | | | | | | | |
| Wolframelectrode diameter (mm) QW-532 | | 2,40 | 2,40 | - | - | - | - | | | | | | | | | | | | |
| Backinggas (Ja / Nee) QW-531 | | Ja | Ja | - | - | - | - | | | | | | | | | | | | |
| Backinggas samenstelling (%) QW-408.128 | | 99,996% Argon | 99,996% Argon | - | - | - | - | | | | | | | | | | | | |
| Backinggas debiet, min-max (L/min) QW-408.126 | | 10 - 15 | 10 - 15 | - | - | - | - | | | | | | | | | | | | |
| Polariteit (DC / AC) QW-409.127 | | DC, el.neg. | DC, el.neg. | - | - | - | - | | | | | | | | | | | | |
| Stroomsterkte, min-max (A) QW-532 | | 60 - 70 | 80 - 100 | - | - | - | - | | | | | | | | | | | | |
| Spanning, min-max (V) QW-532 | | 12,00 - 13,00 | 13,20 - 14,00 | - | - | - | - | | | | | | | | | | | | |
| Druppelovergang QW-409.125 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Piekstroom, spanning (A / V) QW-532 | | 0,00 | 0,00 | - | - | - | - | | | | | | | | | | | | |
| Basisstroom (A) QW-532 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Pulsfrequentie (Hz) QW-532 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Balans (%) QW-132 | | - | - | - | - | - | - | | | | | | | | | | | | |
| Voortloopsnelheid, min-max (cm / min) QW-409.124 | | 3,00 - 4,00 | 5,00 - 6,00 | - | - | - | - | | | | | | | | | | | | |
| Zwaaien (ja/nee), max zwaai breedte (mm) QW-410.124 | | Ja 12,00 | Ja 12,00 | - | - | - | - | | | | | | | | | | | | |
| Minimum uittrek lengte (mm) | | - | - | - | - | - | - | | | | | | | | | | | | |
| H.I. min-max (Kj/mm) QW-409.124 | | 1,08 - 1,82 | 1,06 - 1,68 | - | - | - | - | | | | | | | | | | | | |
| Fabrikant: FABRAP | | Klant: GEJOsft | | Geaut. Instantie: Lloyd's Register | | | | | | | | | | | | | | | |
| Accoord | | Accoord | | Ref. Nee | | Witnessed Nee | | | | | | | | | | | | | |
| Datum: 15-04-2019 | | Datum: 15-04-2019 | | Datum | | Examined Nee | | | | | | | | | | | | | |

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|--|------------------|---|--------------|--|------------|---|--|
|  | | Lasmethodebeschrijving FABRAP - TRAINING | |  | | WPS Nr.: 002-GJS Rev.: 0 Blz x/y: 2/2 Datum: 15-05-19 QC-Lead: GEJO | |
| NR. | Basismateriaal | P. Nr QW-403 | G. Nr QW-403 | S. Nr QW-403 | AWS QW-403 | EN/ISO QW-406 | |
| 1 | TP316L/ASTM-A312 | 8 | 1 | - | - | 8.1 | |
| 2 | TP316L/ASTM-A312 | 8 | 1 | - | - | 8.1 | |

LASTOEVOEGMATERIAAL QW-404

| | | | | | |
|---|-------------|-------------|---|---|---|
| Betreft | GL/Root | VL/Fill | - | - | - |
| Snoernummer | A1 | A2 +n | - | - | - |
| Massief/gevulde draad QW-527 | Solid | Solid | - | - | - |
| ASME F-Nr QW-404.4 | 6 | 6 | - | - | - |
| ASME A-Nr QW-404.5 | 8 | 8 | - | - | - |
| SFA Specificatie QW-404 | 5.9 | 5.9 | - | - | - |
| AWS Classificatie QW-404.12 | ER316LSI | ER316LSI | - | - | - |
| EN ISO Codering | W19123LSI | W19123LSI | - | - | - |
| Merk | LINCOLN | LINCOLN | - | - | - |
| Type QW-404.23 | LNT-316LSI | LNT-316LSI | - | - | - |
| EN-FM-Class - Range | FM5 | FM5 | - | - | - |
| Hand/machine/half auto./automatisch | Manual | Manual | - | - | - |
| Enkelvoudig/meervoudig electrode QW-410.9 | Enkelvoudig | Enkelvoudig | - | - | - |
| daanvoersnelheid, min-max m/min | 0,00 - 0,00 | 0,00 - 0,00 | - | - | - |
| ndelen (ja / nee) QW-410.7 | Nee | Nee | - | - | - |
| Pendelbreedte, min-max (mm) QW-410 | - | - | - | - | - |
| Pendelfrequentie (Hz) QW-410 | - | - | - | - | - |

TECHNIEK QW-410

| | | | |
|--|-------------|--|------------------|
| Eén / tweezijdig lassen: | Enkelzijdig | Neergesmolten laagdikte | |
| Eén / meer snoeren per zijde QW-410.9: | Multiple | Proces (ASME) | Max. (mm) |
| Uitsteeklengte (±5mm): | 0 | - | - |
| Afstand tussen de elektroden (mm): | - | - | - |
| Hameren (Ja / Nee) QW-410.26: | Nee | - | - |
| Meesmeltend inzetstuk: | N.A. | - | - |
| Backingstrip (Ja/Nee): | Nee | - | - |
| Type backingstrip: | NVT | Minimum afstand van oppervlak tot smeltlijn bij plateren (mm) | |



WARMTEBEHANDELING NA LASSEN QW-407

| | | | |
|---------------------------------|-------|--|------|
| Toepassen (Ja / Nee): | Nee | Informatie kerftaaiheid (NIL LMK) | |
| Plaatselijk of in de oven: | nvt | LMK bij T<20°C (Ja / Nee): | Ja |
| Gloeitemperatuur, min-max (°C): | 0 / 0 | LMK temperatuur (°C): | -50 |
| Gloeitijd, min-max (min): | 0 / 0 | Dikte proefstuk LMK: | - |
| Opwarmingsnelheid, max (°C/h): | nvt | Indien kerfslagbeproeving (mm): | 5,00 |
| Afkoelingsnelheid, max (°C/h): | nvt | | |
| Eindtemperatuur, max (°C): | nvt | | |
| Procedure Ref, Nr: | nvt | | |

Aanbevolen LMK om een zo groot mogelijk geldigheidsgebied af te dekken: **NIL LMK Ref. Nr. 10-0825-A**

Opmerkingen:

01- Voor aanvang lassen, de laskanten en het lastoevoegmateriaal goed ontvetten
02- Hechtlassen volledig verwijderen
03- -
04- -
05- -
06- -
07- -
08- -
09- -
10- -

| | | | |
|------------|---|---------|---|
| Ref. Code: | ASME IX | | |
| Fabrikant: | FABRAP | Klant: | GEJO Soft |
| Accoord |  | Accoord |  |
| Datum | 15-04-2019 | Datum | 15-04-2019 |

| | | | |
|-------------------|------------------|-----------|----------|
| Geaut. Instantie: | Lloyd's Register | | |
| Ref. | Nee | Witnessed | Examined |
| | Nee | Nee | Nee |