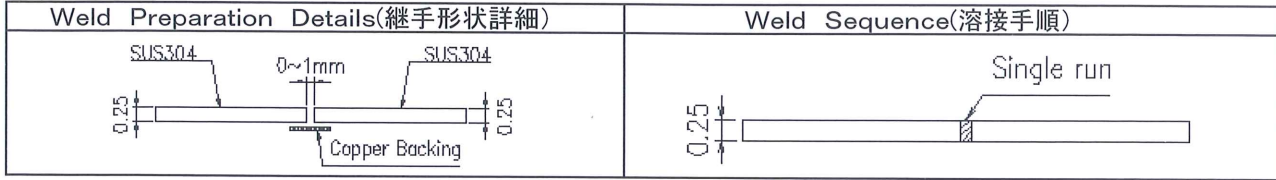


Welding Procedure Specification (WPS)

溶接施工要領書

EN15614-1

Location(場所): NANGOKU FLEXIBLE HOSE INDUSTRY CO.,LTD
 Standard : EN ISO 15614-1:2004
 Manufacturer's pWPS No: pWPS-29-9-1-PW
 Manufacturer's WPQR No: WPQR-29-9-1-PW
 Examiner or Examining body: Lloyd's Register Energy Japan
 Method of preparation and cleaning: Machining and brushing
 (開先加工方法及び手入れ) 機械加工及びブラッシング
 Parent Material Specification: SUS 304 (S. 1)
 (母材の仕様)
 Manufacturer(製造者): NANGOKU FLEXIBLE HOSE INDUSTRY CO.
 Material thickness(mm)(母材板厚): 0.25
 Outside pipe diameter(mm)(管外径): N/A
 Welding position(溶接姿勢): PA
 Mode of Metal Transfer(移行形態): N/A
 Joint Type and Weld(継手と溶接詳細): Butt weld, Single run



| Welding Details(溶接詳細) | | | | | | | | |
|-----------------------|----------------------------|--------------------------------------|--------------------|--------------------|---|-----------------------------------|--|-----------------------------|
| Run パス | Welding Process 溶接方法 | Size of Filler Material 溶加材の直径 | Current A 電流 | Voltage V 電圧 | Type of current/ Polarity 電流のタイプ/極性 | Wire Feed Speed ワイヤ送給 速度 | Run out Length / Travel Speed タブ長さ/ 溶接速度 cm/min | Heat input 入熱 J/cm |
| 1層 Single | TIG 14 | N/A | 16-18 | 8-10 | DC EN | N/A | 55-60 | 102.4- 157.1 |

Filler material designation and make: N/A
 (溶接材料の種類・品名)

Any Special Baking or Drying: N/A
 (フラックスや棒の特別な乾燥)

Backing/Gas/Flux: -shielding: Ar 99.9%
 (裏当/ガス/フラックス) (シールド用)
 -backing: Copperplate
 (裏当て用)

Gas Flow Rate—Shielding: 7ℓ/min
 (ガス流量) (シールド用)
 -Backing: N/A
 (裏当て用)

Tungsten Electrode Type/Size: Th-W /1.6mm φ
 (タングステン電極の型/寸法)

Details of Back Gouging/Backing: N/A
 (裏はつりの詳細/裏当)

Preheat Temperature: Not less than 5°C
 (予熱温度)

Interpass Temperature: N/A
 (パス間温度)

Post-heating: N/A
 (後熱温度)

Posts-Weld Heat Treatment or aging : N/A
 (溶接後熱処理又は時効処理)

(Time, Temperature, Method): N/A
 Heating and Cooling Rates): N/A
 (時間, 温度, 方法, 加熱及び冷却速度)

Other information, e.g.: N/A
 (他の情報 例)

Weaving (Maximum width for run): N/A
 (ウイービング(1パスでの最大幅))

Oscillation: amplitude, frequency, dwell time: N/A
 (オンレーション: 振幅, 回数, 停止時間)

Pulse Welding details: N/A
 (パルス溶接詳細)

Distance contact tube/work piece: N/A
 (コンタクトチューブと部材間距離)

Plasma welding details: N/A
 (プラズマ溶接詳細)

Torch angle: 85°
 (トーチ角度)

NANGOKU FLEXIBLE HOSE INDUSTRY CO.,LTD Hiroyuki Masuda , March . 23 . 2015

Manufacturer (name, signature, date)
 製造者(名前, 署名, 日付)

Hiroyuki Masuda



Welding Procedure Qualification Record form(WPQR)

Welding Procedure qualification-Test certificate

Manufacturer's WPQR No: WPQR-29-9-1-PW
製造者WPQR番号

Examiner or examining body: Lloyd's Register Energy Japan
Reference No. :

Manufacturer: NANGOKU FLEXIBLE HOSE INDSTRY CO.,LTD
製造者: 南国フレキ工業 株式会社

Address: 5-9 Sinden-kitamachi,Daitou city,Osaka center,574-0052 Japan
住所: 大阪府大東市新田北町 5-9

Code/testing standard: EN ISO 15614-1:2004
規格/検査標準

Date of welding: March . 6 . 2015
溶接実施日

Range of qualification (認証範囲)

Welding Process(es): 14 TIG welding without filler material
溶接方法

Type of joint and weld: Butt weld in plate to plate
継手タイプと溶接詳細

Parent material group(s) and sub-group(s): 8.1-8.1
母材グループ及びサブグループ

Parent Material Thickness(mm): $0.18\text{mm} \leq 0.25\text{mm} \leq 0.33\text{mm}$
母材板厚

Throat Thickness(mm): N/A
のど厚

Single run/Multi run: single run
単層/多層

Outside Pipe Diameter(mm): N/A
パイプ外径

Filler Material Designation: N/A
フィラー材の区分

Filler Material Make: N/A
フィラー材の名称

Filler Material Size: N/A
フィラー材の寸法

Designation of Shielding Gas/Flux: Argon Gas
シールドガス/フラックスの区分

Designation of Backing Gas: N/A
バックシールドガスの区分

Type of Welding Current and Polarity: DC EN
溶接電流のタイプと極性

Heat Input: N/A
ヒートインプット

Welding Positions: PA
溶接姿勢

Preheat Temperature: N/A
予熱温度

Interpass Temperature: N/A
パス間温度

Post heating: N/A
後熱

Post-Weld Heat Treatment: N/A
溶接後熱処理

Other Information: N/A
他の情報

Backing: Copper Backing
(裏当材)

Location
NANGOKU FLEXIBLE HOSE INDSTRY CO.,LTD March.23.2015
8 Factories

Date of issue

Examiner or examining body:
Lloyd's Register Energy Japan
Name,

