



# WELDING PROCEDURE SPECIFICATION

WPS: 5000-xxxx-HY80/HSLA100D1.1

REV. NO.: 0

DATE: 11/14/2011

**\*\*APPLICABILITY\*\***

WELDING PROCESS: SAW

CODE: AWS D1.1

OTHER:

SUPPORTING PQR: 5000-HY80/HSLA100

**JOINT:** This WPS shall be used in conjunction with the General Welding Standards (GWS) and Welding Fabrication Procedure (WFP) sections and criteria for joint details, repairs, NDE, inspection, etc.

Weld Joint Type: Butt

Class: Full &amp; Partial Penetration &amp; Fillets

See GWS 1-06 and WFP's for joint details.

Preparation: Machined Bevel 37.5° with 0-1/8" land

Root Opening: N/A

Backing: Metal

Backgrind Root: When required

Backing Mat.: Metal

Bkgrd Method: Gouge, Chip, Grind

GTAW Flux: N/A

Backing Retainer: No

**FILLER METALS:**

Class: Mill-100S-1

A No: N/A

SFA Class: N/A and N/A

F No: N/A and N/A

Size: .045 1/16 3/32 1/8

Insert: N/A

Insert Type: N/A

**Weld Metal Thickness Ranges:**

Flux: Type: Mil800-H

Size: N/A

AWS Root Pass: .125 thru .250

Filler Material Note:

AWS Balance: .375 thru 99

ASME Root Pass: 0 thru 0

ASME Balance: 0 thru 0

**BASE MATERIAL:**

P No: N/A

Gr No.: N/A

to P No.: N/A

Gr No.: N/A

Spec.: HY80

Grade: N/A

to Spec.: HSLA 100

Grade: N/A

Qualified Pipe Dia. Range: &gt;=

AWS: 24

ASME: 0

Qualified Thickness Range:

AWS: 0.375 thru 99

ASME: 0 thru 0

**QUALIFIED POSITIONS:**

AWS: 1G

ASME: N/A

Vert. Prog.: N/A

Preheat Min. Temp.: 200

GAS: Shielding: N/A or N/A

Interpass Max. Temp.: 400 °F

Gas Composition: N/A / N/A / N/A % N/A / N/A / N/A %

Preheat Maintenance: 200 °F

Gas Flow Rate cfh: 0 to 0 0 to 0

PWHT: Time @ °F Temp.: 0

Backing Gas/Comp: N/A N/A %

Temperature Range: N/A °F to N/A °F

Backing Gas Flow cfh: 0

Trailing Gas/Comp: N/A

N/A %

**WELDING CHARACTERISTICS:**

Current: DCEN

Tungsten Type: N/A

Transfer Mode: N/A

Ranges: Amps: 200

Tungsten Dia.: N/A

Pulsing Cycle: 0 to 0

Volts: 18

Background Current: 0

Fuel Gas: N/A

Flame: N/A

Braze Temp °F: N/A to N/A

**WELDING TECHNIQUE:** For fabrication specific requirements such as fitup, cleaning, grinding, PWHT and inspection criteria, refer to Volume 2, Welding Fabrication Procedures.

Technique: Machine

Cleaning Method: Chip/grind/file/wire brush

