





# IN-LINE WELDING HOT TAP & LINE STOP SERVICES

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Al Jubail - KSA 2022



# **IN-LINE WELDING**

#### SCOPE

 Provide any In-Line Welding service under codes: B31.3 – B31.4 – B31.8 according with API1104 & ASME Section IX

#### SOURCE

- Trained and certified in-house crew to execute any In-Line Welding Service.
- Senior Welding Engineer Certified by:
  - ✓ API
  - ✓ AWS
  - ✓ ASME

### TRAINING PROGRAM

- Program has been certified by SGS
- Welders and supervisors have been trained in:
  - ✓ API 1104
  - ✓ ASME Section IX
  - ✓ API 577
  - ✓ API 2201





### **IN-LINE WELDING**

#### **TECH DOCUMENTS**

- Complete set of PQR & WPS to execute any In-Line Welding procedure under API 1104 or ASME Section IX
- Welding Procedures WPS Available up to:
  - ✓ Materials 75.000psi Yield Strength
  - ✓ Any Diameter
  - ✓ Any Thickness

- Welding engineering department provide:
  - ✓ Welding Assessment
  - ✓ Welding Method Statement
  - ✓ Safety Welding Pressure Calculation
  - ✓ Heat Input
  - ✓ Cooling Rate
  - ✓ Hydrotest Pressure Calculation



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#### SCOPE

 Provide any scheduled or emergency Hot Tap service from 3/8" to 48"

#### MAX. OPERATING CONDITIONS

Max. Working Pressure	1480PSI @ 100°F
Max. Working Temperature	700°F @ 700 PSI
Max. Flow	Posy-Latch Pilot Drills ✓ Gas: 30.4 m/sec ✓ Liquid: 15.2 m/sec

#### APPLICABLE

PIPE MATERIAL	FLUID
Stainless Steel Carbon Steel Cast Iron Concrete Copper PVC	Natural Gas Nitrogen Steam Crude Water Fuel PGL Oil





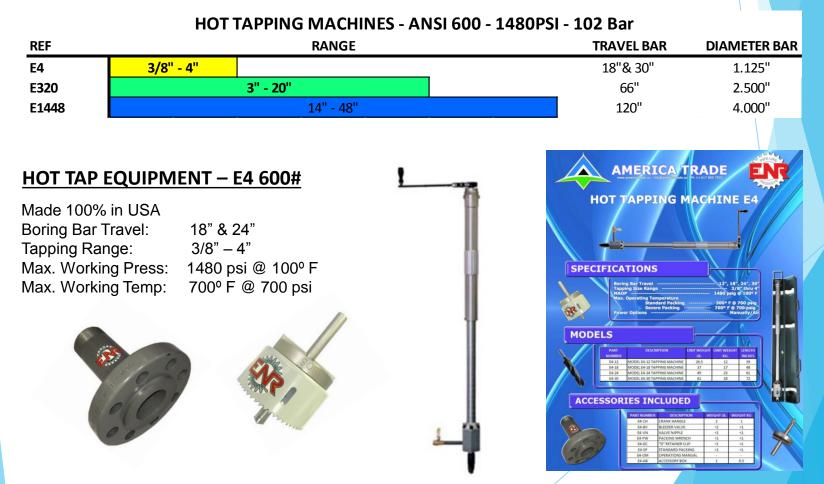
### SOURCE

- Complete set of equipment up to 24" at Jubail KSA
- Equipment made 100% in US
- International Master Technician 30 years of experience
- Trained and certified local crew

- Hot Tapping engineering department provide:
  - ✓ Hot Tap Assessment
  - ✓ Hot Tap Customized Procedure
  - ✓ Equipment Data Sheet
  - ✓ Hot Tap Calculations
  - ✓ Execution Report



#### **EQUIPMENT FLEET – JUBAIL KSA**





#### HOT TAP EQUIPMENT - E320 600#

Made 100% in USABoring Bar Travel:66"Tapping Range:3" - 20"Max. Working Press:1480 psi @ 100° FMax. Working Temp:700° F @ 700 psi









SPECIFICATIONS

Boring Bar: 66" Tapping Range: 3" - 20" Max. Operating Pressure: 1480PSI © 100°F Max. Operating Temperature: Standard Paking: 400°F © 700PSI Severe Packing: 700°F © 700PSI

The model E320 Tapping Machine is the most powerful of the "300 series" machines, providing a tapping Size Range of 3 inch thru' 20 inch, with a Boring Bar Travel of 66".

The machine is hydraulically powered, via a dedicated Diesel Hydraulic Power Unit. As all the ENR Tapping Machines, the E320 is capable of operating up to 1480 paig, so allowing safe operations on lines up to full ANSI 600 operating pressure

> The Machine is operated via dual Hi-Power Hydraulic Motors, providing Speed Control Features at the machine, for ease of use



#### HOT TAP EQUIPMENT - E1448 600#

Made 100% in USABoring Bar Travel:120"Tapping Range:14" - 48"Max. Working Press:1480 psi @ 100° FMax. Working Temp:700° F @ 700 psi







#### SCOPE

• Provide any Line Stop service from 3" to 48"

#### MAX. OPERATING CONDITIONS

Max. Working Pressure	1480PSI
Max. Working Temperature	250°C
Max. Flow	Posy-Latch Pilot Drills ✓ Gas: 28 m/sec ✓ Liquid: 15 m/sec

#### APPLICABLE

PIPE MATERIAL	FLUID
Stainless Steel Carbon Steel Cast Iron Concrete Copper PVC	Natural Gas Nitrogen Steam Crude Water Fuel PGL Oil





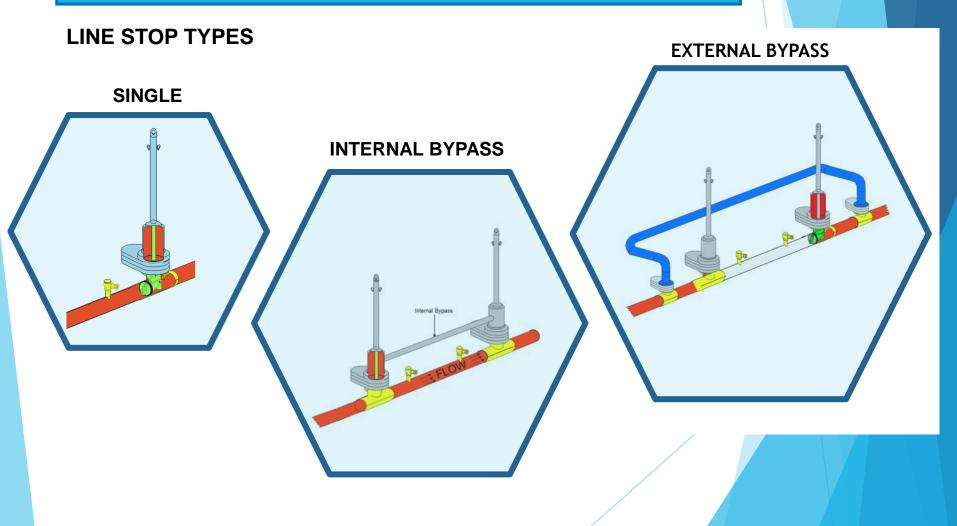
#### SOURCE

- Complete set of equipment up to 20" at Jubail KSA
- Equipment made 100% in US
- International Master Technician 30 years of experience
- Trained and certified local crew

- Hot Tapping engineering department provide:
  - ✓ Line Stop Assessment
  - ✓ Line Stop Customized Procedure
  - ✓ Equipment Data Sheet
  - ✓ Line Stop Calculations
  - ✓ Execution Report









#### EQUIPMENT FLEET – JUBAIL KSA

	HYDRAULIC ACTU	ATORS - 1480P	SI - 102 Bar		
REF	RANGE	<b>TRAVEL BAR</b>	DIAMETER BAR	MOP	
LSA-312	3" - 12"	72"	2.000"	1480 PSI	
LSA-1420	14" - 20"	140"	3.500"	1480 PSI	
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se connectors to the ors as supplied with lically specification if required REQUIREMENTS



#### **EQUIPMENT FLEET – JUBAIL KSA**

#### **SANDWICH VALVES**

Range: 4" – 20" Pressure: ANSI 600# - 1480PSI Made 100% in USA

#### **PIVOTING PLUGGING HEAD**

Range: 3" – 20" Pressure: 1500PSI

#### LINE STOP HOUSINGS

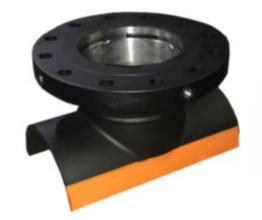
Range: 4" – 20" Pressure: ANSI 600# - 1480PSI Available: 3 Way



# FITTING

### FITTINGS

Type: Hot Tap - Line Stop - Threaded Size: 4" – 48" Available: ANSI150/300/600/900 Design Codes: B31.1/B31.3/B31.4/B31.8 Lock O-Ring: Buna N, Viton, Aflax, EPDM NDE Test: X-Ray Report



HOT TAP FITTING	LINE STOP FITTING	THREADED FITTING	0
Standard	Standard	Threadlock / Weldolet	
3Way	3Way	Threadlock 3Way / Weldolet 3Way	
Nozzle	Spherical	TOR 2"	
Spherical	Completion	* Bronze	
45° Inclination	* Standard	* Cust	1
	* Scarfed Nipple	* Steel	



# FITTING

#### SOURCE

- ✓ Design 100% in USA
- ✓ Fabrication in-house Jubail KSA
- ✓ Customized Fittings Made 100% in our plant in USA

- ✓ Design Package
- ✓ Calculation Package
- ✓ MTR's
- ✓ Xray Report
- ✓ Hydrotest Available

