

**MAXIMISING UPTIME** 



## **SERVICES**

Onsite Machining • Pipe Cold Cutting and Beveling • Cold and Hot Bolting FURMANITE-IPSCO Hot Tapping • "TREVITEST" Online Safety/Relief Valve Testing CTI – Tube Insert • Online Leak Saling • Composite Repair

## **ADVANTAGES**

Local Availability, Quick Responses, International Support, Wide range of Services, Vast Experiences



# **ONSITE MACHINING**







Horisontal

ontal

Vertical

- Heat Exchangers, flange connections, valve seat, manways (round/oval), etc.

Overhead

- Orientation: backface, overhead, vertical, horisontal
- Mounting:

FLANGE FACING

- Inside mounting
- Outside mounting
- Up to 120 inch diameter and more



Backface

Compressor Seat Repair

**Exchanger Partition Milling** 

#### **MILLING**

- H/Exchanger division plates, bedplates, pedestal tracks, key ways
- XY Milling machine available



XY Milling Machine

80

## **RELATED SERVICES**

Journal Turning, Drilling, Trepanning, Fine Boring and Reaming, Grinding and Polishing, Stud drilling

Make: Furmanite - SILK

# PIPE COLD CUTTING and BEVELING





### **SERVICE**

Externally mounted portable pipe cutting and beveling system.

- Cuts dan bevels pipe of any wall thickness and any size
- Materials incluse: Carbon steel, Steel alloys, Hastalloys, Inconels
- Low Clearance operation
- Precise feed for controlled cutting

Make: Wachs

# **COLD and HOT BOLTING**





#### **SERVICE**

**Hydraulic Torque Wrench – A** simple and safe method for ensuring controlled tightening and loosening of bolts.

- Electric / Pneumatic driven hydraulic power pack
- Standard Socket type and Cassette type for Low Clearance operation
- Wide range of sizes

Make: Hytorc

# **HOT TAPPING**









#### SERVIC E

Drilling machine to cut a hole into an inservice, under-pressure piping system.

- Hot Tapping, Line Stopping
- Split Mechanical Pipeline Hot Tap Fitting
- Land and Sub Sea service

#### Furmanite IPSCO

## **HOT TAP MACHINE and ACCESSORIES**

- IP-100 (from ½"-4")
- IP-152 (from 3″-6″)
- IP-304 (from 3" 12")
- IP-406 (from 3″-16″)
- IP-508 (from 3" 20")

#### **APPLICATION S**

Power generation, Offshore oil and gas production facilities and pipelines, Refineries and petrochemical plants, Oil and Gas transmission and dist. pipelines

Make: Furmanite - IPSCO

# **TREVITEST**









## **SERVIC E**

Furmanite patented Safety /Relief Valve Testing System under normal operating condition

## **ADVANTAGES**

- No plant downtime required
- Less time required to commission the plant after shutdown
- Only valves that require an overhaul need to be removed from the line Most spring loaded valves including welded-in valves can be tested online
- No need for temperature compensation for set pressure

# CTI TUBE INSERTS















CTI developed a tube repair technique that today is recognized as the most widely used cost-effective system.

## CTI Shield/Seal™

Inlet-end erosion, Stress Corrosion Cracking, crevice corrosion or any problems related to the tube-ends.

### **CTI Full Length Tube Liners™**

Some exchangers suffer from full-length problems. CTI Full Length Tube Liners $^{\rm IM}$  can be a very attractive alternative to a partial or full retube.

CTI Industries - www.cti-ind.com

# **FURMANITE ONLINE LEAK SEALING**



Large flange connection



Valve Gland



Pipe body



Small flange connection



Straight pipe / Elbow



FurmaSeal high pressure self-sealing repair clamp



Split Sleeve Repair Clamp (SSRC)

#### ONLINE LEAK SEALING

Pioneering leak-sealing technology and unrivalled onsite service, Furmanite gives you 'The Standard' in online leak sealing.

- Sealing without plant stop.
- Temp. from sub-zero to 600°C
- Pressure up to +200 kg/cm2
- Sealing all kinds of media leaks (steam, chemical, gas)
- Land, Subsea

### **Applications**

- Flange connections
- Elbow, tee, union, straight pipe
- Valve gland (operable after repair)
- Other non standard constructions

# FURMASEAL SPLIT SLEEVE REPAIR CLAMPS (SSRC)

- Bolted Self Sealing Pipeline Repair Clamps
- Split Sleeve Bolted Mechanical Hot tapping Fittings

# **FURMANITE COMPOSITE REPAIR**









# SERVIC E

- Permanent repairs
- Equipment longevity
- Structural strengthening and integrity
- Minimal impact to productivity

## **ADVANTAGES**

- Pressure retention capability to 3,072 PSI (209 bar)
- Reliable at temperatures from 13°F to 320°F (-25°C to 160°C)
- May be applied in confined spaces
- Provides leak sealing capability
- Materials conform to irregular shapes, formed to shape on site
- Up to ten times stronger than steel
- Non corroding

### **APPLICATION S**

Piping, Tanks, Pressure valves, Caisson, Structural components