

TTR SERVICES PROFILE



Vung tau 2022



VISION - MISSION - CORE VALUE

VISION

Our services becomes the solution of trust for customers.

MISSION

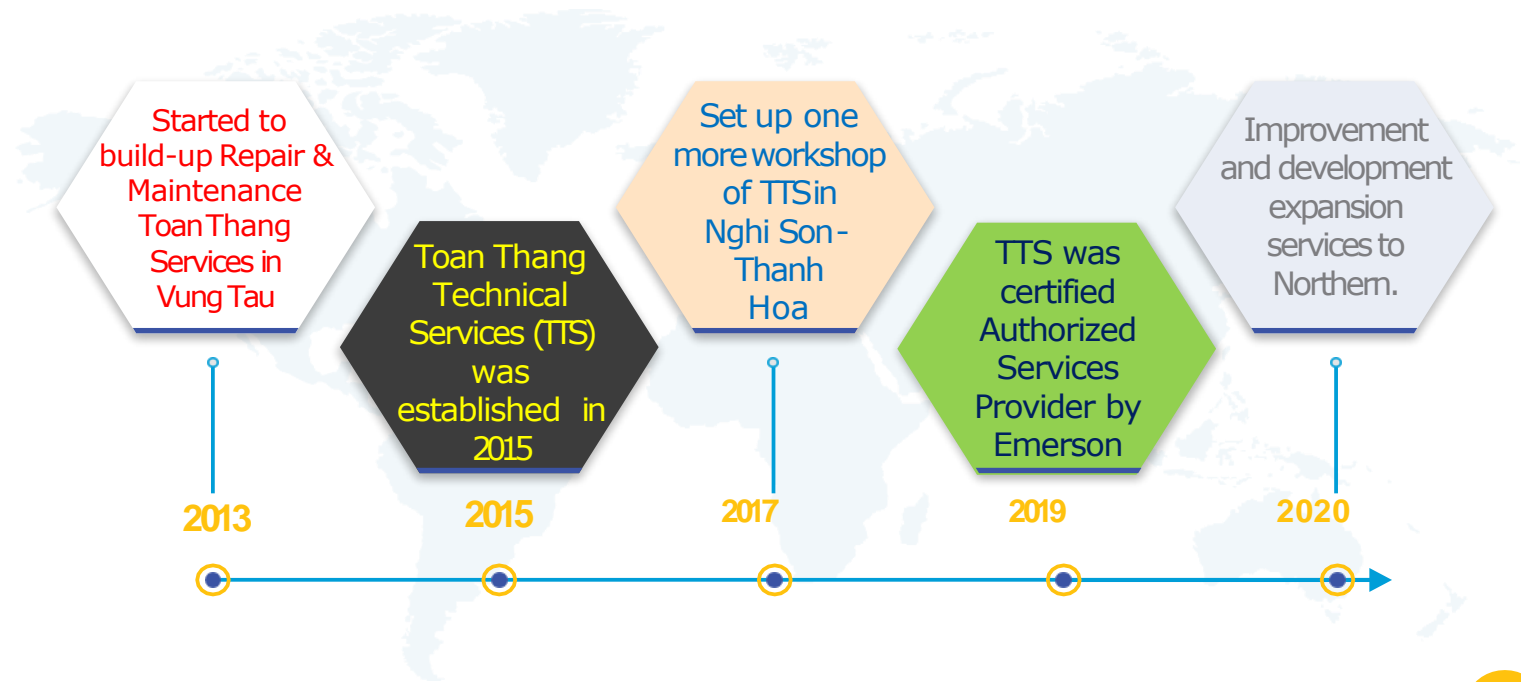
Become the most Valued Service Provider to Clients.

CORE VALUE

Safety - Quality -
Integrity Customer
Care



TIMELINES





TIMELINES

Merger to
mother
company TTE
become
services
department

2022

Target to
Become
Authorized
services provider
of **FLOWSERVE**

2023

Goal to
become O1 of
professional
services
provider in VN

2027



SERVICES LOCATIONS

VUNG TAU WORKSHOP

AUTHORIZED SERVICE PROVIDER OF EMERSON (ASP)

Add: Road No.12 Dong Xuyen IZ,
Rach Dua Ward, Vung tau
City



+84.254.352.2219



+84.254.383.4617



+84.978.756.060



tin.h.av@toanthang.vn





NGHI SON WORKSHOP

UNDER VUNG TAU MANAGEMENT

**Add: Nghi Son IZ, Tinh Gia district,
Thanh Hoa province**

- 700m2 workshop
- 5T over head crane
- 2T balancing machine
- Machining shop: lathe, drilling, welding, ...
- Test bench up to 12 inches, up to 20 000 psi pressure
- Portable Lapping machine





TOAN THANG CERTIFIED SEALS CENTER

MECHANICAL SEAL TECHNICAL & SERVICES

Address: Tuyet Diem 3 Hamlet, Binh Thuan Commune,
Binh Son District, Quang Ngai
Tel: (84) 985 864 339 - (84) 907 977 840



Toan Thang Certified Seals Center (CSC) was formerly Flowserve Quick Response Center (QRC) which was established in 2009.

Toan Thang Engineering Corporation acquired QRC and renamed to Toan Thang Certified Seals Center (CSC) at beginning of 2019 in order to provide world class repair and refurbishment for mechanical seals certified by the OEM.

- Workshop Area : **300sqm**
- Qualified technical team : **as per Flowserve's procedures and requirements.**



QUANG NGAI BRANCH OFFICE & WORKSHOP

Toan Thang Certified Seals Center (CSC)

Address: Tuyet Diem 3 Hamlet,
Binh Thuan Commune, Binh Son District,
Quang Ngai Province



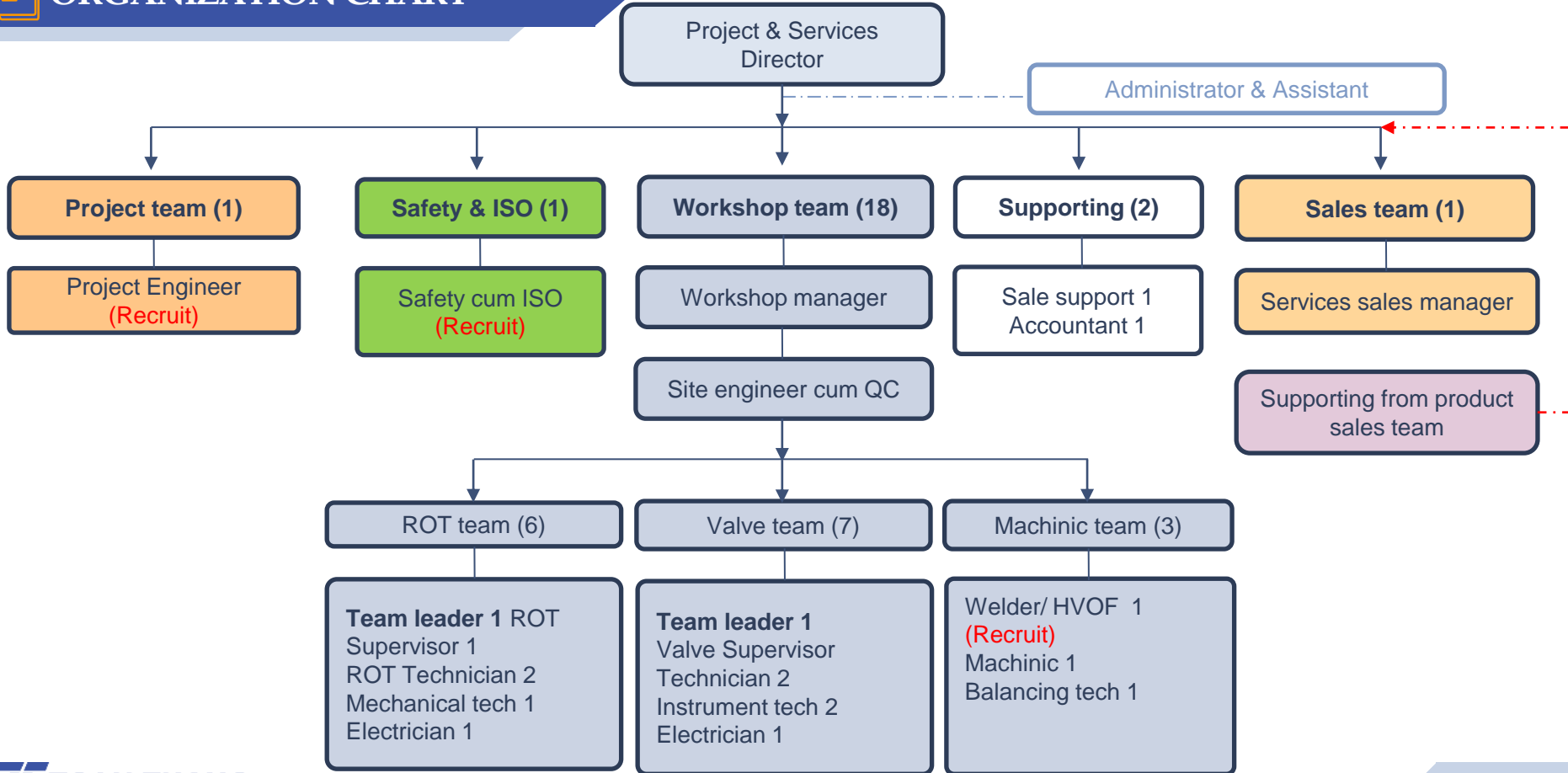
TOAN THANG CERTIFIED SEALS CENTER **DUNG QUAT, QUANG NGAI**

- Supported EPC/Binh Son Refinery(BSR) during commissioning/warranty period to repair/RCFA for every seal failure
- Mechanical Seal Upgrades And Exchange Programs
- Mechanical seal Maintenance Contract
- Technical Support
- Field Services
- Mechanical Seal Training Services
- Mechanical Seal Repair, Assembly, Test and Maintenance for Flowserve/ John Crane/ AES seal/ Eagle Burgmann Seal/ ...





ORGANIZATION CHART





Our management and staffs are committed to:

- ❑ Maintain quality principles and build stronger customer focus.
- ❑ Achieve our commitments for quality, cost, and schedule.
- ❑ Continually Improve our Quality Management System Conform to ISO 9001:2015 Quality Management Systems, International Standards.





SERVICES PROVIDING

1

ROTATING EQUIPMENT SERVICES

2

VALVES & AUTOMATION SERVICES

3

REFUBISHMENT SERVICES

4

SKID FABRICATION



1- Onsite services

- Laser alignment
- Routine maintenance: oil change, filter changing/ cleaning
- Troubleshooting
- Bearing change for small size pump/ compressor
- Seal plan upgrade, modification
- Seal changing
- Manpower supply
- Installation & commissioning
- Onsite overhaul during plant shutdown or TA



2- Workshop services

- Pump/ compressor/ gear box over haul
- Pump/ compressor major repair, maintenance, refurbishment
- Machining spare part: wearing, shaft, bushing, sleeve,....
- Impeller machining
- Coating for repair/ refurbish: HVOF coating, electro selective plating
- Seal testing
- Mechanical seal repair/ retrofit – Authorize services center FIs in Quang Ngai
- Bearing changing for mid & big size.
- Gear box bearing housing repair/ reconditioning
- Shaft straighten



2- Workshop services (c)

- Pump/ compressor upgrading, modification
- Balancing
- Base frame fabrication, modification
- Pump/ compressor/ skid fabricating, modification



Equipment

- Laser alignment kit
- Pulley alignment kit
- Balancing machine up to 5ton capacity, long bed up to 5,5m
- Machining shop manual and CNC
- HVOF for coating
- 10T overhead crane
- 1000m² workshop
- Hydraulic bolt tightening up to 11.500 Nm
- Inside/ outside micrometer up to 1000/ 500mm
- Puller master set 50T capacity
- Bearing heater machine up to 600mm diameter bearing



ROTATING EQUIPMENT SERVICES

COMPRESSOR SERVICES

- Maintenance 2K, 4K, 8K
- Repair and overhaul
- Upgrade bundle
- Dry gas seal replacement

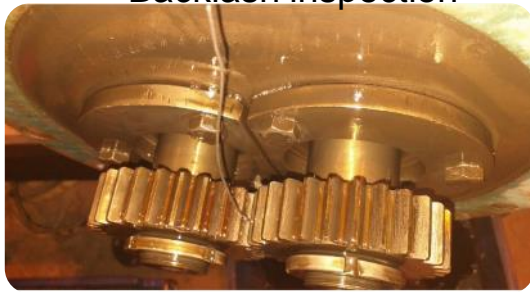




Axial clearance adjustment



Backlash inspection



ROTATING EQUIPMENT SERVICES

Screw shaft inspection



Cylinder housing inspection





PUMP SERVICES

- ❖ Preventive Maintenance
 - ❑ 03 Month, 6 month preventive maintenance
 - Carry out alignment check.
 - Collect vibration data as request.
 - Check and fill up lube oil.
 - Other steps as per check sheet.





ROTATING EQUIPMENT SERVICES



Balancing for pump impeller



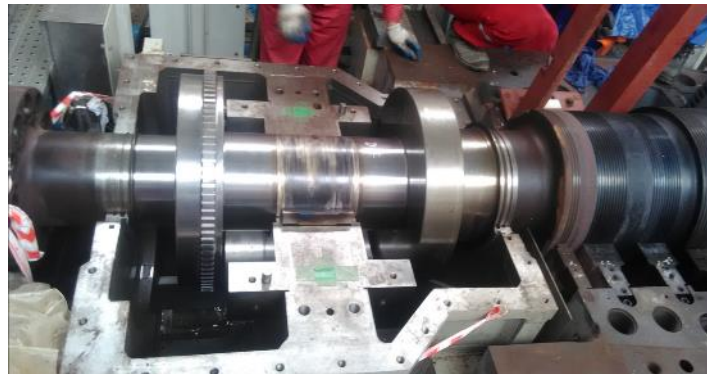
Mechanical seal services





TURBINE SERVICES

- Maintenance 2K, 4k,8K.
- Overhaul service.
- Control system retrofit
- Upgrading





VALVES & AUTOMATION SERVICES

1- Onsite services

- Pre-testing
- Installation
- Calibration
- Function test
- Maintenance
- Repair
- Testing
- Overhaul
- Retrofit/ modification
- Plant shutdown or Turnaround
- Manpower supply

Other services for instrument equipment (PT,TT, FT)

- Installation
- Calibration
- Loop test
- Replacement



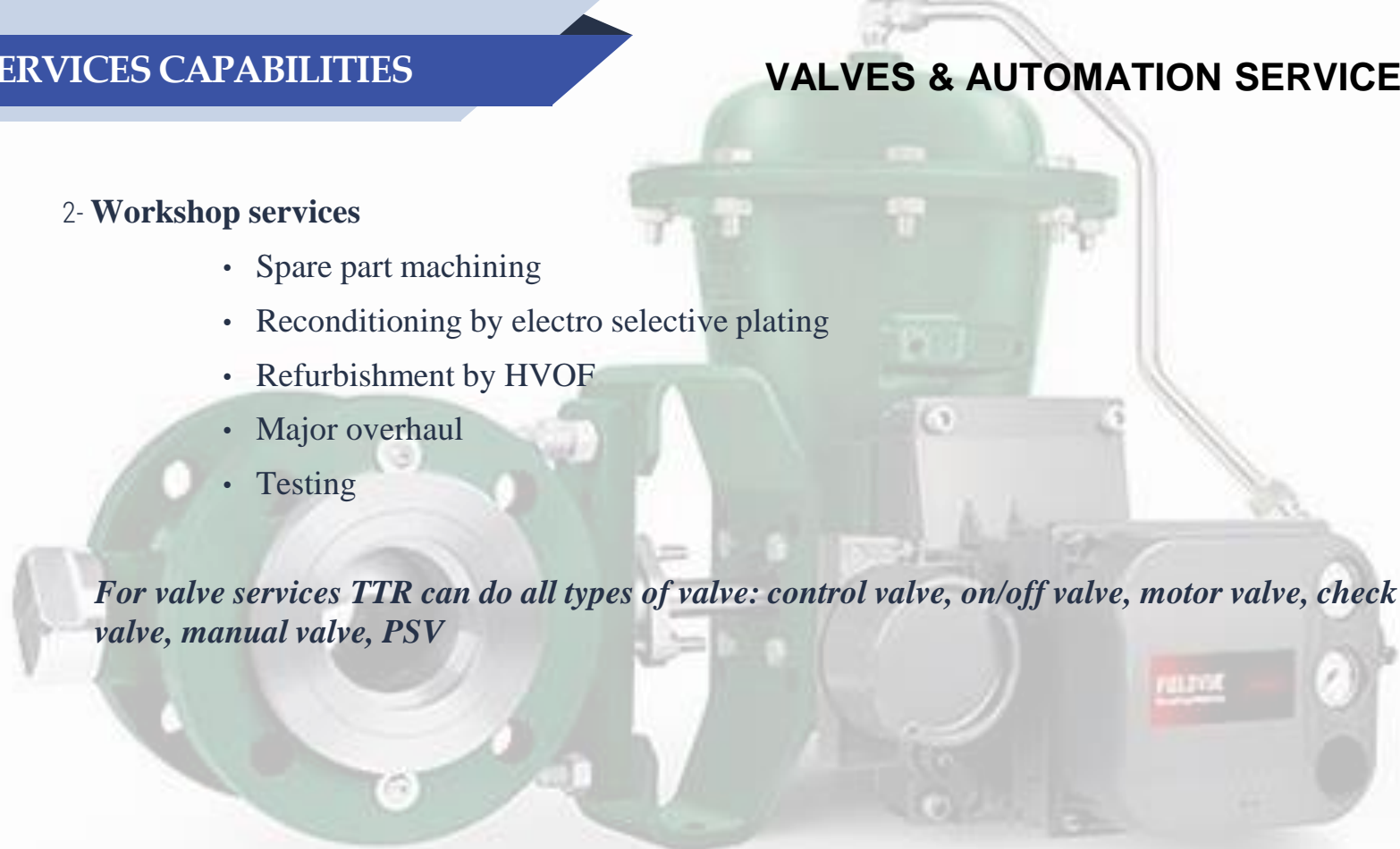
Onsite Services.
Everywhere. Anytime.



2- Workshop services

- Spare part machining
- Reconditioning by electro selective plating
- Refurbishment by HVOF
- Major overhaul
- Testing

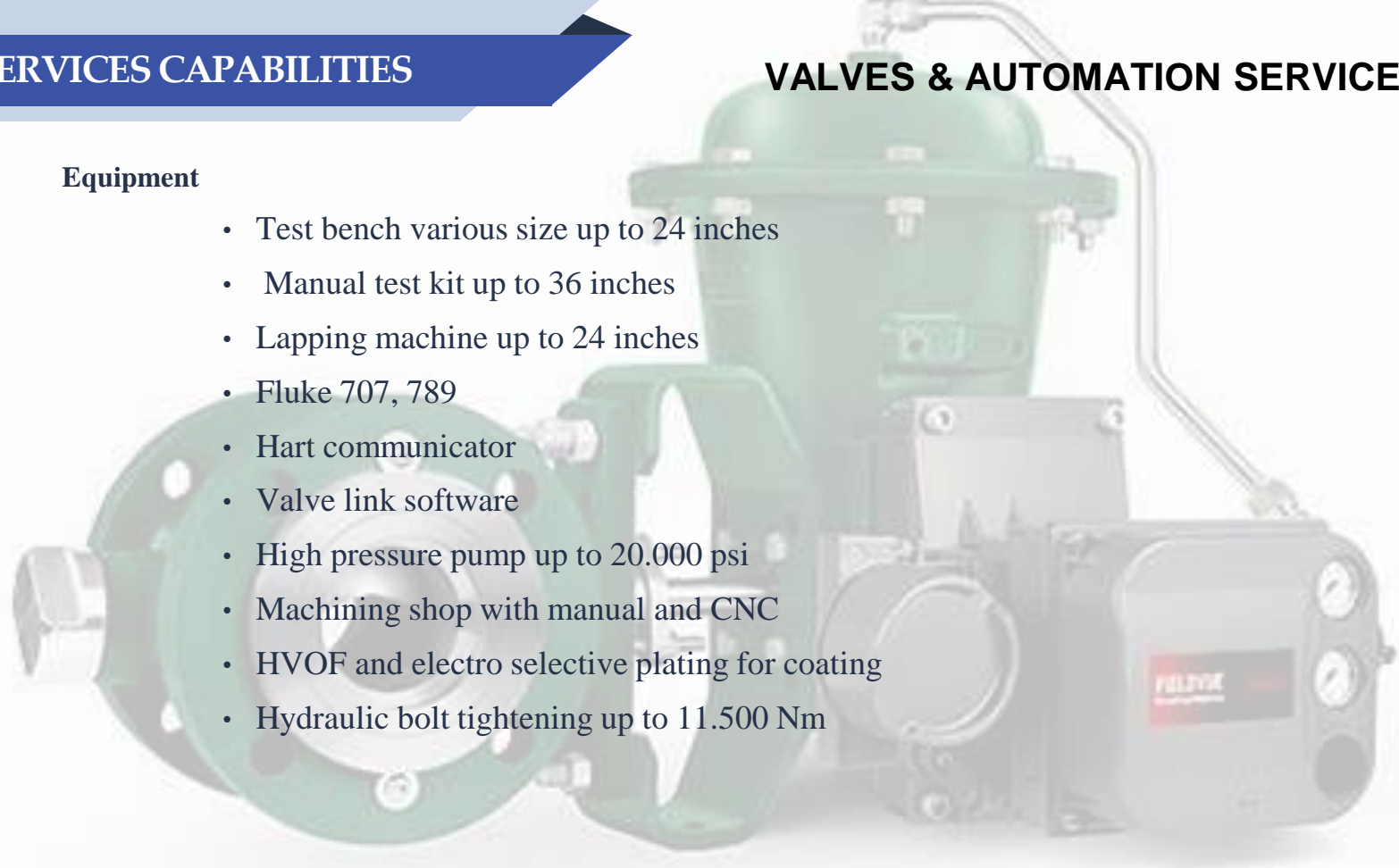
For valve services TTR can do all types of valve: control valve, on/off valve, motor valve, check valve, manual valve, PSV

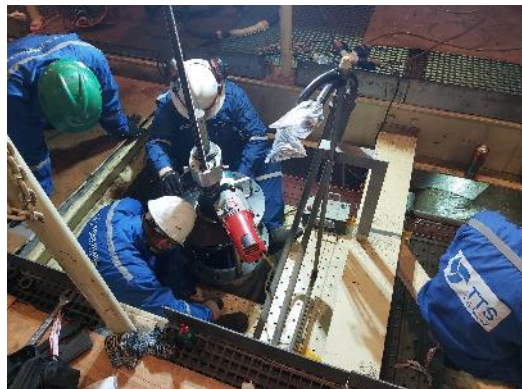




Equipment

- Test bench various size up to 24 inches
- Manual test kit up to 36 inches
- Lapping machine up to 24 inches
- Fluke 707, 789
- Hart communicator
- Valve link software
- High pressure pump up to 20.000 psi
- Machining shop with manual and CNC
- HVOF and electro selective plating for coating
- Hydraulic bolt tightening up to 11.500 Nm



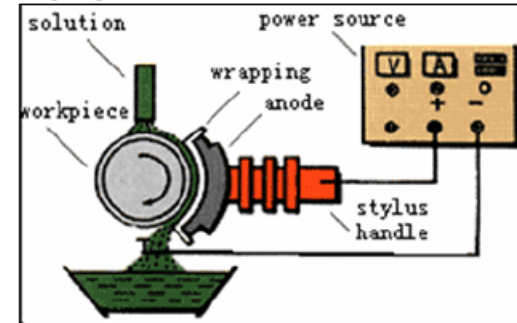
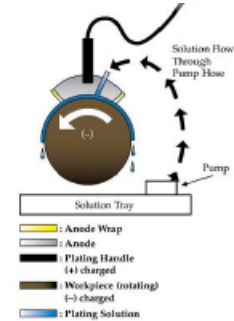




ELECTRO SELECTIVE PLATING

Full name: **Selective** portable brush electro plating. As electrochemical metallizing method;

- It is the best effective method in the field of recovery surface of metals
- High adhesion by electrochemical
- Can do plate various metals & requirements
- Exactness till micrometer
- Not thermo affect to basic metal
- Can do refurbishment at site





ELECTRO SELECTIVE PLATING



Before



After

MECHANICAL PART REFURBISHMENT





ELECTRO SELECTIVE PLATING

PLATE FOR SPHERE SHAPE



Sunken sphere



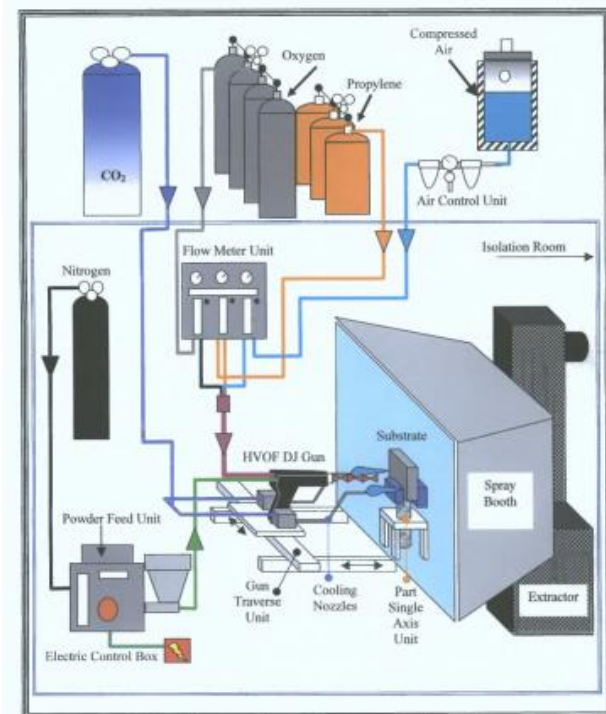
Convex sphere (ball valve)



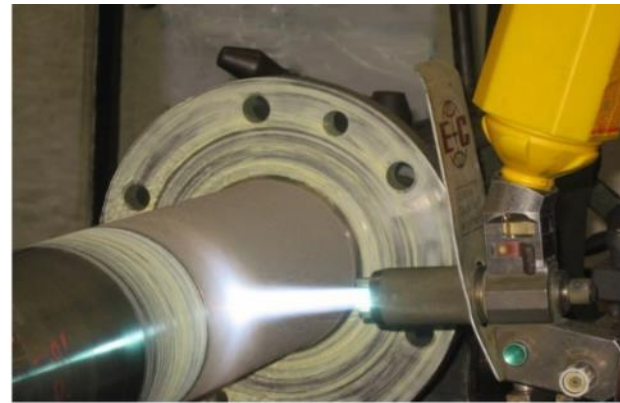
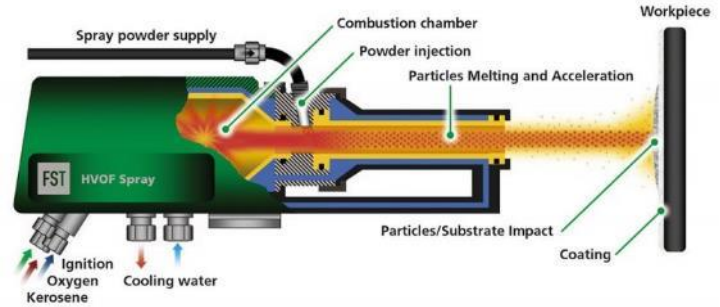
Seat



HIGH VELOCITY OXYGEN FUEL



MECHANICAL PART REFURBISHMENT





HIGH VELOCITY OXYGEN FUEL

Product	Composition	Wear Resistance	Corrosion Resistance	Oxidation / Sulfidation Resistance	High Temperature Service	Restoration / Build Up
Diamalloy 4060NS	Cobalt – Chrome Alloy	•	•	•	•	
Diamalloy 3001	Cobalt – Molybdenum Alloy	•	•	•	•	
Diamalloy 3002NS	Cobalt – Molybdenum Alloy	•	•	•	•	
Diamalloy 1007	Copper		•			•
Diamalloy 1004	Copper Alloy (Aluminum Bronze)	•	•			
Diamalloy 1003	AISI Type 316 Stainless Steel	•				•
Diamalloy 1003-1	AISI Type 316 Stainless Steel	•				•
Diamalloy 1008	Iron / Chrome Blend	•	•			
Diamalloy 4008NS	Nickel – Aluminum Alloy		•			•
AMDRY 4532	Nickel – Chrome Alloy		•			
AMDRY 4535	Nickel – Chrome Alloy		•			
Diamalloy 1005	Inconel 718*		•			•
Diamalloy 4004NS	Rene 80*		•			•
Diamalloy 1006	Inconel 718*		•			•
Diamalloy 4006	Nickel – Chrome Alloy with Amorphous Phases	•	•			
AMDRY 1718	Inconel 718*		•			•



FABRICATION NEW SKID, SKID REFURBISHMENT

- Metering skid
- Fuel skid
- Pump skid
- Compressor skid





NGHI SON REFINERY PLANT

Client/End User	NSRP
Location	Nghi Son - Thanh Hoa
Service	Shutdown Maintenance for Control valve & Instrument
Year	2019





NGHI SON REFINERY PLANT

Client/End User	NSRP
Location	Nghi Son - Thanh Hoa
Service	Long Term Service For Control valve & On-off valve
Year	2018-2019





MEKONG THERMAL POWER PLANT

Client/End User	Mekong Energy
Location	Phu My – Ba Ria Vung Tau
Service	Shutdown Maintenance for Control valve
Year	2017 - 2018





SU TU NAU PROJECT

Client/End User	PTSC MC/ CLJOC
Location	Vung Tau
Service	Installation & Commissioning for Air Compressor & Dryer Packages
Year	2015





NAM CON SON PIPELINE WETGAS

Client/End User	NCSP
Location	Dinh Co - Vung Tau
Service	Installation, hook up for wetgas metering system
Year	2015





PHA LAI POWER PLANT

Client/End User	EVN-Pha Lai
Location	Hai Duong
Service	Repair Generator shaft
Year	2018





SERVICES CAPABILITIES

VALVES & AUTOMATION SERVICES



Actuation Technologies

Certificate of Attendance

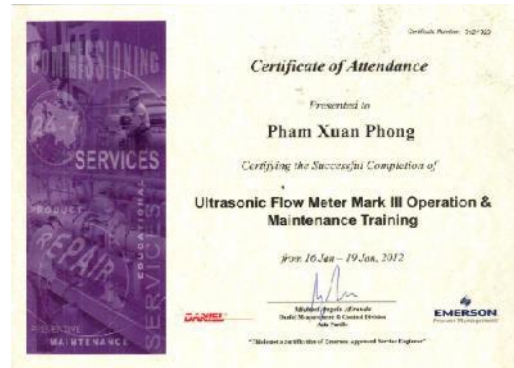
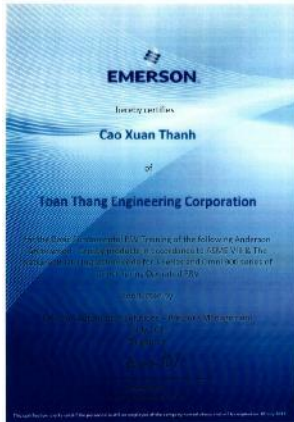
This document certifies that

Cao Van Hau

Successfully completed Biffi ICON A-Manager with HART Training (Online)

Held on 3 July and 10 July 2020.

Pok Chin Leong / Gianluca Madonna
 Training Facilitators





ACHIEVEMENTS





CLIENTS





THANKS!

Any questions?

Services requirement please contact

tin.h.av@toanthang.vn

0978. 756. 060