



**VARLEY**  
EXCELLENCE SINCE 1886

**PT VARLEY INDONESIA**

***VALVE REFURBISHMENT SPECIALIST***

# VARLEY GROUP 135 YEARS HISTORY

 **SINCE 1886**  
A Small Plumbing and Boiler-Making Business

 **DIVERSIFICATION**  
Transportation, Energy, Defence and Aviation

 **TODAY'S NETWORK**  
Australia, USA and Indonesia

Company Type : **Private**

Employees : **850 (AU), 150 (US), 217 (IND)**

Annual Revenue : **\$232M**



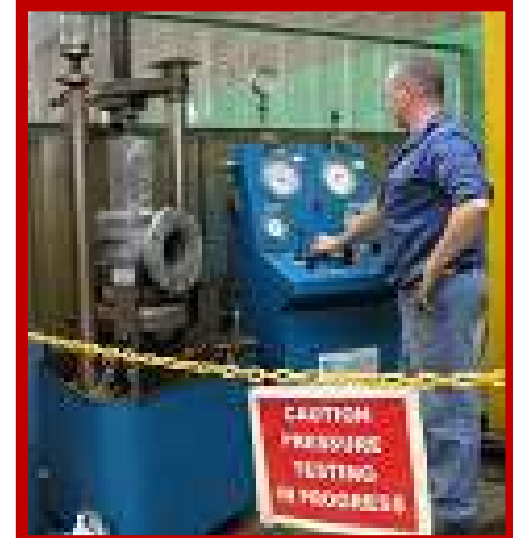
# VARLEY GROUP AUSTRALIA CORE BUSINESS



**DEFENCE & AEROSPACE**



**SHIP REPAIR**



**VALVE REFURBISHMENT & RE-ENGINEERING**



**RAIL SERVICES**



**VARLEY ROAD RAIL**

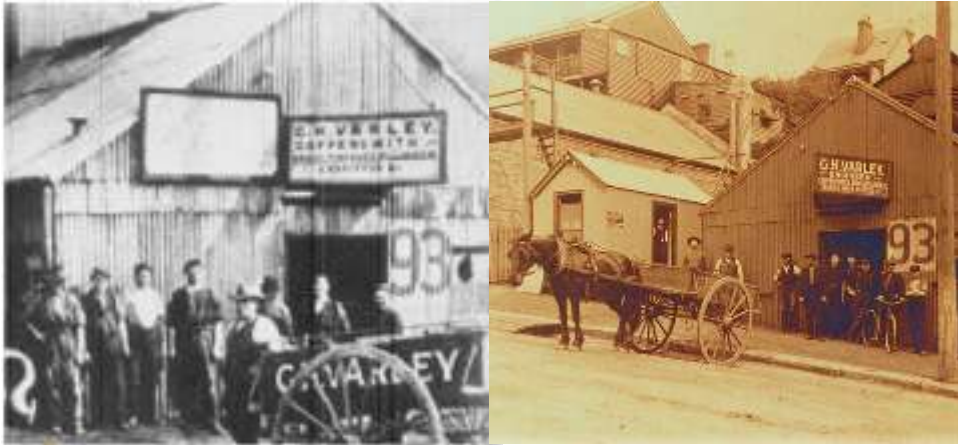


**SPECIALISED VEHICLE**



**ELECTRIC VEHICLES**

# INTRODUCTION



**1886**

**G.H VARLEY**

Start from Coppersmith  
and Shipwright.



**2002**

PT Varley Indonesia has been operating as a joint venture between Mr. John Hendarmin and Varley Group Australia since **2002**.

As a specialist in Valve Refurbishment since **2004**.



# PT VARLEY INDONESIA VISION AND MISSION

## **OUR VISION**

*“To be the leader in the valve service industry”.*

## **OUR MISSION**

*“To provide a high quality service, supported by competent human resources, up-dated technologies & equipments and maintaining a close & honest working relationship, ensuring customer satisfaction at all times”.*

# PT VARLEY INDONESIA WORKSHOP AND HEAD OFFICE



Jln. Prabu Siliwangi Km 0.7 No.42 Kel. Keroncong,  
Jatiwung - Tangerang 15134

Tel : +62 (21) 591 3627

# PT VARLEY INDONESIA WORKSHOP FACILITY



**Workshop area 2.500 m<sup>2</sup>**

**ONE OF THE BIGGEST  
VALVE REPAIR WORKSHOP IN INDONESIA**

# OUR CAPABILITY



- 1. VALVE REFURBISHMENT**
- 2. IN SITU OR WORKSHOP REPAIR**
- 3. PSV ONLINE TESTING**
- 4. ON SITE MACHINING**
- 5. VALVE REPLACEMENT**
- 6. INSTRUMENT CALIBRATION**
- 7. VALVE UPGRADE**
- 8. ENGINEERING SERVICE**
- 9. REVERSE ENGINEERING SPARE PART**



# OUR QUALITY CERTIFICATE



**ISO  
9001:2015**



**ISO  
14001:2015**



**ISO  
45001:2015**

# CERTIFIED MAN POWER



K3 Umum



Welding Engineer



Welder  
By Disnaker



NDT Level 2

- Magnetic Particle
- Liquid Penetrant

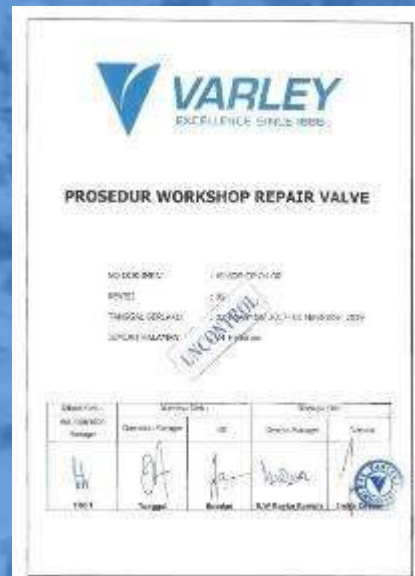
# STANDARD OPERATING PROCEDURE



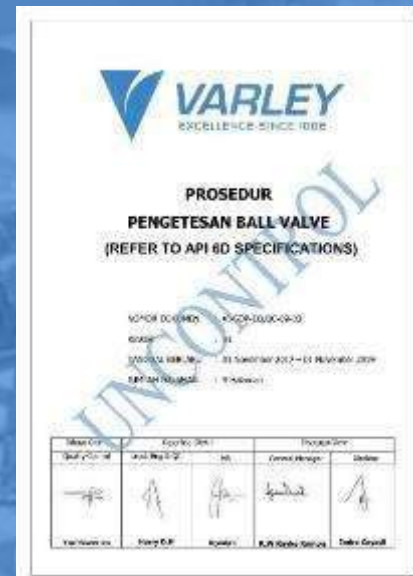
Varley Indonesia memiliki lebih dari 100 Standard Operating Procedure (SOP), Instruksi Kerja (IK), Inspection and Test Plan (ITP) terpisah untuk setiap pekerjaan Valve, serta lebih dari 15 Welding Procedure sesuai aplikasi material yang digunakan.



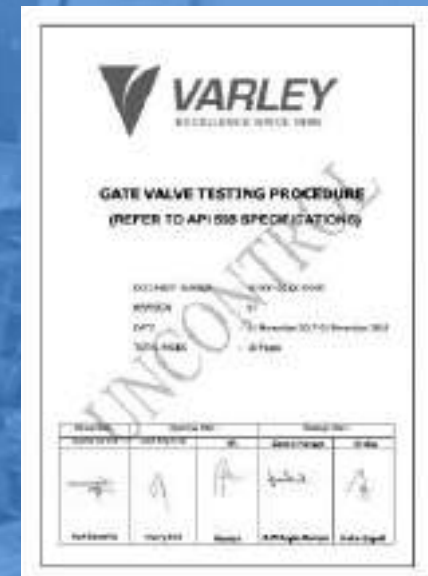
SOP  
IN SITU REPAIR



SOP WORKSHOP  
REPAIR



SOP  
PENGETESAN  
BALL VALVE



SOP  
PENGETESAN  
GATE VALVE

# NEW INVESTMENT AND TECHNOLOGY



**Leadwell Cnc Latte Machine**



**Ball Valve Lapping Machine**



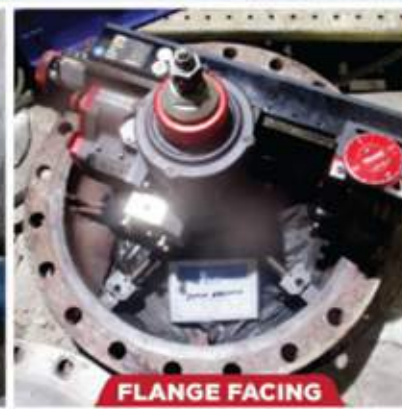
**Ventil Automatic Test Bench**



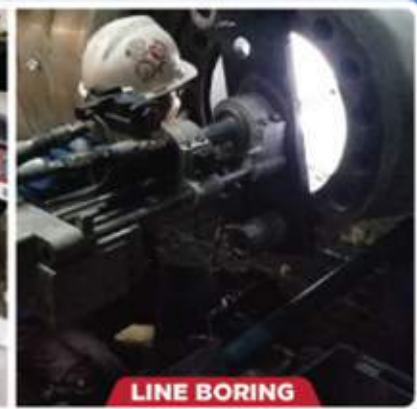
**PSV Preventest Advance**



**SEAT GRINDING  
MACHINE**



**FLANGE FACING  
MACHINE**



**LINE BORING  
MACHINE**

**And Many Others**

# ENGINEERING SUPPORT



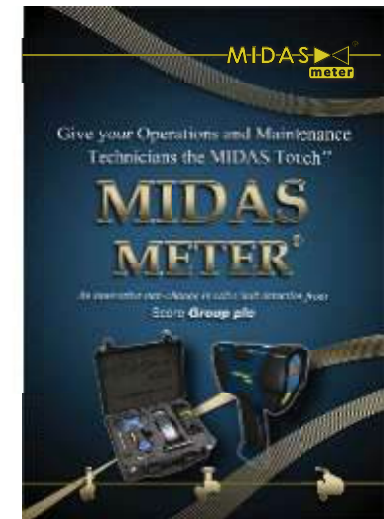
**3D SCAN**



**PMI Service**

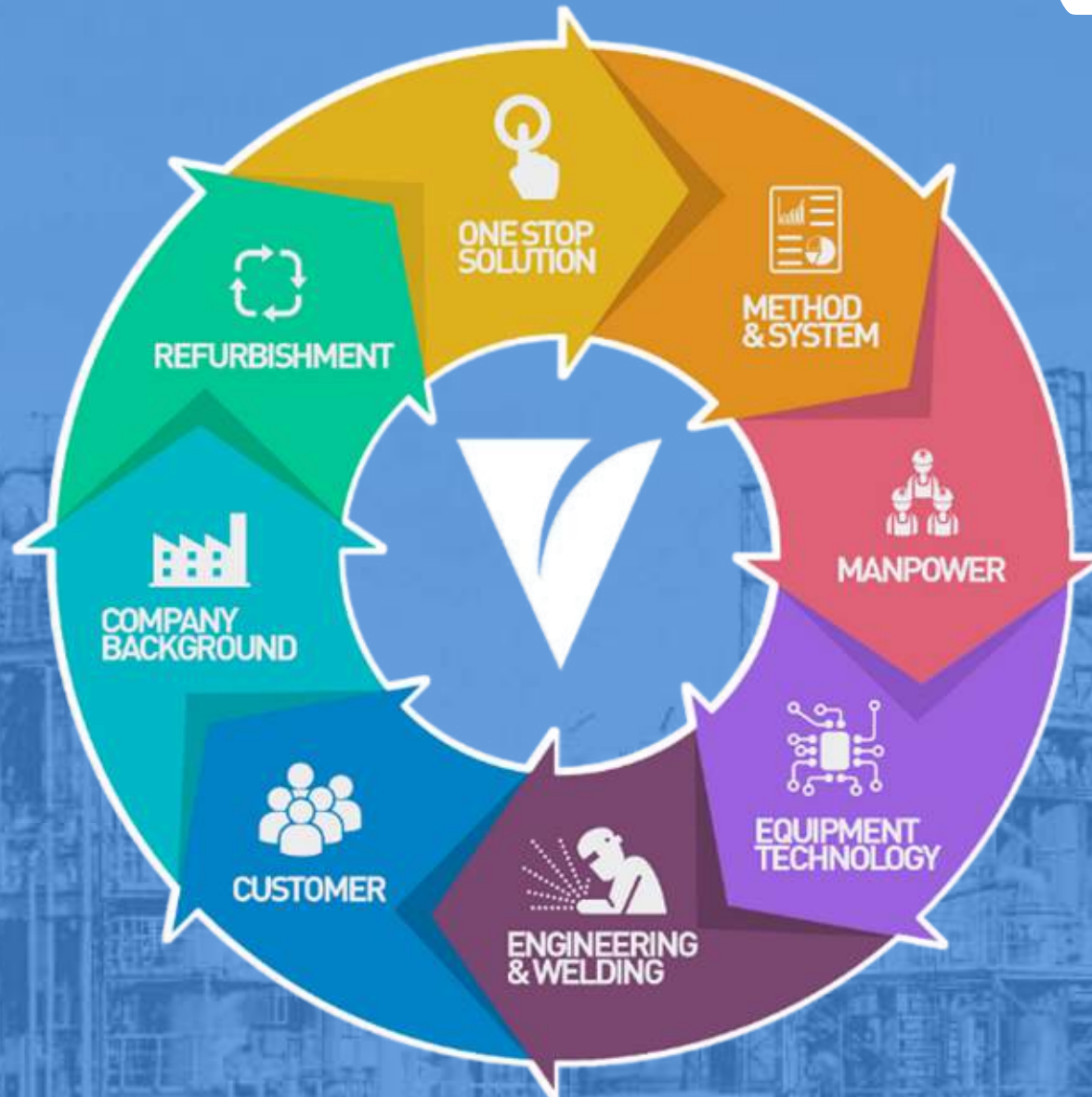


**Solidworks Software**



**Accoustic Monitor Midas**

# WHAT MAKE US DIFFERENT



# WHAT MAKE US DIFFERENT



## COMPANY BACKGROUND

- Varley Group SINCE 1886
- The oldest and biggest Engineering Company in Australia
- Varley Indonesia SINCE 2002
- One of the biggest Valve Repair Company in Indonesia
- 5000 m2 workshop in Indonesia

## REFURBISHMENT

- Upgrade Trim
- Part Equal OEM
- Repaired as Basic Design Valve Standard

## ONE STOP SOLUTION

- Valve Management Program
- Refurbish all Type, Size, Class, Brand
- Instrumentation Calibration Service
- Main Turbine Valve Service
- On Site Machining Service
- PSV Certification
- Preventive and Corrective Maintenance
- Valve Upgrade
- Valve Replacement

# WHAT MAKE US DIFFERENT



## METHOD & SYSTEM

- **API Standard**  
*598, 621, 600, 527, 6A, 6D, 6DR and many more*
- **ISO 9001, 14001, 45001**
- **OHSAS 18001**
- **Manual OEM From customer**
- **Standard Operating Procedure**
- **Inspection & Test Plan**
- **Valve Database**



## MAN POWER

- **More than 200 employees**
- **Qualified Employee – card competency**
- **Capable to huge project at the same time**
- **Expert support from Varley Australia**
- **Sharing knowledge with customer**
- **8 Support Division**



## EQUIPMENT TECHNOLOGY

- **Line Boring Machine**  
*for Main Turbine Valve & HP LP Bypass Valve*
- **Valve Seat Grinding Machine**
- **Flange Facing Machine**
- **Preventest – Online Testing PSV**
- **Solidworks Software – Reverse Engineering**
- **PMI Service**
- **3d Scan**
- **Advanced NDT**
- **Valve Management Database**
- **10 Mobile Container Workshop**

# WHAT MAKE US DIFFERENT



## ENGINEERING & WELDING

- Liquid Penetrant Testing Level II
- Magnetic Particle Testing Level II
- Welding Engineer
- Welding Inspector
- Welder by Migas & Disnaker
- PWHT Equipment
- Prequalified WPS for every process



## CUSTOMER

## POWER PLANT

### *LTSA (Long Term Service Agreement)*

- **Cogindo Daya Bersama** (*Perjanjian Kerjasama Operasi Pemeliharaan dan Perbaikan Peralatan Valve Pembangkit Listrik*)
- **Indonesia Power** (*Kontrak Payung Jasa Pemeliharaan dan Perbaikan Peralatan Valve Pembangkit Listrik*)
- **PLN Kit SBS** (*Kontrak Payung Jasa Perbaikan Valve **PLTU Ombilin, PLTU Bukit Asam, PLTU Sebalang, PLTU Tarahan** dan **PLTU Teluk Sirih PT PLN (Persero) Pembangkitan Sumatera Selatan***)
- **PJB UP Paiton Unit 1 & 2** (*Kontrak Payung Repair Valve*)

# OUR CUSTOMER





# WORKSHOP REPAIR REPORT

# DOKUMEN LAPORAN PEKERJAAN



Contoh Surat Penawaran



Contoh Report Inspeksi



Contoh Report Pekerjaan



Contoh Report Pengetesan

# SCOPE OF WORK

## GATE VALVE

1. Mobilization Valve to workshop PT. Varley Indonesia.
2. Dismantle Process.
3. Inspection inner part incl. Penetrant test.
4. Cleaning Process (Sand Blasting Process).
5. Inspection and Recommendation Report.
6. Spindle Run Out Check and Polishing Stem.
7. Lapping Disc & Seat.
8. Replace Mechanical Seal (Packing, Gasket, O-ring).
9. Assembly valve.
10. Testing Process (Witness by user).
11. Painting Process & Packaging.
12. Packaging.
13. Report document.
14. Delivery Valve.

# SCOPE OF WORK

## BALL VALVE

1. Mobilisasi Valve ke workshop PT Varley Indonesia
2. Visual Inspection
3. Tagging and marking unit Valve
4. Dismantle Valve
5. Cleaning & Measurement
6. NDT Process for ball
7. Checking Stem
8. Valve Recondition Process :
  - a) Major Repair
    - Stem Recondition
    - Ball Spot Weld
    - Ball Machining
    - Ball Lapping
    - Ball + Seat Ring Hard chrome
    - Seat Ring Skimming
    - Seat Ring Welding
    - Seat Ring Machining
  - b. Minor Repair
    - Ball & Seat Lapping
9. Valve Assembly Process :
  - Gasket & Packing Replacement
10. Testing accordance to API 6D (Internal & Witness by user)
11. Repainting Valve
12. Packaging
13. Report & Documentation

# BEFORE - AFTER REPAIR



**BEFORE**



**Ball Valve sebelum Repair**

**AFTER**



**Ball Valve setelah repair dan dilakukan pengelasan standar API 6D**

# BEFORE - AFTER REPAIR

**BEFORE**



RF Flange mengalami korosi cukup parah

**AFTER**



RF Flange setelah dilakukan Cleaning, Welding & Machining

# BEFORE - AFTER REPAIR

**BEFORE**



Seat pocket terpapar cairan

**AFTER**



Seat Pocket setelah dilakukan  
Cleaning and Polishing

# BEFORE - AFTER REPAIR

**BEFORE**



**Ball – Permukaan contact area mengalami scratch**

**AFTER**



**Ball setelah dilakukan Welding, Machining, Lapping & Hardchrome**

# BEFORE - AFTER REPAIR

**BEFORE**



**Stem terdapat Scratch  
sedalam  $\pm 0.01$  mm**

**AFTER**



**Stem setelah dilakukan  
Cleaning dan Polishing**

# BEFORE - AFTER REPAIR

**BEFORE**



**Seat Insert was Compressed and Scratched**

**AFTER**



**Seat Insert ganti baru**

# TESTING PHOTO RECORDS

**Low Pressure Closure  
Test Standar :  
80-100 Psig**

**High Pressure Closure  
Test Standar :  
314 Psig**

**Hydrostatic Shell Test  
Standar : 428 Psig**



An aerial photograph of an industrial plant, possibly a power station or refinery, featuring several tall smokestacks and large cooling towers. The image is overlaid with a semi-transparent blue filter. The text "THANK YOU" is centered in white, bold, uppercase letters.

**THANK YOU**