

### **DINAC INDUSTRIES**

#### **PROFILE**

Established in the year 2016, we M/s. DINAC INDUSTRIES are one of the leading design cum manufacturers and service providers for a wide range of Special Purpose Machines. The machinery range offered by us include Testing machine unit, CNC machines, Automatic assembling machine, New product development, Reverse engineering technology, all type of automations and Fabrication works.

Presently, right from small-lot prototype development to large volume turnkey production, We are proud to say specialist in the following,

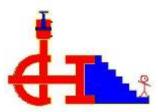
- ✓ All type of Special Purpose Machines(SPM) design and manufacturing(Not only conventional also CNC machines)
- ✓ All type of automation
- ✓ Reverse engineering
- ✓ New product development
- √ Jig and Fixture design cum manufacturing
- ✓ All Machine spares.
- ✓ All Type of Fabrications.
- ✓ Hydralics and Pneumatics .
- ✓ Wire cut, sparking, turning, Milling, surface Grinding, Cylindrical Grinding And Centerless grinding.



### **DINAC INDUSTRIES**

### OUR CAREER PROJECTS(2013 - 2016):

- ✓ Seat grinding design with automation
- ✓ CNC lathe automation
- ✓ CNC twin spindle turning machine and automation
- ✓ CNC groove grinder machine concept design
- ✓ CNC high speed seat grinder machine and automation
- ✓ Friction welding machine and automation
- ✓ End touch machine automation
- ✓ Hydraulic press machine design
- ✓ GPU testing machine and automation
- ✓ End touch machine reconditioning
- ✓ Seat grinding machine reconditioning
- ✓ CNC lathe machine reconditioning
- ✓ Centre less grinding machine reactor fitting hydraulic to CNC



### **DINAC INDUSTRIES**

### OUR PROJECTS(2016) to 2019:

- ✓ Pipe cutting and Drilling machine
- ✓ Hydraulic press 50 ton
- ✓ Sweet cutting machine
- ✓ Casting leak testing machine
- ✓ Profile cutting machine
- ✓ Automatic Dosa machine
- ✓ LED bonding machine
- √ Filter clamping fixture
- ✓ Lug hardening machine
- ✓ Servo Printer setup
- ✓ Drilling fixtures.
- ✓ All type of Conveyors.
- ✓ Air inflation and deflation machine

- ✓ Run out Checking Machine
- ✓ Seat Rubber Assembly Fixture
- ✓ Hydraulic press 100 ton
- ✓ Auto Holes Checking Fixture.
- ✓ Chain Assembly Machine.
- ✓ Machine Spares.
- √ Jigs and Fixtures.
- ✓ Deburring Machine
- ✓ Part Rotating Fixture



# Gear pump unit testing with automation







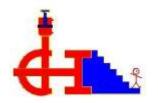
The function of Gear pump unit is to deliver the Petrol/Diesel from the bottom sump to our vehicles at bunk. Our testing machine will ensure the Performance of Pump includes lpm, Vacuum and delivery pressure, rpm and torque at every stage.



## Gear pump unit testing with automation

- Hydraulic press can compress any material to a full extent.
- •We developed a Hydraulic press machine for
- •grinding wheel pressing in manufacturing.





## **Casting Leak Testing Machine**

- In our machine casting internal leak and external leak can be detected.
- For clamping and external ports closing pneumatic cylinders used. After clamping air allowed inside the DUT and pressure drop monitored.
- If DUT passed the test means OK punch will be done on component, If not ok means Red alarm will come.
- No of components testing will be displayed, all operations controlled by PLC system.





### **LED – Bonding Machine**

- Our unit combined with titanium alloy extrusion head, rapid heating can be set up for heating, accurate temperature control.
- For different size of panels we can customize the setting parameters like temperature, load and time, which can be noticed by display
- For easy operating, manual toggle clamp loading used
- Timer detects and alarms when the bonding time exceeds.
- Very compact which can be easy handling for site work also.





### **Servo Printer Setup**

- By using our machine we can move the DUT(Printer) as per desired path and speed with perfection.
- For linear movement Ball screw and servo used. For better guiding LM rails used.
- Whole unit developed by AL profile for better adjustment and low weight.
- For servo speed control external drive used for better accuracy.





## Filter Assy – Fixture Unit

- The requirement is need to add connector with the filter by double side with manual tightening.
- In our machine there Is two mode i.e., Auto/Manual.
- In auto mode while locating the component it will be automatically clamp the component by cylinder actuation through proximity sensor. After assy need to push Unload button then we Can use another connector assy by same method.
- In manual mode after locating the component need to push the clamping button then we can tight the connector. After assy need to unload by push button for another connector assembly.
- If component is not in fixture means cylinder does not actuate.





### **LUG Hardening Machine**

- Requirement is need to heat the DUT than its Recrystallization temperature and immediate cooling by coolant.
- DUT will be rotated at 60-100 rpm and heating will be done by heating coil.
- DUT front and back movement & clamping done by pneumatic cylinders.





# **50 Ton Hydraulic Press**

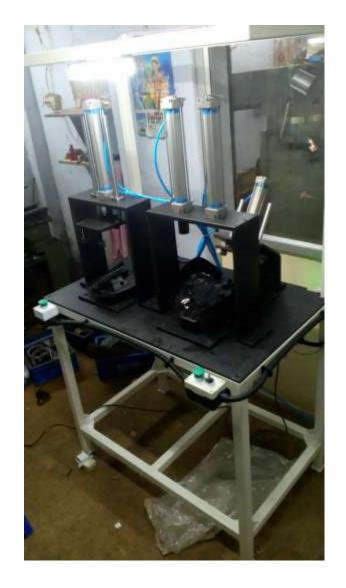
- Customer Requirement is 50 ton Hydraulic press .
- Using for Die importation to aluminium part.





## **Seat Rubber Assy**

- A requirement is need to customer end Seat rubber assemble at Seat back side using pneumatic pressure.
- So we design the project As per customer requirement and manufacture the assemble machine.





### **Lug Hardening Machine and Automation**

- •This is automation setup for continuous hardening the test piece
- •It's a lighter and faster robotic pick and place mechanism with high precision
- •It will operate with the cycle time of 30 sec

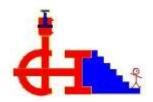




## **Belt Conveyor Part Inspection**

- Customer Requirement 1.2 meter Belt Conveyor.
- •Structure made with Al profile to reduce weight and aesthetic improvement
- •It is a material transportation conveyor with gear box enclosed electric motor driven belt type.





## **Belt Conveyor Part Moving**

- Belt conveyor 5 meter Length. part Moving From Machine to Packing Area
- •It is a material transportation conveyor with gear box enclosed electric motor driven belt type.





### **Shaft Run out Checking Machine**

- •This is a testing machine which is used to check run out on rotary shafts.
- •Shaft will be rotated by electric motor with sensing element of movable probing system.
- •Checked result will be displayed and stored for reference.





# **Checking Gauge**

• Sheet Metal Part Checking Gauge





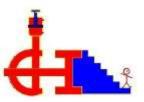




## **Drilling and Cutting Machine**

- Hollow Tube Drilling and cutting Machine
- •Minimum Size OD-25, Id-19, L-350
- •Maximum size OD-28,ld -18,L-2500
- •Drilling Length 85mm
- •Cutting Length 50mm
- •Cycle Time for both side 45sec





## **Auto Holes Checking Fixture**

- Car steering holes and slots Checking fixture.
- Using Pneumatic cylinder for Hole plugging.
- •Total 3 types of parts as all same process.

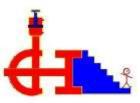




### **Air Inflation and Deflation Machine**

- Two wheeler tyre air inflation and deflation Machine
- cycle time 19 to 20 sec





## **Chain Assembly Machine**

- Chain Pinning Machine.
- •Using 2 axis and Arm Robot.
- •Cycle Time 15 sec





### **Run out Checking Machine**





### **Part Rotating Unit**



### **DEBURRING MACHINE**

- Aluminium ID and OD Chamfer.
- Cycle Time 4 to 5 sec Per Component.



### **FORMING MACHINE**

• AC Hose End forming Machine 4 stage Forming Unit





## **Machine Spares**











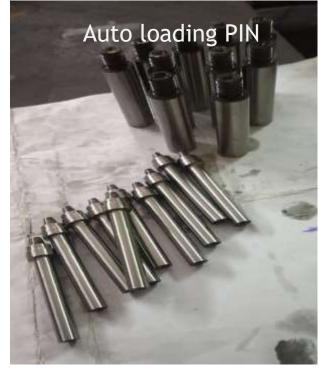




## **Machine Spares**















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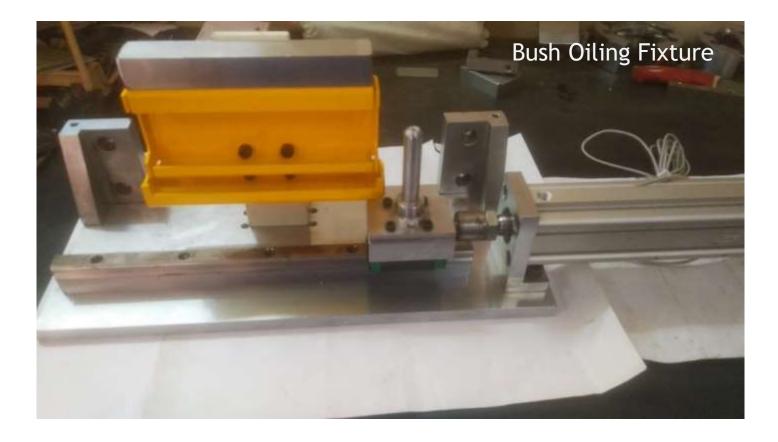








# Jigs & Fixtures





# **Jigs & Fixtures**







### **DINAC INDUCTRIES**

#### **Contact info:**

Partners cum Owners info:

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Started career in M/s. Rane Engine valve ltd at 2009 with Diploma in mechanical engineering. After one year went to higher study Bachelor of Engineering & re-joined with M/s. Rane Engine valve in Machine tool development as a design engineer for 3 years. Then Started Dinac Industries April 2016.

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### **DINAC INDUCTRIES**

Thank you...!

Hopefully we are waiting for your favorable reply to fulfill your requirement .