
Tatparya Dynamics



"We don't just sell we solve your problems"

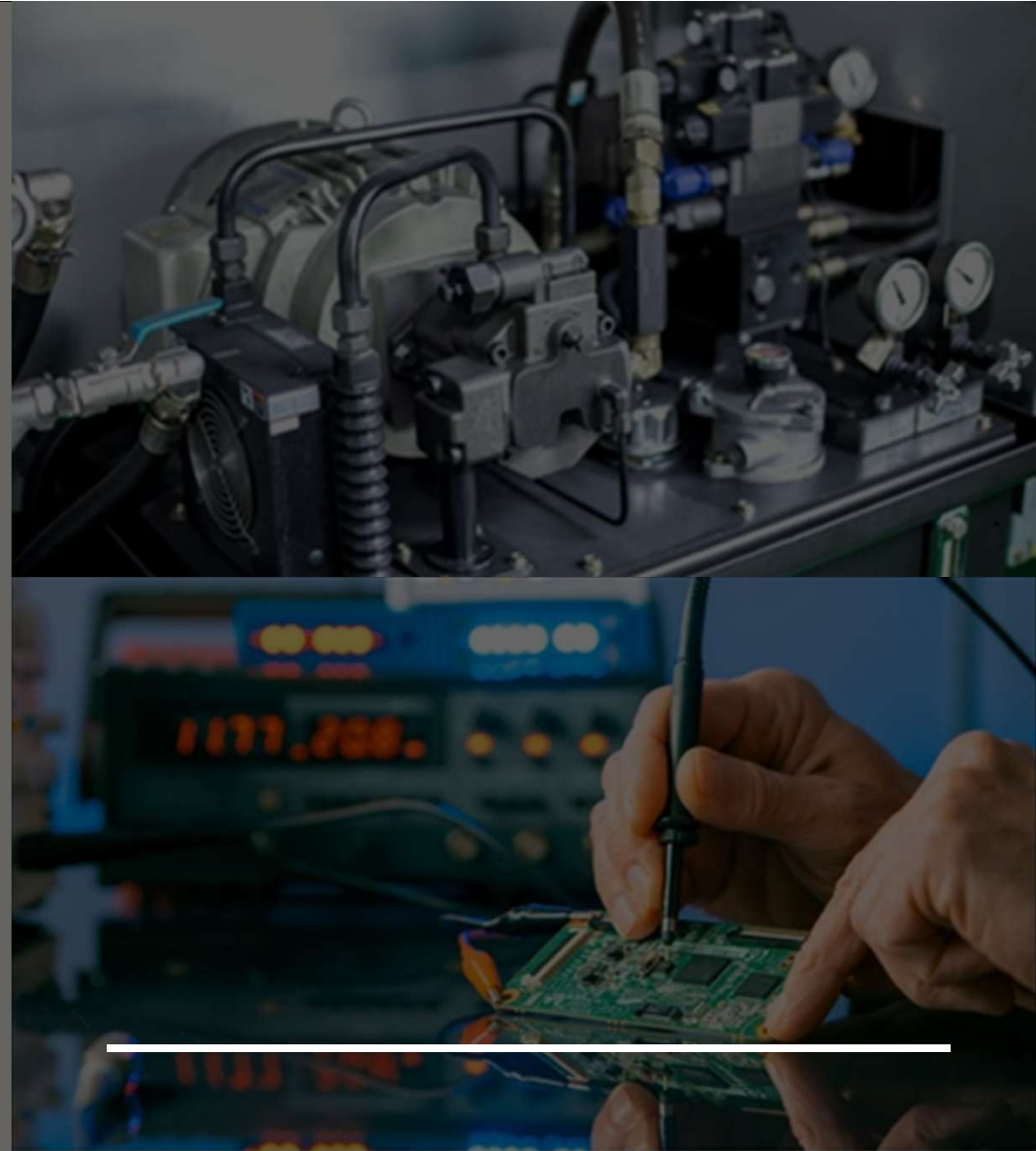
Contact us:-

www.tatparyadynamics.com

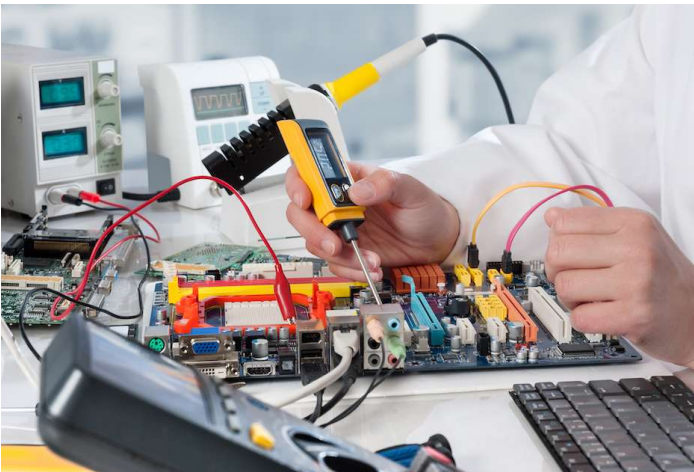
Hardik Patel

Mo - 8460337402

Email- Hardik@tatparyadynamics.com



About us



- We are a multi-disciplinary industrial solutions provider specializing in **hydraulic sealing systems, valves, small hydraulic cylinders, gas springs, and industrial electronics repair and supply.**
- We don't just sell products — **we understand our customers' problems and deliver practical, reliable solutions** tailored to their needs. Whether it's a leaking cylinder, a failed control board, or a need for OEM-compatible seals, we're here to solve it — fast and effectively.
- With a focus on **quality, technical expertise, and service**, we support OEMs, factories, and maintenance teams across industries. Our goal is to be your **trusted one-stop partner** for both mechanical and electronic industrial needs.

What we offer

- Hydraulic seals
- Hydraulic valves
- Hydraulic cylinder
- Hydraulic gas spring
- Repairment and supply of all industrial electronics.



Hydraulic seals

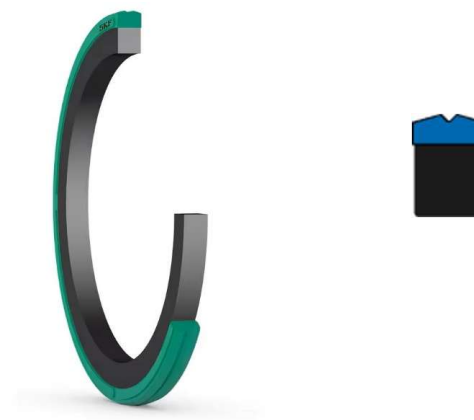
- **Piston seals**

piston seals maintain sealing contact between a piston and cylinder bore. The moving piston rod generates high pressure on the piston seal which increases contact forces between the seal and cylinder surface.

Wide range of materials including thermoplastic polyurethanes (TPU), polytetrafluoroethylene (PTFE), polyamide (PA) and nitrile rubber (NBR)

Two types of piston seals

- Double acting seal
- Single acting seal





Hydraulic seals

- **Rod and buffer seals**
- Rod and buffer seals maintain sealing contact in *sliding motion between the cylinder head and the piston rod*

Pressure	Up to 700 bar (10000 psi)
Speed	Up to 1 m/s (3.2 ft/s)

Temperature range

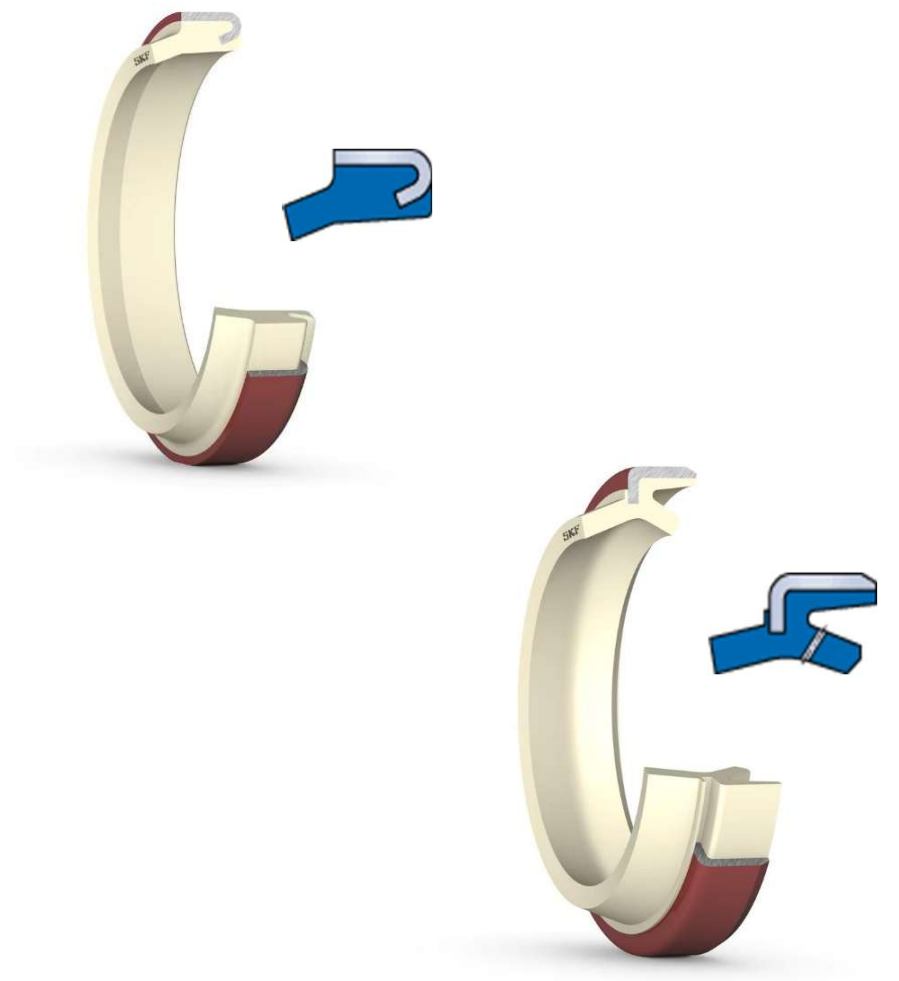
A horizontal color gradient bar representing a temperature range, identical to the one at the top of the slide. The top row shows Celsius values: -60, -40, -30, 110, 120, 130[°C]. The bottom row shows Fahrenheit values: -75, -40, -20, 230, 250, 265[°F].



Hydraulic seals

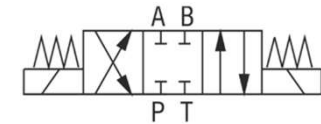
- **Wiper seal**
- Hydraulic cylinders operate in a variety of applications and environmental conditions, including exposure to dust, debris or outside weather conditions. To prevent these contaminants from entering the cylinder assembly and hydraulic system, wiper seals (also known as scrapers, excluders or dust seals) are fitted on the external side of the cylinder head.

• Speed	• Up to 1 m/s (3.2 ft/s)
• Temperature range	• -40 to +110 °C (-40 to +230 °F)



Hydraulic valves

- **Direction control valve**
- Directional Control Valves (DCVs) guide the flow of hydraulic oil within a circuit. They control the starting, stopping, and direction of fluid flow, making them essential in almost every hydraulic application
- **Types of DCVs:**
 - **4/3 Way Solenoid Valve** (center positions: closed/open/floating)
 - **4/2 Way Manual Lever Valve**
 - **Pilot Operated DCV**
 - **Monoblock Valves** (widely used in mobile hydraulics)



Parameter	Value
Max Pressure	Up to 350 bar
Flow Rate	20 – 250 L/min
Operation Type	Solenoid / Lever / Pilot / Pneumatic
Coil Voltage	12V, 24V DC / 110V, 220V AC
Port Size	1/4" to 1" BSP / NPT
Mounting Style	Subplate, Inline, Modular

Hydraulic valves

- **Electro-Hydraulic Servo Valves**
- Servo valves are used for precision hydraulic control in systems requiring fast response, high accuracy, and continuous feedback. They are a core part of servo-hydraulic closed-loop systems.



Parameter	Value
Rated Flow	1 – 100 L/min
Operating Pressure	210 – 350 bar
Signal Input	±10V, 4–20 mA, PWM, CANopen, EtherCAT
Feedback Mechanism	LVDT / Digital sensor
Response Time	1 – 5 ms
Mounting	ISO 10372 / CETOP 3, 5



Hydraulic valves

- **Pressure Control Valves**

Function: Maintain system pressure within safe limits

- Type:-

- Pressure Relief Valve
- Pressure Reducing Valve
- Sequence Valve
- Unloading Valve

Specs:

- Pressure Range: 5–350 bar
- Mounting: Inline / Modular / Subplate



Hydraulic valves

- Flow Control Valves



Check Valves



Modular Valves (Stack Type)





Hydraulic Gas spring

We supply **durable, maintenance-free hydraulic gas springs** for lifting, lowering, and positioning applications. Ideal for panels, hoods, lids, and machinery — ensuring **smooth and controlled motion**.

Key Features:

- Compact design, high force in small size
- Custom stroke & force as per application
- No leakage, long-life performance
- Available in mild steel & SS304/316
- Ball socket, eyelet & fork-end mountings

We also offer custom-designed gas springs based on force, stroke, and mounting





Industrial Electronics Repair

What we do

Minimize Downtime. Maximize Uptime.

We specialize in the repair of a wide variety of industrial electronic equipment used in automation, motion control, and power systems. Our highly skilled team restores functionality at component level, delivering cost-effective alternatives to new replacements with warranty-backed assurance.



We repair

- -AC & DC Drives (VFDs, Servo, Spindle)
- - PLCs & Industrial PCs
- - HMIs, Operator Panels, Touchscreens
- - SMPS, Linear PSUs, UPS Systems
- - CNC Boards, Controller PCBs
- - I/O Modules, Communication Modules
- - Encoders, Sensors, Temperature Controllers
- - Relays, SSRs, IGBTs & Power Modules

Industrial Electronics Repair





Industrial Electronics Repair

From Breakdown to Full Recovery – Step by Step

We follow a systematic repair workflow designed to minimize turnaround time and ensure consistent, tested results for every unit we handle.

- Repair Workflow:
- 1. Receiving & Tagging – Component barcode-tagged and logged
- 2. Assessment & Approval – Detailed inspection and cost estimation
- 3. Chip-Level Repair – Replacement of IGBTs, ICs, capacitors, relays, and more
- 4. Simulation & Testing – Function-tested under load conditions
- 5. QC & Packing – Final quality check and safe dispatch
- Every repaired unit goes through a test bench simulation to ensure performance under real-world conditions.

Why It Works:

- - Transparent process with full tracking
- - In-house expertise across all major industrial brands
- - Repeatable quality ensured by testing labs
- Every repaired unit goes through a test bench simulation to ensure performance under real-world conditions.

Magnetic coupling

- Magnetic couplings transmit torque without physical contact, using magnetic fields. They eliminate leakage and wear common in mechanical seals
- Permanent magnet coupling
- Hysteresis coupling
- Disk coupling
- hysteresis coupling transmits torque from the driving to the driven element without contact via magnetic forces (wear-free torque transmission).
- optimally suitable for specifications of up to 25 bars and +300 °C
- torque range from 25 to 550 Nm



Cycloidal drives

Cycloidal drives (also called *Cyclo drives* or *Cycloidal gear reducers*) are precision speed reduction mechanisms used in robotics, automation, and heavy industrial machinery

- Single-Stage Cycloidal Drive
- Two-Stage Cycloidal Drive
- Parallel Dual-Disc Type
- Planetary-Cycloidal Hybrid

Parameter	Range / Typical Value
Reduction Ratio	1:30 to 1:3000
Backlash	<1–3 arc-min (precision type)
Efficiency	85–93%
Torque Range	10 Nm to 20,000 Nm
Shock Load Capacity	Up to 500% rated torque
Service Life	15,000–25,000 hours



A **Harmonic Drive** (also called a **strain wave gear**) is a **compact, high-precision speed reducer** based on **flexible gear deformation** — it transmits torque through *elastic wave motion* rather than rolling or sliding contact.

- **Direct Drive Harmonic Drive Reducer**
- **Hollow Type Harmonic Drive Reducer**
- **Input Shaft Type Harmonic Drive Reducer**
- **Ultra Thin Harmonic Drive Reducer**
- **Mini Harmonic Drive Reducer**





High Performance Hydraulic Valves



Domin Brake-by-Wire



Domin Suspensions



Domin Powerpack



Why Choose Us – Focused, Fast & Technically Sharp

your Trusted Startup for Industrial Electronics & Hydraulics

we bring **technical depth, fast response, and real commitment** to every repair and supply request. Our goal is to make your operations smoother and your downtime shorter — without unnecessary replacements.

- **Why Work With Us:**

- In-depth knowledge of hydraulic and electronic systems
- Direct component-level diagnostics and repair
- Affordable repair costs vs full replacements
- Quick turnaround for urgent service
- Customer-first, problem-solving approach
- Growing inventory & adaptable service model

We're not just a vendor — we're your partner in building long-term reliability

Contact us

Hardik Patel(Director)

-  **Phone:** +91 8460337402

-  **Email:** hardik@tatparyadynamics.com

-  **Website:** www.tatparyadynamics.com

-  **Register office:** 6th Floor, B.D Patel house, Ankur road,
Navarangpura, Ahmedabd

-  **Branch Office** – 401, Siddheswar Holiness, Harni, Vadodada.

C O N T A C T U S