



19 HYDRAULIC BATCH ROTATING SYSTEM

Controlled Fabric Reaction & Batch Rotation Station

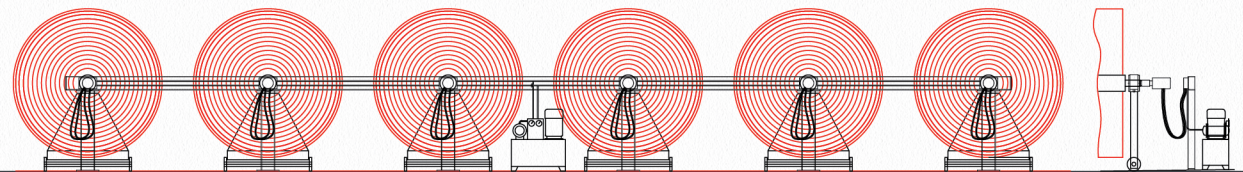
The Hydraulic Batch Rotating System is designed to provide controlled slow rotation of textile fabric batches during reaction or dwelling periods in wet processing operations such as desizing, dyeing, and washing.

During these processes, fabrics require a reaction time of approximately 6–8 hours to allow proper chemical interaction and dissolution of sizing materials such as starch, gums, and PVA. Controlled batch rotation ensures uniform chemical penetration throughout the fabric roll, preventing compression or uneven treatment.

The system utilizes a hydraulic drive mechanism capable of delivering high torque at low rotational speeds, enabling smooth and continuous rotation of wet fabric rolls without damaging the fabric structure.

The equipment consists of a central hydraulic power pack connected to multiple drive stations, allowing simultaneous rotation of several batches during the reaction period.

This system is widely used in continuous textile wet processing plants to improve chemical efficiency, fabric quality, and operational reliability.



SYSTEM CONFIGURATION

The Hydraulic Batch Rotating System consists of:

- » Central Hydraulic Power Pack Unit
- » 6 to 8 Hydraulic Drive Stations
- » Individual drive control for each station
- » Hydraulic motors mounted on batch trolleys
- » High-pressure hydraulic hoses and fittings
- » Structural support frame for drive stations

Each drive station rotates the fabric batch slowly and continuously, ensuring proper reaction during the chemical dwell period.

Technical Specifications — Jacketed Heating / Cooling Cylinders

Parameter	Specification
Machine Type	Hydraulic Batch Rotating System
Application	Fabric Reaction & Batch Rotation
Reaction Time Supported	6 – 8 Hours
Drive Type	Hydraulic Motor Driven
Hydraulic Motors	High Torque Orbital Motors
Drive Stations	6 – 8 Stations
Power Supply	380V / 3 Phase / 50–60 Hz
Hydraulic Pump Type	Dual Gear Pump
Oil Tank Capacity	Approx. 40 Liters
Hydraulic Hose Size	3/8" High Pressure Hose
Frame Construction	Heavy Duty Mild Steel Fabricated
Surface Finish	Industrial Powder Coated
Operation	Continuous Duty

Typical Applications

- » Textile Wet Processing Plants
- » Continuous Desizing Lines
- » Fabric Dyeing Operations
- » Fabric Washing Systems
- » Chemical Reaction Storage

KEY FEATURES


- » Hydraulic Drive Rotation
Economical hydraulic system designed for slow and controlled rotation of wet fabric batches.
- » Uniform Chemical Reaction
Ensures proper penetration of chemicals during desizing and dyeing processes.
- » Fabric Protection
Prevents fabric compaction, creasing, or uneven chemical treatment during reaction periods.
- » Industrial Duty Construction
Heavy-duty fabricated steel structure designed for continuous textile processing environments.
- » Low Maintenance Design
Hydraulic motors and drive systems ensure reliable and maintenance-friendly operation.
- » Energy Efficient Operation
Optimized hydraulic power system for reduced energy consumption.


OPERATIONAL BENEFITS


- » Uniform chemical reaction across fabric batches
- » Improved desizing and washing efficiency
- » Reduced fabric damage during reaction period
- » Stable batch handling in wet processing lines
- » Suitable for large-scale textile production plants



CONTACT

 DHARA TEXTILE MACHINERY PRIVATE LIMITED.
PLOT NO. 4011, ROAD NO. 4B
PHASE-4, GIDC VATVA
AHMEDABAD – 382445
GUJARAT, INDIA

 +91 98240 59699 (Shailesh Panchal)
+91 97230 59699 (Jay Panchal)

 sales@dharatextilemachinery.com
sales.india@dharatextilemachinery.com

 dharatextilemachinery.com

