



**Parmar Machines  
& Technologies Pvt. Ltd.**



**Vertical Auto Body Forming with  
Neck-In & Assembly Line  
(720Drums/Hour)**

[www.parmarmachinestech.com](http://www.parmarmachinestech.com)

# PMT X STI COLLABORATION

Parmar Machines & Technologies Pvt Ltd are proud to confirm the strategic technological buyout of the proprietary systems developed by our long-standing Italian partners, STI Impianti Srl, Italy. This acquisition empowers us to manufacture the industry's most advanced fully automatic mechanical lines entirely indigenously.

These lines will be produced in India under the guidance and mentorship of our partners, who will maintain oversight of quality assurance and manufacturing compliance. The acquired technology helps us become the only manufacturer in the whole of Asia to offer these lines: a high-speed output of 720 barrels per hour driven by next-generation crimping mechanics that guarantee uniform specifications across 100% of production. This Italian-engineered architecture redefines efficiency; it not only is 40% more energy-efficient than standard horizontal lines but also can help your plant operate for shorter durations with suffice production capabilities and offers a true automatic operation eliminating the need for human intervention and maximizing production continuity.



# INTRODUCTION TO PARMAR MACHINES & TECHNOLOGIES PVT LTD.

Parmar Machines & Technologies Pvt Ltd is a leading manufacturer and complete solution provider for the drum and barrel industry in India, with over 40 years of expertise. We specialize in machinery for MS barrels and bitumen drums (150–250 L), drum machinery (10–100 L), and conipail drums, along with high-precision dies and spare parts such as seaming rollers and seaming chucks for all drum and barrel plants. We also provide complete labor and conversion solutions, including repair work and transforming raw materials into finished products—ensuring a seamless, end-to-end experience for our clients. We are proud to announce the strategic technological buyout of proprietary systems from our long-standing Italian partners, STI Impianti Srl, Italy. This enables us to manufacture fully automatic mechanical drum lines entirely in India under Italian guidance and quality oversight. With this advanced technology, we are the only manufacturer in Asia offering high-speed lines capable of producing up to 720 barrels per hour, featuring next-generation crimping mechanics for uniform quality. These lines are up to 40% more energy-efficient, offer true fully automatic operation, and significantly enhance production continuity. Whether setting up a new plant or upgrading existing machinery, Parmar Machines & Technologies Pvt Ltd delivers reliable, advanced, and future-ready solutions for the drum and barrel industry.



# INTRODUCTION TO S.T.I IMPIANTI S.R.L, ITALY

S.T.I. IMPAINTI S.R.L, ITALY. has been founded in 1989 by Carlo Storari and his son Massimo as a result of natural evolution of "Carpenteria meccanica Flli. Storari", general light and middle weight steel works for two generations. Besides continuing the steel works activities Massimo, thanks to his meanwhile acquired know-how, started construction and marketing of small roller tables and transport systems as well as maintenance of machines and lines at Italian drummakers'. About two years later, upon insistence of her customers, S.T.I. ventured production of her very first - from-drawing-to-construction - own drum making machines obtaining, as proven by all of the single machines and lines so far supplied, a substantial share of the Italian as well as the worldwide market. S.T.I.'s policy has always aimed to satisfy her customers' requests by cultivating each detail of her own machinery keeping - and this should help to open up new international markets - to her own philosophy and that is "Passion for Excellence".



# Pictures of the Line



# TYPES OF STEEL DRUMS MANUFACTURED ON THIS LINE



**OPEN TOP  
STEEL DRUM**



**GI STEEL  
DRUM**



**GOOSENECK  
STEEL DRUM**



**TIGHT HEAD  
STEEL DRUM**

# FORMING LINE

The forming line is designed for precise shaping and preparation of steel drum bodies before assembly. It ensures uniform dimensions and consistent quality.

## Main Barrel Feeder

Automatic feeding system for continuous and smooth barrel loading.

## Flanger Unit

Suitable for multiple drum types:

- Open Mouth Barrels
- Tight Head Barrels
- Neck-In Barrels

## Beader Machine

Supports both:

- W-Bead
- Normal Hoop Bead

## Corrugator Unit

Available in 3 or 4 corrugation.

## Neck-In Machine

Designed for precise forming of:

- Standard Neck-In Barrels

## Transfer System

Ensures smooth movement of barrels between forming stations.



# ASSEMBLY LINE

The assembly line ensures accurate and reliable top and bottom lid assembly for leak-proof and durable drums.

## Full Barrel Feeder System

Automatic feeding for continuous assembly line operation.

## Top Seamer

High-strength seaming unit for secure and uniform top sealing.

## Bottom Pre-Assembler

Ensures correct placement of bottom lids.

## Bottom Seamer

Provides strong, leak-proof bottom seam formation.

## Top Pre-Assembler

Prepares and positions top lids for precise seaming.

## Turnover Table

Automatic barrel turning system for smooth transfer to bottom assembly.

## Synchronized Line Control

Ensures perfect coordination between all assembly stations.



# KEY FEATURES OF THE FLANGING MACHINE

## Automatic Tool Change System

Integrated tool changing for Tight Head and Open Top drums, controlled directly from the control panel.

## Servo-Based Cam Mechanism

Fully operated on advanced servo-driven cam systems, ensuring high precision and consistent flanging on every barrel.

## Hydraulic-Free Operation

No hydraulic system used, resulting in:

- Lower maintenance
- Cleaner operation
- Higher reliability

## Automatic Height Adjustment System

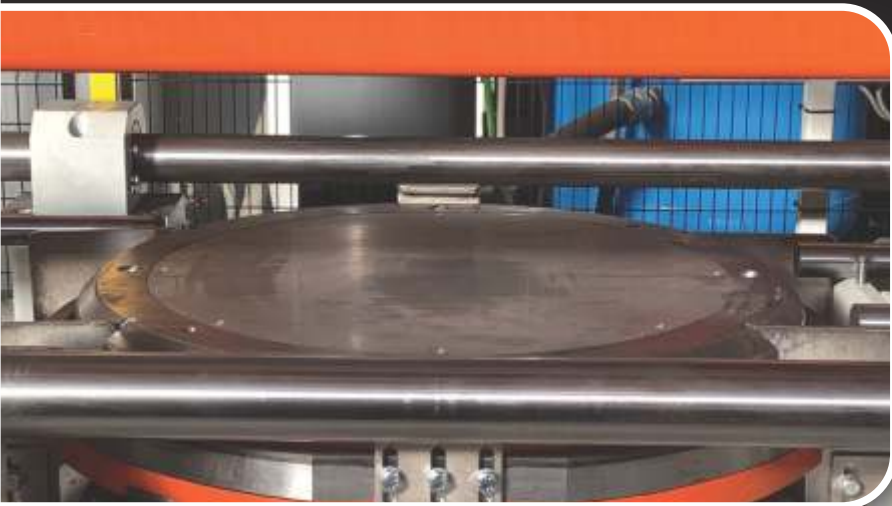
Equipped with screw-based auto height adjustment for processing different barrel heights with ease.

## High Consistency & Accuracy

Guarantees uniform flanging profile and dimensional stability across all drum types.

## User-Friendly Control Interface

Easy parameter setting and operation



# KEY FEATURES OF THE BEADING & W BEAD MACHINE

## Flexible Bead Profile Selection

Supports both:  
W-Bead  
Normal Hoop Bead  
Selection can be easily made from the control panel as per production requirements.

## High-Speed Crimping Technology

Equipped with advanced crimping technology that supports line speeds of up to 720 drums per hour.

## Servo-Based Cam System

Fully cam-driven and operated by high-performance servo motors, ensuring precision accuracy.

## 32-Segment Crimping System

Crimping is performed using 32-segment male and female tooling, powered by servo motors for uniform bead formation.

## Centralized Control Interface

All operating parameters and modes are managed through a user-friendly control pan



# KEY FEATURES OF MULTIPLE CORRUGATION MACHINE

## Multi-Corrugation

Capable of forming 3 or 4 corrugations on the drum body, adjustable via the control panel based on your spec.

## High-Speed Crimping Technology

Equipped with advanced crimping technology, enabling line speeds of up to 720 DPH.

## Non-Rotational

Corrugation is formed without any rotation of the drum, eliminating surface scratches, dents, and profile damage.

## Pre-Printed Sheet Compatibility

The machine is capable of processing preprinted drum sheets without affecting logos, branding, or surface finish.

## Crimping Mechanism

Corrugation is performed using 32-segment male and female tooling driven by servo motors.

Segments require no replacement throughout machine life.



# KEY FEATURES OF NECK-IN MACHINE

## Smart Line Integration & Auto Bypass System

If a different barrel type (e.g., Tight Head) is selected, the system automatically skips the Neck-In machine, ensuring uninterrupted line operation.

## Centralized Control Interface

User-friendly control panel for easy monitoring, parameter setting, and production mode

## No Secondary Line Required

Eliminates the need for a separate or secondary production line for manufacturing gooseneck barrels.

## Multiple Neck-In Profile Selection

Supports various neck-in barrel types, selectable from the control panel, including:

- Hoop Bead
- W-Bead
- With Corrugation
- Without Corrugation



# KEY FEATURE OF SEAMERS & PRE ASSEMBLERS

## Servo-Based Vertical Seamers

Equipped with advanced servo-driven vertical seaming systems for high precision, stability, and consistent seam quality.

## Automatic Turnover & Bypass System

Integrated auto turnover system for smooth top-to-bottom transfer. Includes intelligent profile selection and bypass function for Open Mouth drums, ensuring uninterrupted line flow.

## High-Speed Seaming Operation

Each seaming cycle is completed in only 4 seconds, supporting high-volume production.

## Compensator Screw System

Advanced compensator screw mechanism ensures uniform pressure distribution and precise seam formation on every drum.



# KEY FEATURE OF SEAMERS & PRE ASSEMBLERS

## Servo-Based Arm Adjustment System

Seamer arms are adjusted through servo motor-driven screw mechanisms, ensuring accurate and repeatable setup for different drum types.

## Automatic Pre-Assembler Unit

Equipped with a pre-assembler system that automatically fits lids onto barrels before seaming, reducing manual handling and improving accuracy.

## Automatic Roller Lubrication System

Built-in auto-lubrication system improves roller durability and minimizes maintenance downtime.

## Quick Roller Change System

Advanced roller mounting system enables roller change in under 10 minutes, ensuring minimal downtime.



# FEATURES OF LINE AS WHOLE

## High-Speed Performance

The production line operates at a maximum speed of 720 drums per hour (DPH), ensuring high-output capacity and maximum productivity.

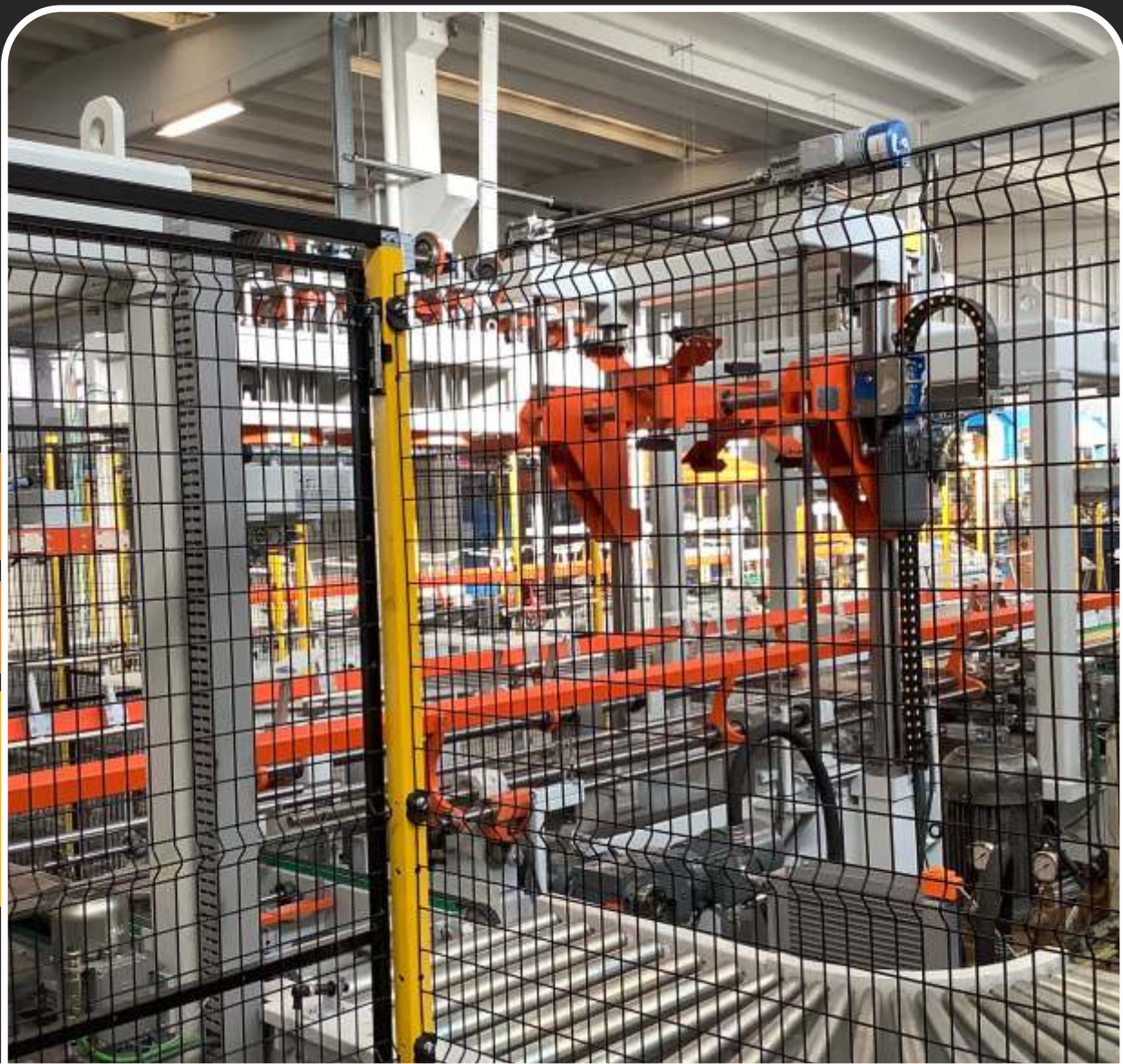
## Fully Automatic Speed Adjustment

The line automatically synchronizes with the welder machine, intelligently recognizing the incoming drum feed rate and adjusting speed accordingly for smooth, continuous production.

## No Hydraulic Systems

The entire line is designed without hydraulic systems, resulting in:

- Lower maintenance requirements
- Reduced operating costs
- Cleaner operation



# FEATURES OF LINE AS WHOLE

## 100% Servo Motor Driven

All machines and movements within the line are powered by fully adjustable servo motors, providing:

- Precise speed control
- Adjustable torque settings
- Higher accuracy
- Improved energy efficiency
- Reduced mechanical wear

## Advanced HMI Control System

The complete line is operated via HMI (Human Machine Interface) control panels, allowing:

- Reduced mechanical wear
- Easy operation and monitoring
- Quick changeover between different steel drum types
- Full parameter customization Via Online
- User-friendly control and diagnostics



# FEATURES OF LINE AS WHOLE

## Lubrication-Free Line Design

- The complete vertical auto line is designed to operate without routine lubrication requirements in major forming systems.
- Eliminates the need for continuous manual greasing and oiling.
- Reduces manpower involvement and maintenance effort.
- Minimizes operational costs and improves overall cleanliness of the production area.

## Energy Efficient Operation

- The full production line operates at a maximum connected load of 150 kVA only.
- Optimized servo-based systems ensure efficient power consumption.
- Lower energy requirement compared to conventional hydraulic or pneumatic-based lines.
- Reduces long-term electricity costs and improves ROI.



# KEY FEATURES OF 5-STATION AIR LEAKAGE TESTING MACHINE

## Fully Automatic Operation

Designed for complete automatic functioning with minimal operator intervention.

## 5-Station Simultaneous Testing

Performs automatic air leakage testing on five steel drums simultaneously, ensuring high throughput and efficiency.

## Automatic Drum Loading System

Automatically loads 5 steel drums at a time into the testing stations.

## Continuous Auto Feeding System

While 5 drums are under testing, the next 5 drums are automatically positioned behind them, ensuring uninterrupted operation.

## Visual Leak Detection Indication

Clear and instant status display:

**Green Signal** - No Leakage(Pass)

**Red Signal** - Leakage Detected (Reject)

## Advanced HMI Control Panel

Complete machine control through a user-friendly HMI system, allowing

- Parameter setting
- Pressure monitoring
- Cycle control
- System diagnostics

## High Productivity & Reliability

Designed for continuous industrial operation with consistent and accurate leak detection.



# Pictures of the Line





## **Parmar Machines & Technologies Pvt. Ltd.**

**Manufacturers of: PLANTS AND DIES FOR CONIPAIL | DRUM |  
BARREL | CONICAL STEEL DRUM**

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