





**Cost of Ownership** 

**Optimum Technologies** 

**User Friendly Equipment** 

**High Uptime** 

**Easy to Maintain** 

**Keeping Up with Emerging Technologies** 

**Upgrading Existing Machines for Productivity** 

**Modular Construction** 

Standard Components - Worldwide Availability

**After Sales Services** 

## **Team - Master Handlers**

Master Handlers is a company established in the year 1982 with a clear vision to serve the society with new technology and new products. Spearheaded by the Managing Director, Mr. Jaydeep Shah, an IIT graduate.

Under the Master Handlers umbrella there are three divisions...

- Master Automation and Robotics Under take material handling & industrial automation projects.
- 2. Master Zippel A joint venture between Master Handlers and Zippel GmbH for industrial component cleaning solutions
- 3. Master Handlers In manufacturing of presses and impregnation lines for panel and board industry.

The journey for our Press division started in the year 1982 when we manufactured our first handling system for an HPL press.

We are the only manufacturer in the world who manufacture & provide total solution for lamination industry.

We also undertake complete project consultation service for HPL manufacturing and for Pre -Laminated Board manufacturing.

We are not only present in India but also exported our products to countries in GCC, Europe, Africa and South East Asia.

We are a technologically driven organization with our machines abiding to European performance standards. We believe in innovation and our technical team is continuously striving for new technical advancements & developments to create solutions that brings more profits to the customers.

We have state of the art integrated manufacturing facility of 16,000 m<sup>2</sup>. At the production facility, Master Handlers pursue a constant upgrade of its technological equipment in the endeavor to manufacture better and better product. With the approach we strive to guarantee quality, service and commitment towards the customers.

#### With experience spanning decades, we have commissioned:

- □ 89 High Pressure Lamination Press Lines
- ☐ 51 Short Cycle Lamination Press Lines
- □ 18 Paper Impregnation Lines

# Paper Impregnation Line

Melamine

Phenol | Urea Melamine



#### **OPTIONS:**

Coating Stations | Automatic Temperature - Dryer Turret Rewinder | Automatic Stacker with Pallet Changing

#### **PRODUCT PROGRAM**

Web Speed up to 120 m/min - PHENOLIC RESIN for Kraft

Web Speed up to 50 m/min

Standard Web Widths

**Paper Weight** 

Impregnation & Coating

Melamine Impregnation line

Phenol Impregnation line

Two Stage Impregnation Drying tunnel - Heating

- MELAMINE / UREA RESIN for Décor
- 130 | 160 | 190 | 220 cm
- 15 ~ 400 gsm
- Décor Paper, Kraft Paper, Foil, Overlay & Barrier.
- HPL, LPL, CPL and Finished Foil.
- HPL, CPL and Foil.
- Urea Impregnation & Melamine Coating for LPL
- Thermic Fluid | Gas

#### **IMPREGNATOR SPECIFICATIONS:**

- ☐ Turret Un-winder with automatic splicing unit & automatic tension control
- Pre-wetting with motorized skying
- Accurate resin pick up and control
- ☐ Motorized gap setting of metering/squeeze rolls with electronic display & repeat accuracy
- ☐ Heated drag roll & Heated VAT (Resin tray)
- ☐ Different paper paths to suit paper & resin
- ☐ Efficient "S" curve type air flotation dryer
- Excellent sealing and insulation
- Sliding support of drying tunnel

- ☐ High efficiency cooling roll station
- ☐ High speed rotary cutter with CNC servo control & breaking
- ☐ Stacker & pallet changing system
- ☐ Efficient central exhaust system with VFD
- ☐ AC multi-motor vector main drive (CAN based)
- ☐ All drives synchronized by CNC motion control
- SCADA with touch screen for diagnostic, alarm annunciation, visualization, setting of parameters and periodic quality and quantity report generation





## Short Cycle Lamination Line

Press Lines for Decorative & Flooring Lamination



#### **OPTIONS:**

Secondary Circuit | Air Jet Cleaning | Multiple Board Sizes Automatic Paper Lay Up System | Thin Board Loading Press Plate Change & Storage System | Trimming Star Cooling Wheel

#### **PRODUCTION PROGRAM:**

Board Width - 122 to 220 cm

Board Length - 210 to 420 cm

Board Thickness - 3 mm to 40 mm

Specific Pressure on Board - 32 & 40 kg/cm²

Tray Belt Loading - 80 ~ 100 boards / hr

Clamp Loading (NewGen) - 120 ~ 135 strokes / hr

(Possible to do 2 boards / stroke)

#### SHORT CYCLE PRESS Models -

□ Optima – Main press with tray belt loader
 □ Midget – Press with Creel to load board, tray belt loader and vacuum unloader & unloading conveyor
 □ Xpress – Fully automated Press line
 □ Other options can be discussed as construction and control are modular

#### SHORT CYCLE PRESS SPECIFICATIONS:

- ☐ Weld Free rigid main frame
- ☐ Excellent pressure and temperature distribution hot plate
- ☐ Mechanical equilization of hot plate movement
- ☐ Hydraulic precision equalization for large size press
- ☐ Inspection acrobat (vacuum hoist) with tilting
- ☐ Built for higher productivity easy maintenance & long life
- Provision for extra pumping station on power pack
- □ SCADA with touch screen for diagnostic, alarm annunciation, visualization, setting of parameters and periodic quality and quantity report generation.
- ☐ All drives are provided with VFD's to save energy

#### NewGen (Clamp Loading)

- → Automatic paper Lay up
- → Static Charger
- → 2 Boards per stroke
- → Paper pallet centralization
- → Third pallet position for overlay.
- → Servo drive for loader

#### Note -

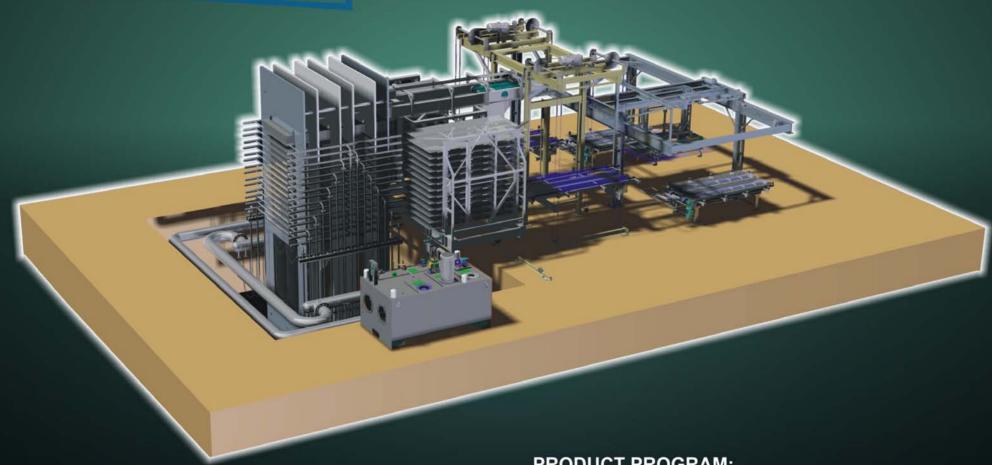
Completely assembled and tested before dispatching. Reduce installation and commissioning at customer site.





# High Pressure Laminate Press Line

Multi-opening Press Lines - Customised Layouts



#### **OPTIONS:**

Through Feed System | Wet Plate Cleaning System Ionized Air Cleaning for Press Plates | Heating - Cooling System

#### **PRODUCT PROGRAM:**

- 122 ~ 185 cm Width Length - 244 ~ 420 cm No. of Openings - 10 ~ 24 Pressure

- 20 to 130 kg/cm<sup>2</sup> - Steam | Hot Water | Thermic Fluid **Heating System** 

Laminates / opening

- Carrierless loading & unloading **Press Board** 

#### HPL PRESS SPECIFICATIONS:

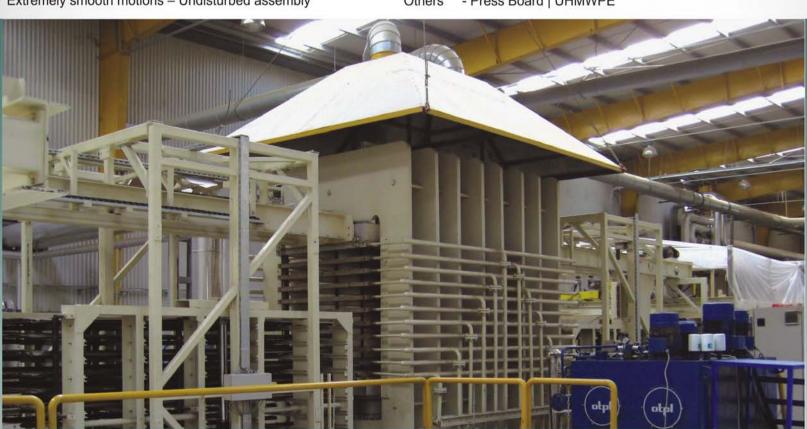
- ☐ High productivity low dead time
- Customized layouts and solutions
- ☐ SCADA with touch screen for diagnostic, alarm annunciation, visualization,
  - setting of parameters and periodic quality and quantity report generation.
- ☐ Weld Free & rigid main frame
- ☐ Ground hot plates
- ☐ Simple Hydraulics easy maintenance
- ☐ Efficient insulation
- ☐ Efficient heat transfer
- ☐ Highly reliable Merry go Round material handling system
- ☐ Mould plate protection
- ☐ Extremely smooth motions Undisturbed assembly

## Product Line - Multi Opening Press

HPL - Decorative | Compact | Post Form | Comprege

Industrial - Copper Clad | Industrial Insulation | Composites

Others - Press Board | UHMWPE





# Project Engineering Services

## **Project Engineering Services**

Master Handlers thrives on the expertise of dedicated team of professionals. The internal team combined with widely experienced professionals in the field has diverse skills. Together the team provide unmatched service for plant engineering, production technology, quality setup, production startup & training. The team empowers us to provide all services to support you to set up a new plant for:

Pre Lamination Board Line
Decorative & Industrial Laminate Factory

PLANT ENGINEERING

PRODUCTION TECHNOLOGY

**QUALITY SETUP** 

PRODUCTION STARTUP

TRAINING

#### To set up a plant, we offer the following services:

- Complete plant engineering with detailed drawings for the entire plant -
  - Plant Layout
  - Storage, RM intermediate & finish goods
  - Material Handling
  - Heat Engineering
  - Laboratory Setup
  - Electrical Insulations
- > Guide architect and construction professional with relevant inputs
- > Production Technology
  - Resin Technology
  - Process Parameters
  - Equipment Specification & Sourcing
- Coordinate between various suppliers to ensure completeness of the whole plant - avoiding startup delays
- > Coordinate commissioning of all the equipment to begin production
- > Establish quality setup for raw material, intermediates & finished product.
- > Run production for a period of 3 months
- > Training of technicians to run the plant
- > Establish preventive maintenance schedule and identify spares to be maintained
- > Recommendation for establishing minimum maintenance work shop
- > Keeping present & future business plans in view







### **Our Group Companies**

- Master Zippel Cleaning Systems Pvt Ltd
- Master Automation & Robotics Pvt Ltd
- Master Handlers (Guj) Pvt Ltd
- AutoVue Electronics



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