



SMLC®

**SML INDUSTRIES**

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*Quality in everything we do*

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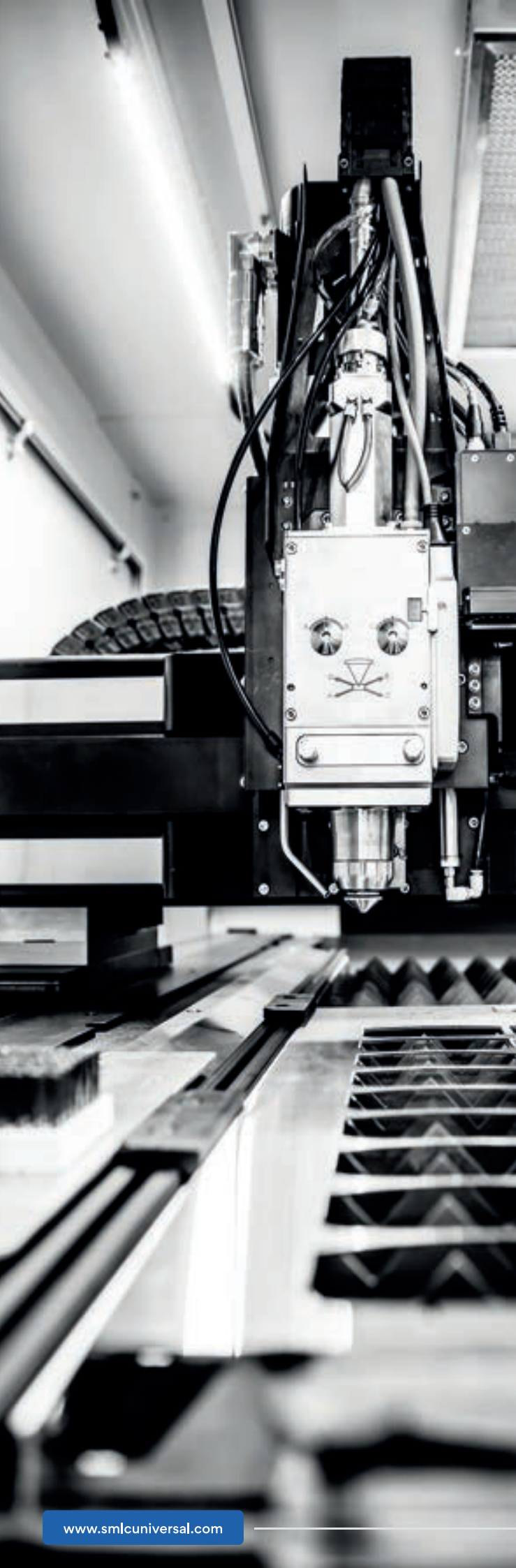
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# 01 INTRODUCTION

We at SMLC are SPM manufacturers. We understand that every industry/ company, manufacturing unit is different and has its own application needs and requirements, and faces different challenges. We are here to understand your application needs and provide you with a solution which is long lasting and durable and unique to your requirement.

In the this catalogue we have summarized our SMLC Drum-press. Please go through it and get in touch with our sales executive to have an in-depth understanding of how we can customize this system as per your application needs and integrate it seamlessly in your setup.

## 02 DRUMPRESS

Pumping, emptying, mixing, filling and metering - when liquids are set in motion the requirements are very diverse. In any case the process must run smoothly.

SMLC DRUM-PRESS is a simple, robust single component dispensing system can easily pump out a wide range of materials. It offers chemical resistant, hardened parts making it both durable and low maintenance.

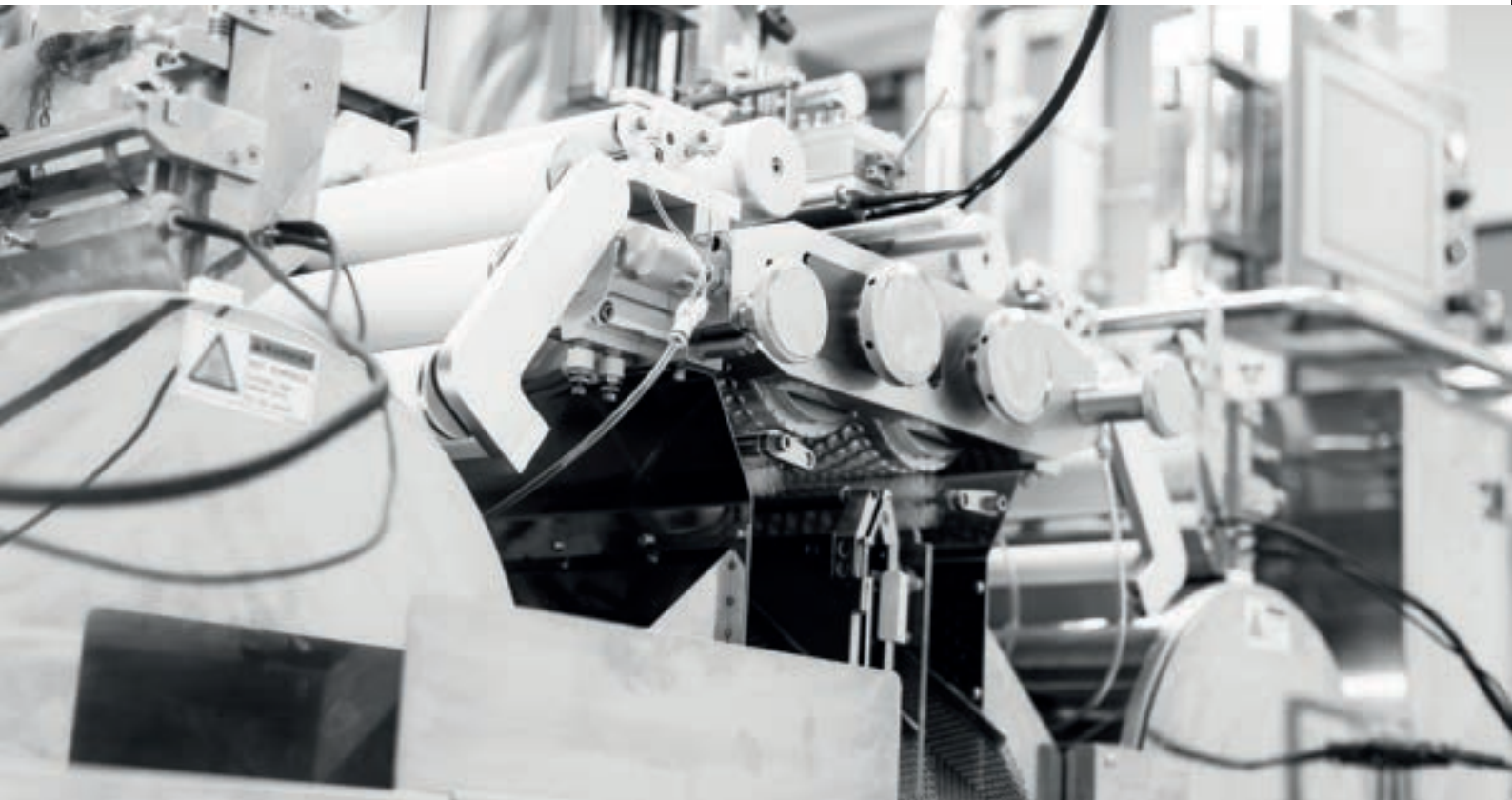
This single component system is heavy duty and it easily dispenses fluids or adhesives. This system excels when large surface areas need to be covered and a

handgun is usually the standard application method.

It offers a 01 kg and 250 kg tank and can dispense materials upto 3 lac cps viscosity using pneumatic pressure. It can simultaneously run two hand guns allowing to double the output.

This system is used for a wide range of viscosity materials including silicone, polyurethane, polysulfide, etc.

This system is built on a portable cart and with simplicity in mind, making it affordable, reliable, and easy-to-use.





## 03 FEATURES

High Flow rate pumps and guns

Priming piston(shovel) type suction for high viscosity fluids.

Superior quality spares to reduce maintenance cost.

Auto shut off for pumps when reach empty level.

Facility for twin pail switchover system.

Can be custom made for 5kg to 250 kg drum size.

These are equipped with medium duty or heavy duty range of pumps and are suitable for semi solid or pasty materials.

Chemical Resistant Parts.

SMLC drum press are designed with ergonomic and safety in mind.

They can be used with Forward and back ward integration on manufacturing lines.

Teflon coated follower plate. (optional)

Pneumatic Power Application methods.

Heating system provision for hydraulic and follower plate.

## 04 COMMON APPLICATIONS

1. Sealant/Adhesive dispensing
2. Grease dispensing
3. Silicon dispensing
4. Pasty type material dispensing
5. Cartridge filling
6. High viscous material transfer application
7. Gap filling
8. heat sink compound
9. thermal paste

## 05 APPLICATION INDUSTRY

Solar Industry

Automotive Industry

Chemical Industry

Defence Industry

Packaging Industry & Printing press

Adhesive and Sealant Manufacturer

Construction industry

E- Mobility

# INDUSTRY 4.0 FEATURES

**01**

Vision camera for bead inspection.

**02**

Automatic aeration.

**03**

Air consumption monitoring.

**04**

Hydraulic stroke count to check per day material consumption.

**05**

Bar code scanner for shelf life monitoring of material.

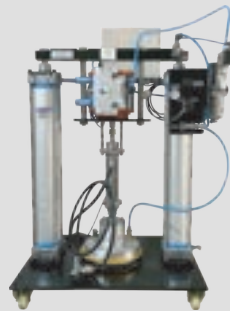
**06**

Report generation.

## 07 STANDARD PICTURES



**SMLC 5 kg Drumpress**



**SMLC 25 kg Drumpress**



**SMLC heated 25 kg Drumpress**



**SMLC heated 250 kg Drumpress**



**SMLC 250 kg Drumpress**

# 08 SPECIFICATIONS

## GENERAL SPECIFICATIONS

SR. NO.	SP. TYPE	LOW DUTY	MEDIUM DUTY	HEAVY DUTY	HEAVY DUTY
1	TYPE	40:110	35:210 D	55:275 D	75:210 D
2	RATIO	35:1	35:1	55:1	75:1
3	OUTPUT/CYCLE (CC)	110	210	275	210
4	AIR MOTOR PISTON DIA. (mm)	200	200	300	300
5	STROKE LENGTH (mm)	120	120	120	120
6	APPROX WEIGHT (kg)	60	67	67	90
7	RECOMMENDED SPRAY VOLUME PER MINUTE (Lit.)	5	5	7.5	5.5
8	AIR INLET PRESSURE MAX. (BAR)	6	6	6	6
9	OUTPUT PRESSURE MAX (BAR)	240	210	330	450
10	AIR CONSUMPTION Lit/MIN. MAX	3500	3500	5000	5000

## ELECTRICAL SPECIFICATIONS

SR. NO.	SP. TYPE	RENEWAL
1	TYPE	PID/PLC Controlled Panel
2	HMI	Siemens/Delta /Mitsubishi
3	INPUT SUPPLY	3 Phase (415 VAC/50 HZ)
4	CONTROL SUPPLY	24VDC,5A
5	CONTROL VALVE	4/3 Rotary Valve (Janatics/SMC/Festo)
6	SENSOR TYPE	RTD PT-100
7	PART DETECTION	Photoelectric Sensor (Baumer)
8	HYDRAULIC SENSOR	RTD PT-100
9	HYDRAULIC HEATER	900-1000 watt
10	FOLLOWER PLATE HEATER	2.5-3 KW
11	FOLLOWER PLATE SENSOR	RTD PT-100
12	HOSE HEATER	450 WATT
13	HOSE SENSOR	RTD PT-100

# 09 MODES OF DISPENSING

## 01. Manual Dispensing

### SMLC Manual Dispensing gun

Our manual sealant dispensing gun provides precise and accurate dispensing of sealant.



#### SPECIFICATIONS

- Maximum working pressure: 350 bar
- inlet port : 1/4" BSP(M)
- Tip connection: M18 x 1.5(M)
- Bidding size: As per requirements

## 02. Automatic Dispensing

### • SMLC High pressure automatic dispensing gun

SMC High pressure automatic dispensing gun can be attached to our drum press for high pressure precision dispensing. This can be mounted on a stand for semi automatic dispensing or can be attached to the robot for automatic dispensing as per the requirement.

- Maximum working pressure : 350 Bar
- Switching air inlet pressure: Minimum 4 bar (spring return)
- Tip connection: M18 X1 (M)
- Inlet/ circulation ports: 1/4" BSP (F)
- Wetted parts: 304 Stainless steel, tungsten carbide





• **San-Ei-TECH High Pressure Automatic Dispensing Valve**

- Designed to withstand high pressure dispensing of fluids. (up to 17.2MPa)
- Easy maintenance.
- High pressure transferring pump can be connected.



**SPECIFICATIONS**

Model	Application	Valve Type	Weight and size	Wetted parts
SV46	High pressure spool valve	High pressure balanced-spool type	\$38.1x 119.4mm	UHMW 303 Stainless steel



**03. Volumetric Dispensing**

Metering valves are multi turn valves designed to regulate the flow of the material. The metering valve can be attached to our drum press for the dispensing of high viscosity materials. It can be mounted on a stand for semi automatic dispensing or can be attached to a robot for automatic dispensing.

**SPECIFICATIONS**

Dispensing volume (cc)		customisable
Inlet Size		G1/4"
Outlet Size		G1/4"
Min. Operation Pressure	Lubricant	15 kg/cm <sup>2</sup>
	Air Line	3 kg/cm <sup>2</sup>
Operating Pressure Range	Lubricant	15-120 kg/cm <sup>2</sup>
	Air Line	3-7 kg/cm <sup>2</sup>
Proof pressure for grease line		120 kg/cm <sup>2</sup>
Mass kg (Approx)		2.3 kg

# 10 PROCESS INTEGRATION

## 01) SMLC Gantry System

3 Axis Robotic system consists of Belt type XYZ Slide suitable according to part dimensions, Servo Motor Driven system. Motion Controller. Feeding Input data through PC CAD File.



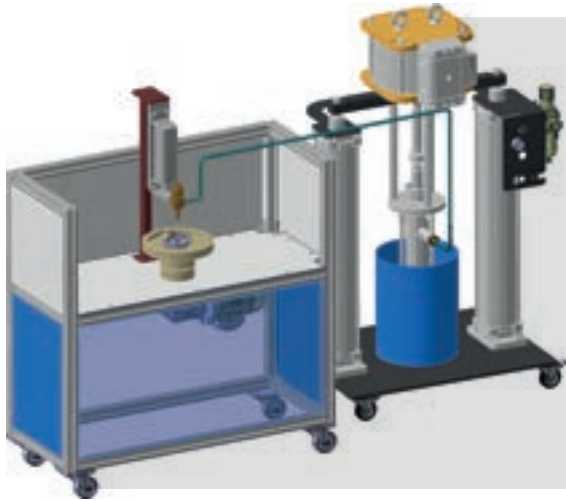
## 02) Scara Robot.

The SCARA acronym stands for Selective Compliance Assembly Robot Arm or Selective Compliance Articulated Robot Arm. Scara is a type of Industrial robot. The SCARA robot is most commonly used for pick-and-place or assembly operations where high speed and high accuracy is required.

## 03) 6 Axis Robot.

One of the most popular robot types in the industrial space is the six-axis articulated-arm robot. Six axes allow a robot to move in the x, y, and z planes, as well as position itself using roll, pitch, and yaw movements. This functionality is suitable for complex movements that simulate a human arm.





#### 04) SMLC Rotary Indexer:

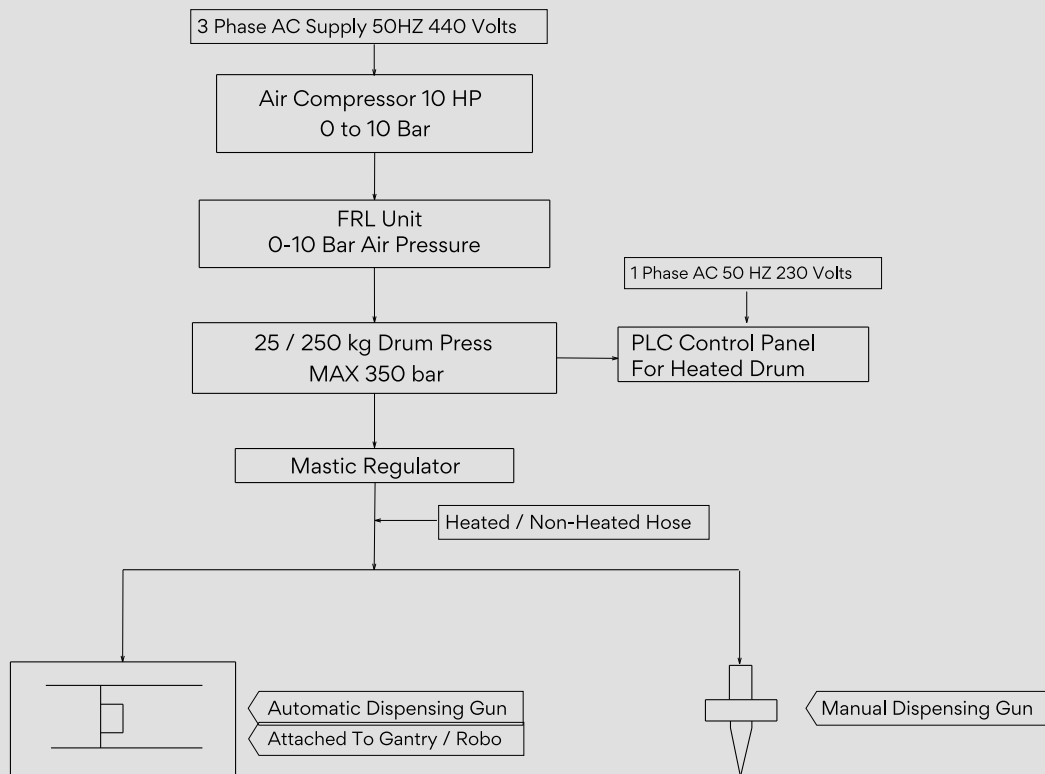
Pneumatic rotary indexing tables can be used to carry out continuous rotary movements. Rotary indexing tables are used, for example, in assembly applications. A variable direction of rotation and freely selectable indexing enable a wide variety of applications.

#### 05) SMLC Bench top Robot System

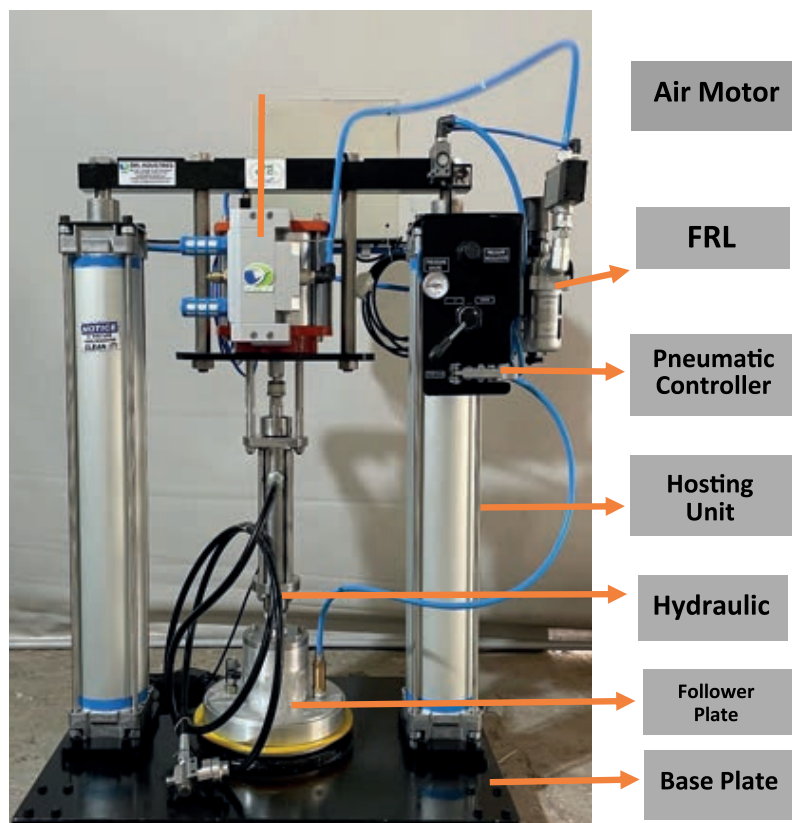
Benchtop dispensing robots are compact machines for automatic dispensing of adhesives, coatings and many other liquids or pastes. Benchtop dispensing robots allow for easier manual processing, as well as helping stop material waste, rejects, time and labour. Benchtop Robots function in x.y and z axis.



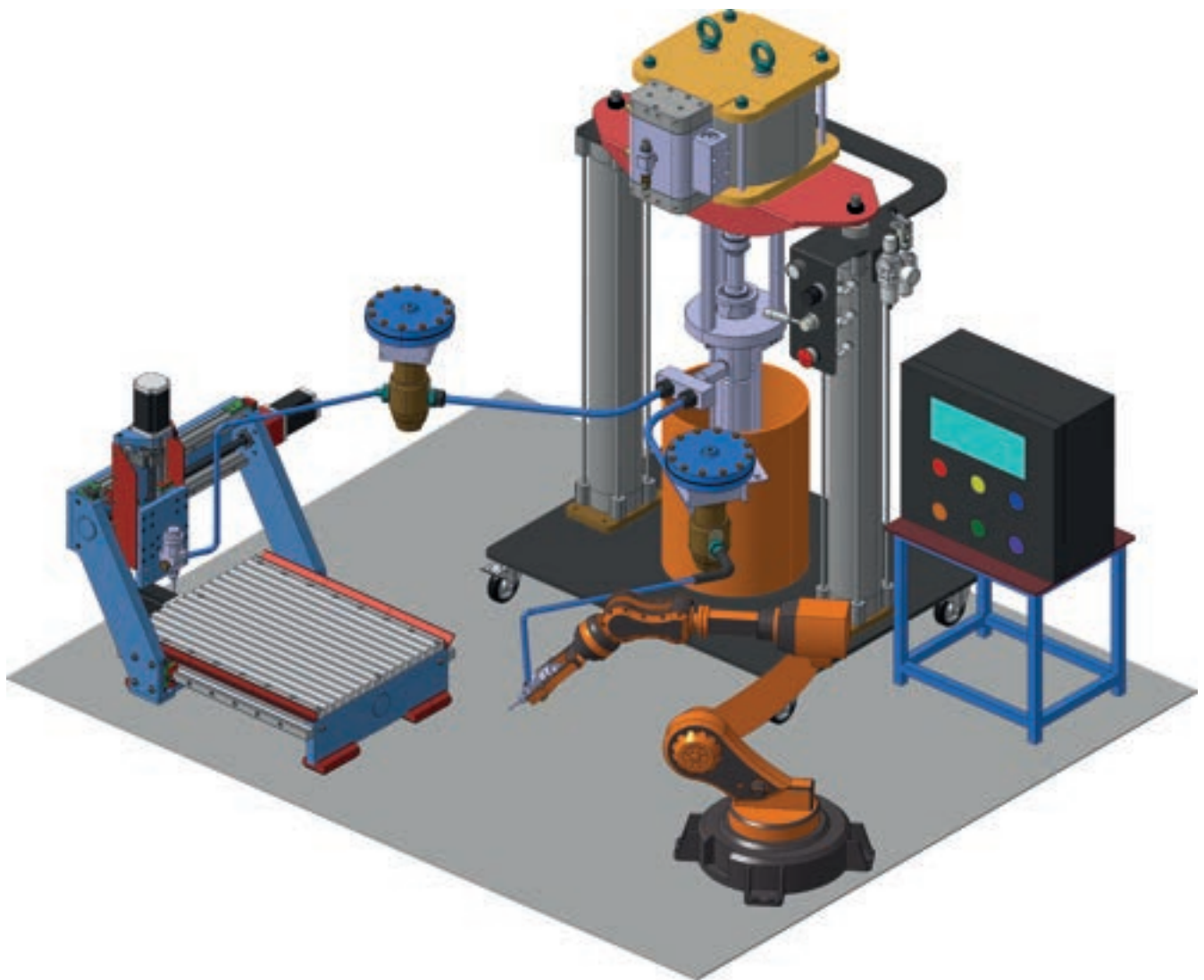
# 11 PROCESS FLOW



## SMLC DRUM PRESS STANDARD LABELLED PICTURE



# 13 GENERAL ARRANGEMENT





# 14 ACCESSORIES

- Mastic regulator for Pulsation regulation
  - Drum heater for SMLC heated drum press
  - Heated hose for SMLC heated drum press
  - PLC Base Electro pneumatic control panel
  - High pressure fluid hoses upto 450 bar
- Nozzles
  - SMLC servo based dozer system
  - High pressure filter
  - Z Swivel
  - Filter cassette



## Drum heater for SMLC heated Drum Press

- Uniform temperature across the drum
- Prevents heat accumulation
- Improved pumping and filling
- Efficient heat transfer
- Wattage: 1600 watt
- Supply: 230 watts, 50Hz

## Heated hose for SMLC heated drum press.

Sizes available up to 10mm with standard Fittings up to 3/8" BSP other sizes as per requirement.

- Heater Watt - 45- 200 watt/meter
- Temp - Max 150 c
- Sensor- PT100
- Nylon, PTFE, Thermoplastic tubes





**High pressure filter**

**High pressure hose**

**Z- Swivel**

## SMLC Mastic regulator

SMLC makes Mastic regulator regulates the flow of material which is minimum or maximum and provide continuous supply to dispensing unit.

Maximum Inbound pressure	345bar
Regulated Pressure (Air Operated)	30-290 bar
Maximum Flow	6 lpm
Inlet, Outlet, Gauge port Air inlet pressure max	3/8" BSP, 3/8" BSP, 1/4" BSP
For air operated regulator	7 bar
Wetted Parts	304 stainless steel, Aluminium, Tungsten Carbide valve, PTFE



## Flat Bid, Round Bid Nozzles and Adaptor



### FILTER CASSETTE L L14



<b>Size</b>	Diameter 27mm Length 114mm
<b>Filteration Area</b>	93cm <sup>2</sup>
<b>Mesh Sizes</b>	30, 60, 120, 150, 200, 400 (Other Sizes on request)
<b>Construction Material</b>	304 Stainless Steel

### FILTERCASSETTE L L14



<b>Size</b>	Diameter 27mm Length 145mm
<b>Filteration Area</b>	120cm <sup>2</sup>
<b>Mesh Sizes</b>	30, 60, 120, 150, 200, 400 (Other Sizes on request)
<b>Construction Material</b>	304 Stainless Steel

# Certifications



**SMLC®**

**Shri Mahaluxmi Chemicals**

Quality in everything we do

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