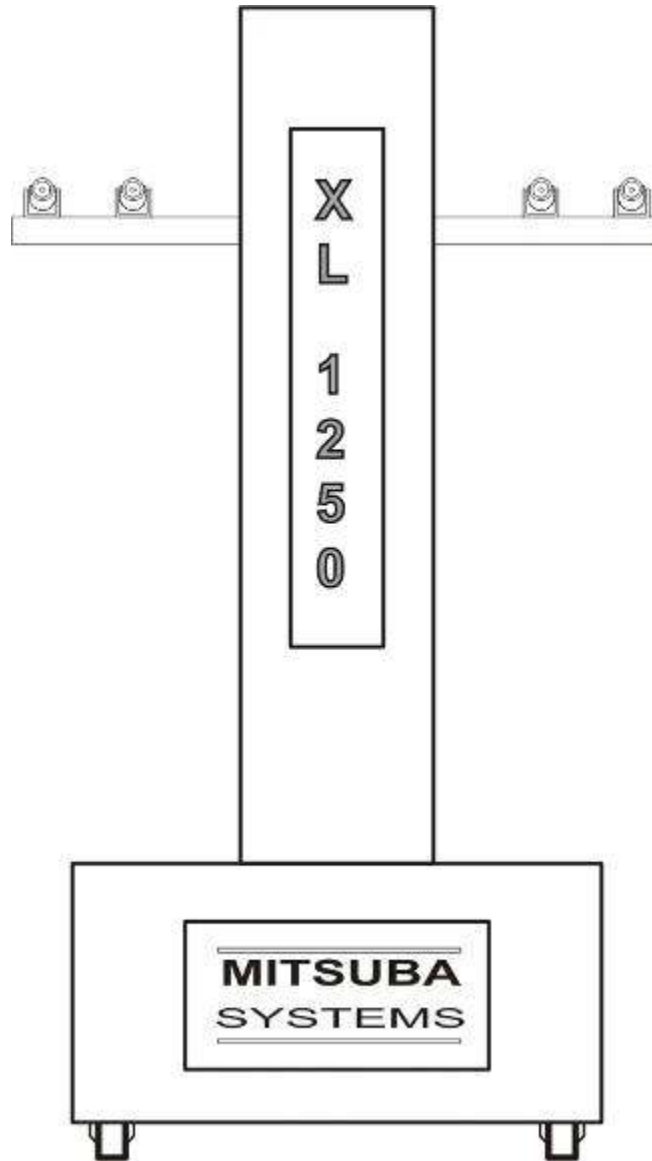


RECIPROCATOR WITH CONTROLS



**ELECTRO-MECHANICAL RECIPROCATOR - VERTICAL
WITH DIGITAL CONTROLS**

CONSTRUCTION

The guns are mounted on an arm and extended from a carriage. The carriage is programmed to move in the user decided length and speed depending on the object height and the conveyor speed. The carriage moves up and down through a belt driven by an AC geared motor. The carriage is supported by a very sturdy frame structure. A counter weight is used to balance the number of guns mounted on the spray arm. The entire reciprocator is on castor wheels to facilitate easy movement during colour change.

CONTROL

The movement of the carriage is controlled by a most update A.C. frequency drive and an advanced digital based controller to achieve the desired stroke and speed. This advanced digital based controller can also vary the speed in a multi-speed pattern. This feature allows the operator to select three speeds with three stroke lengths, thus customizing coating for the various geometries of a complicated object. This is useful in coating various complicated objects.

The control panel incorporates a most user friendly touch screen which self explains the operations so that the operator can simply punch in the required stroke length and speed for single speed or switch to multi-speed options. All the parameters can be seen on the same touch screen which makes it simple to handle. This panel allows controlling two reciprocators on same control panel. Optical encoder and proximity switches are employed for precise feedback of the stroke length.

The panel allows individual Settings of top stroke, bottom stroke and speed for 99 Programs setting which is useful to switch the settings for different parts' coating operations. This helps in saving the programming time for the part. This feature also allows to switch the setting very rapidly.

The following displays can be viewed during operation:

1. Top Stroke Length
2. Bottom Stroke Length
3. Speed in Mtr./Min.
4. Multi speeds and their corresponding strokes and speeds.
5. Individual Settings of top stroke, bottom stroke and speed for 99 Programs.

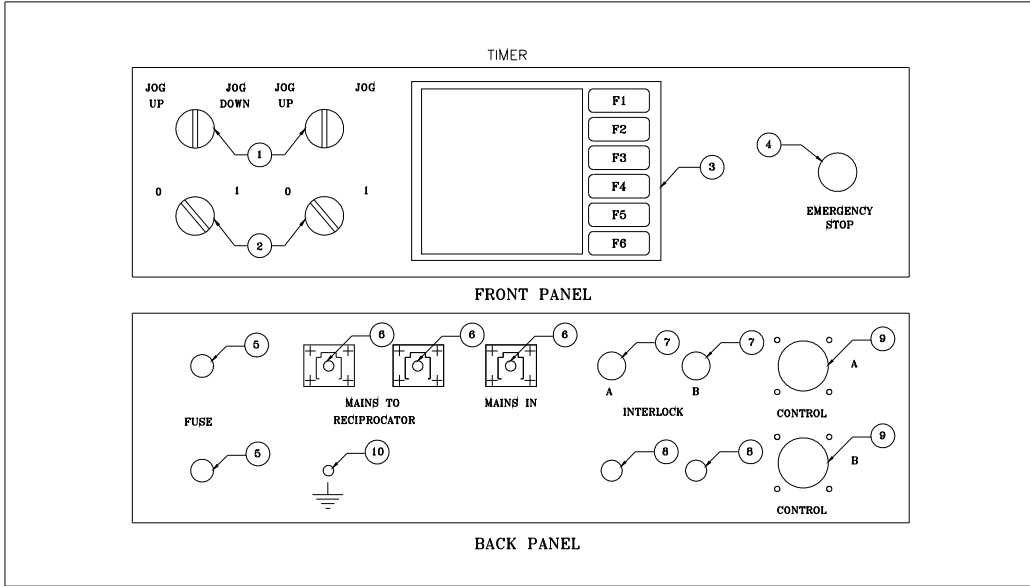
...2

RECIPROCATOR WITH CONTROLS

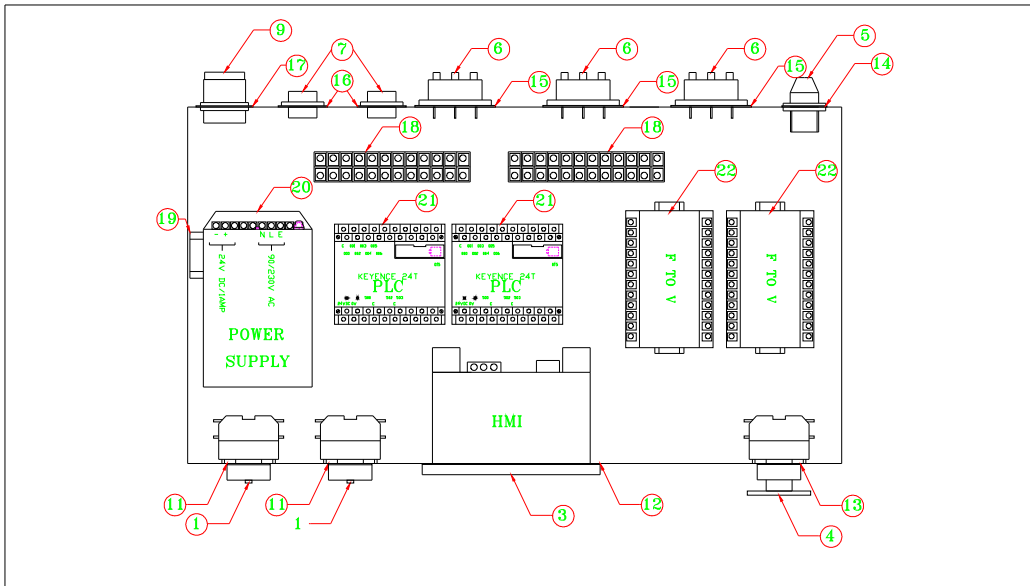
SPECIFICATIONS

• SPEED	: 0 - 30 Mt./Min (INFINITELY SELECTABLE)
• MINIMUM STROKE	: 100 mm
• MAXIMUM STROKE	: 1500mm/2600mm
• PRE - SET POINTS	: ANY SPEED & STROKES SELECTABLE. NINETY NINE (99) POSITIONS PROGRAMMABLE.
• MULTI SPEED	: THREE MULTI SPEED SETTINGS- SELECTABLE TOP STROKE AND MIDDLE STROKE AND THERE INDIVIDUAL, TOTALLY INDEPENDENT OF SINGLE SPEED SETTINGS.
• DISPLAY	: TOUCH SCREEN
• WEIGHT BEARING CAPACITY	: UPTO 30 KGS (8 AUTOMATIC SPRAY GUNS)
• CONTROL	: ADVANCED DIGITAL BASED CONTROLLER ALONG WITH A VARIABLE FREQUENCY DRIVE
• CONTROL CABINET	: CAN BE INCORPORATED IN AUTO RACK
• MOTOR	: REVERSIBLE GEARED 1 HP. AC MOTOR
• POWER	: SINGLE PHASE 230 VAC (OTHER VOLTAGES ON REQUEST)

RECIPROATOR CONTROL PANEL



MITSUBA SYSTEMS (I) PVT. LTD.		MATERIAL :	QUANTITY : 1	Ref.	PRODUCT: DIGITAL RECIP PANEL
1. ALL DIMENSIONS ARE IN M.M. UNLESS STATED 2. BREAK SHARP EDGES AND CORNERS.		R.M.SIZE :	PROCESS :	SCALE N.T.S.	TITLE: RECIPROATOR PANEL
SURFACE FINISH SYMBOLS		LINEAR :		DRN. ISHO	DRAWING No.
~	∇	MM. UP TO & NC	6 30 120 315 1000 2000 >4000	CHKD. MNP	
CLEANED	ROUGHING UP TO 100μm	SMOOTHING UP TO 250μm	FINISHING UP TO 6.3μm	TOLERANCE M.M.	±0.1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.2 ±2 ±3



MITSUBA SYSTEMS (I) PVT. LTD.		MATERIAL :	QUANTITY : 1	Ref.	PRODUCT: VERTICAL RECIPROATOR
1. ALL DIMENSIONS ARE IN M.M. UNLESS STATED 2. BREAK SHARP EDGES AND CORNERS.		R.M.SIZE :	PROCESS :	SCALE N.T.S.	TITLE: PANEL SCHEMATIC DIAGRAM
SURFACE FINISH SYMBOLS		LINEAR :		DRN. ISHO	DRAWING No.
~	∇	MM. UP TO & NC	6 30 120 315 1000 2000 >4000	CHKD. MNP	
CLEANED	ROUGHING UP TO 100μm	SMOOTHING UP TO 250μm	FINISHING UP TO 6.3μm	TOLERANCE M.M.	±0.1 ±0.2 ±0.3 ±0.5 ±0.8 ±1.2 ±2 ±3

GUN CLAMPING SYSTEM

