SPECIAL PURPOSE POLE CLOSING MACHINE

SPECIFICATIONS:

| Type of SPM offered | Pole closing SPM with PLC Control |
|--|-----------------------------------|
| Pole closing size min. & max. (mm) | 75 OD x 2 thk to 650 OD x 6 thk |
| Angular closing Capacity | 5 Tonnes each |
| No. of angular guide thrust Rolls | 2 Sets |
| Central Top closing Cylinder tonnage | 5 Tonnes |
| Strokes of all these three Cylinders | 300 mm |
| Length of Roller guide stand for | 21 meters |
| Octagonal Poles | |
| No. of Roller supports | 7 units |
| Angular and central roller guides | Dove-tail slide with L.M Guide |
| Roller Drive for Movement of Octagonal | AC Motor stepless variable type |
| Pipe | |
| Drive Power | 2 HP |
| Speed of Movement required | 2.5 – 50 mm/sec |
| Hydraulic Power Pack | 5 HP |
| Power Pack Oil tank capacity | 100 liters |

BRIEF DESCRIPTION

Hydraulic System

Our hydraulic power pack will have three sets of prop. valves monitoring the position and pressure of side and centre Rollers. These precision Valves will get oil supply from the Power Pack filtered by in-line filters and cooled by water cooling. The power Pack will be designed for continuous operation so that the same does not overheat.

Electronic Control

This will be a Telemecanique P.L.C control. We will be writing special Software to control the machine with servo positioning precision. The controller will have full diagnostics so that the operator can find out by himself which sensor or element has failed. Flat Panel display can withstand a lot of vibrations and rough handling unlike that of CRT. The feedback sensors used to obtain close loop are either rotary or linear

encoders and pressure sensing will be done by pressure transgressors of reliable make.



Figure: Pole closing welding machine