

01.IFC MAKE ELECTRICALLY OPERATED TROLLEY TYPE AGEING OVEN.

SPECIFICATION.

USEFUL CHAMBER SIZE	:	15.6MTRS (L) X 1.42MTRS (W) X 1.9MTRS (H),
INTERNAL CHAMBER SIZE	:	15.6 MTRS (L) X 1.144 MTRS (W) X 1.645 MTRS (H).
POWER RATING	:	130 KW/440VOLTS, 3 PHASE (TOTAL 4 ZONES).
OPERATING TEMP	:	135 DEG C, +1- 5 DEG C DURING SOAKING.
MAX TEMP	:	200 DEG C.
NO OF LOADING TROLLEY	:	13 NOS. NO.MS0098-2. WITH DIGITAL TIMER.
TROLLEY MOVEMENT	:	BY MEANS OF HYDRAULICYLINDER AND POWER PACK.
INSIDE CHAMBER	:	MADE OF AISI 304 GRADE SS SHEET.
OUTER SHELL	:	MADE OUT OF M.S SHEET 2MM THK.
HEATING ELEMENT	:	MADE OUT OF AIR FINNED HEATER WITH INCOLOY SHEATH FOR 4 ZONES.
1STZONE	:	36KW
2ND ZONE	:	31.5 KW
3RD ZONE	:	31.5 KW
4TH ZONE	:	36 KW
HOT AIR CIRCULATION	:	2 HP MOTOR FOR RE CIRCULATION SYSTEM WITH SS SHAFT AND FAN BLADES 04 NOS. TO GET UNIFORMITY INSIDE THE TEMPERATURE.
EXHAUST	:	06 NOS. – 2” X 2.5” EACH WITH ADJUSTABLE DAMPERS.
HYDRAULIC POWER PACK	:	YEKEN MAKE.
MOTORS	:	SEIMENS MAKE WILL BE PROVIDED.
DOOR	:	DOUBLE DOOR WITH PULL OPEN TYPE WITH HINGES TYPE BOTH SIDE.

INSULATION : CERAMIC FIBRE BLANKET WITH 96 DENSITY OF 150MM THICK.

CONTROL PANEL : A CONTROL PANEL CONSISTING OF PID CONTROLLERS (04 NOS) AND SAFETY CONTROLLER (04 NOS) WITH THYRISTORIZED POWER REGULATORS WITH ISOLATORS.

LIMIT SWITCHES, DIGITAL TIMERS, DIGITAL AMMETER, DIGITAL VOLTMETER, HOOTER WITH LAMPS. FUSE CARRIERS, INDICATION LAMPS, MCCB FOR EACH ZONE, 8 CHANNEL TEMPERATURE SCANNER, PC BASED WITH DATA ACQUISITIONS RS 485 INTERFACE WITH CONVERTER.

PAINT : OVEN INLET AND OUTLET EXHAUST DUCTS HEATING CHAMBER WILL BE PAINTED WITH HEAT RESISTANT ALUMINIUM PAINT.

MODE OF SENSING : THROUGH "K" OR "J" TYPE THERMOCOUPLE WILL BE PROVIDED.

CONSTRUCTION DETAILS:

THE OVEN WILL BE OF A FLOOR MOUNTING TYPE WITH THE HEARTH PROVIDED WITH RAILINGS FOR THE FREE MOVEMENTS OF THE TROLLEYS. THE ANGLE FABRICATED FRAME WILL BE IN DOUBLE WALL CONSTRUCTION AND THE GAP WILL BE FILLED WITH 96 DENSITY CERAMIC FIBRE BLANKET. THE OUTER SHELL WILL BE COVERED WITH CRCA SHEET OF 2MM THICK WITH WELDING /SCREW JOINTS WHEREVER APPLICABLE. THE INSIDE CHAMBER IS MADE OUT OF SS 304 GRADE SHEET OF 1.6MM THICK.

RE-CIRCULATION MOTOR WITH FAN BLADES WILL PROVIDED WITH 2 HP MOTOR (04 NOS)(SIEMENS MAKE)

THE TROLLEY SPEED WILL BE CALCULATED IN SUCH A WAY THAT EVERY 18-20 MINUTES. DIGITAL TIMER WILL BE PROVIDED.

HEATING ELEMENT: HEATING ELEMENT "U" SHAPED AIR FINNED HEATER WILL BE PROVIDED BOTH SIDES.

DOOR: 2 SETS OF DOOR DOUBLE DOORS WILL BE PROVIDED AT FEED END AND DELIVERY END WORKING ON HEAVY FABRICATED HINGES WITH LOCKING SYSTEM FOR FREE OPERATION. THE DOORS ARE MADE OUT OF MS ANGLE FRAME

COVERED WITH MS SHEET AND FILLED WITH CERAMIC FIBRE BLANKET WITH ASBESTOS ROPE FOR DOOR SEALING

TO AVOID MAXIMUM HEAT LEAKAGE 7 THE DOOR FACING THE INNER CHAMBER OF THE OVEN WILL BE SS 304 SHEET.

DUCTS: ALL INLET, OUTLET AND EXHAUST DUCTS ARE MADE OUT OF MS FABRICATED PIPES WITH FLANGES DULY INSULATED WITH GLASS WOOL WITH ALUMINIUM CLADDING WITH BENDS DAMPER ETC.,. THE MAIN EXHAUST WILL BE PROVIDED WITH 10 MTRS HEIGHT ABOVE THE ROOF WITH NECESSARY STAY WIRE AND WEATHER PROTECTION CAP ON THE TOP. WINDOW WILL BE PROVIDED FOR CLEANING DUCT WITH SUITABLE PLATFORM.

PUSHER/POWER PACK UNITS:

TANK CAPACITY	:	30 LTRS
PUMP FLOW	:	2.2 LPM
MAXI. WORKING PERSON	:	160 BAR
POWER	:	1.5 KW, 2 HP, 3 PHASE, 1440 RPM

TECHNICAL SPECIFICATION OF HYDRAULIC CYLINDER.

BORE DIA	:	62MM.
PISTON ROD DIA	:	36MM.
STROKE	:	1200MM.
MAX WORKING	:	200KG /CM2
CYLINDER ROD	:	20MM.
PORT DIA	:	3/8" BSP.
CONTROL PANEL	:	THE CONTROL PANEL WILL BE OF RITTAL MAKE TO HOUSE ALL THE SWITCH GEAR ITEMS AS UNDER.

01. MAIN ISOLATOR OF SIEMENS MAKE.
02. MCCB FOR EACH ZONE – SIEMENS MAKE.
03. INDICATOR LAMPS - TECHNIC MAKE.
04. DIGITAL VOLT METER & AMMETER WITH SELECTOR WITH SELECTOR SWITCH
– A E MAKE.
05. THE THYRISTER POWER PACK WILL BE PROVIDED WITH BYPASS CIRCUIT OF
AIR BRAKE MAGNETIC.
06. PUSH BUTTON TYPE STARTERS FOR ALL MOTORS.
07. HOOTER WITH ALARM WILL BE PROVIDED.
08. HRC FUSES FOR ALL CONTROL POWER CIRCUITS WILL BE PROVIDED.
09. PUSH BUTTON TYPE STARTER FOR HYDRAULIC POWER PACK GE/ENGLISH
ELECTRIC MAKE.
10. MAIN CONTROLLER AND SAFETY CONTROLLER HONEYWELL MAKE OR
EQUIVALENT.

11. 8 CHANNEL TEMPERATURE SCANNER WITH PROVISION TO A PC WITH RS 485 INTERFACE AND CONTROLLER WILL BE GIVEN.

12. THE PANEL WILL BE WIRED WITH FINOLEX PVC CABLE, CHANNEL, INPUT & OUTPUT TERMINAL COOLING FAN, FILTER ETC, WILL BE GIVEN.

13. DIGITAL TIMER WILL BE GIVEN.

TROLLEYS: TROLLEYS AND RETURN TROLLEY RAILS WILL BE PROVIDED 2 SIDES AND FRONT AND BACK, IF THE OVEN FOR EASY MOVEMENTS WILL BE GIVEN. TROLLEY WHEELS WILL BE MADE FREE TO MOVE WITH THE HELP OF BEARINGS AND SAND CEILING WILL BE PROVIDED FOR THE BOTH SIDE OF THE CHAMBER BOTTOM.

PAINTING : OVEN INLET AND OUTLET EXHAUST DUCTS HEATING CHAMBER WILL BE PAINTED WITH HEAT RESISTANT ALUMINIUM PAINT WILL BE DONE.