



ROTARY AUTOCLAVE

NSI Equipments Private Limited manufacture Rotary Autoclave, Autoclave for Reclaim Rubber, Reclaim Rubber Plant, Rotary Autoclave for reclaimed rubber industry for high temperature and high pressure cooking of rubber crumbs and to recycle the same in to Rubber sheets in subsequent process. The Rotary Autoclave is made from boiler quality plate with limpet coil for heating and with hollow agitator with blades, driven by motor and gear box. These Rotary Autoclaves are designed to work at a pressure of 300 psi. and at a temperature of 250°C.

MATERIAL OF CONSTRUCTION

Shell – ASTM – A 516 Grade 70 Dished Ends – ASTM – A 516 Grade 70 Top & Bottom Mouth. Steel Casted Limped Coil – IS:1239. Saddles – MS to IS:2062, and Central Shaft – MS Seamless Pipe

BATCH CAPACITY

2000/3000/3500/4000 Kgs per batch of Rubber Crump`s.

COMPONENT OF ROTARY AUTOCLAVE

LIMPED COIL

Fabricated from semi Class – C Pipe, ERW and welded all over the length of the shell at appropriate pitch. Suitable inlet headers and outlet are provided, if heating medium is by steam.

AGITATOR SHAFT

Fabricated from seamless pipe & two ends stubs of EN – 8 are welded at both ends. The shaft is machined in assembly. Suitable keyway and seat the flanged hub accurately.

STIRRER ARMS AND BLADES

Fabricated of MS to IS:2062 Grade plate
The arms of the stirrer are welded to the hubs, which are keyed and bolted to the central shaft. The hub is flanged to the central shaft in two halves. The arms are welded with end blades. These blades are specially designed in a way that they turn and move the material longitudinally so that the same particle does not remain in contact with surface for long time and uniform heating is provided to the material inside.



STUFFING BOXES

Consists of two stuffing boxes suitable for gland and rope packing, fabricated from MS – IS:2062 Plate, Provided with Phosphorus Bronze bush. The stuffing boxes are water cooled with outer jacket and suitable inlet and outlet openings are provided for circulation for water.

BEARINGS

The complete stirrer is supported on two end bearings Double row, self-aligning type Roller Bearing housed in their respective housings

TOP & BOTTOM MOUTHS

Steel casted and specially designed, consist of jaw arrangement through which the mouth can be locked & unlocked by a suitable gearing arrangement at top and at bottom with a counter weight and gearing arrangement for easy open and for tight closer. Suitable neoprene runner gasket of single piece is mounted to the mouths to seal the system.



SADDLE SUPPORT

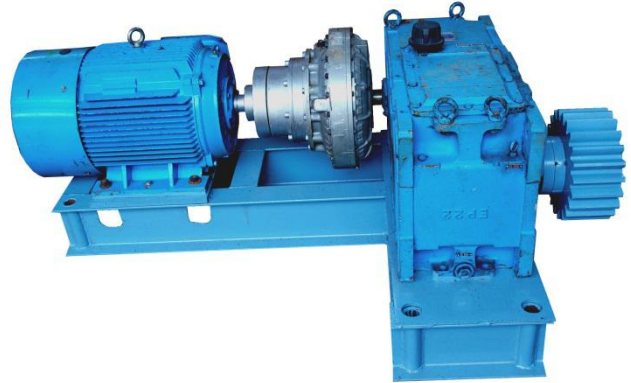
Two heavy duty saddle supports are welded to the pad plates which are welded to the shell.

GIRTH GEAR

A suitable girth gear is fixed to the end of the shaft which is driven by means of motor and gear box

LIFTING ARRANGEMENT FOR TOP COVER

One set of screw arrangement with its supporting structure pivoted on its central shaft mounted on bearings which facilitates to & fro motion of the top cover and the same is to be fitted on the supporting platform.



DRIVE ARRANGEMENT

Rotary Autoclave drive consists of

Motor, Gear Box – Helical Gear Box, Fluid Coupling between motor and gear box, Channel Base Frame for Motor and Gear Box

ELECTRIC PANEL BOARD

The electric panel consists suitable SFU, contactors, overload relays, volt and current indicators, push buttons, indicators etc. housed in a powder coated panel board.

The electric panel is a star delta starter with provision for automatic forwarding and reversing of the agitator at a pre-fixed time for better product mixing and heating.

Also the same could be worked under manual forwarding or manual reversing.



FEATURES OF AUTOCLAVE UNIT

- These Autoclave Unit are highly Durable
- These Autoclave Unit are Safe to use
- These Autoclave Unit are Quality tested

SPECIFICATIONS AUTOCLAVE UNIT

- Working Pressure of Autoclave Unit: 25Kg/SGCM and are tested at 40Kg/SGCM
- Material used in Autoclave Unit: Stainless steel of grade SS304 and SS316
- Sizes of Autoclave Unit: Client Specific(Customised)