World Class Machines

For

World Class Tyres

SPECIFIC
ENGINEERING CORPORATION

Specific Engineering Corporation Pvt Ltd

Our Other Machines

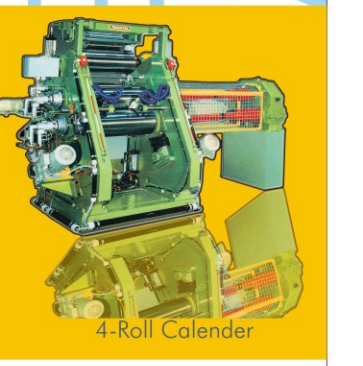

Tyre Curing Press


Bladder Press


Hot Feed Extruder


Cold Feed Extruder with Temperature Controller Unit


Tube Spilcer


4-Roll Calender

Mixing Mills

Range of SEC Mixing Mills

SEC-MM-0613
SEC-MM-1024
SEC-MM-1642
SEC-MM-2260
SEC-MM-2684

Contents

Product Pictures

Peripherally drilled chilled cast iron Rolls
Size - 26″ X 84″

Peripherally Drilled chilled cast iron Roll
size - 26″ X 84″

26 ″ X 84″ UNI DRIVE Mill with
stock blender

26″ X 84″ Mill - BULL GEAR design

Mixing Mills

Technical Description

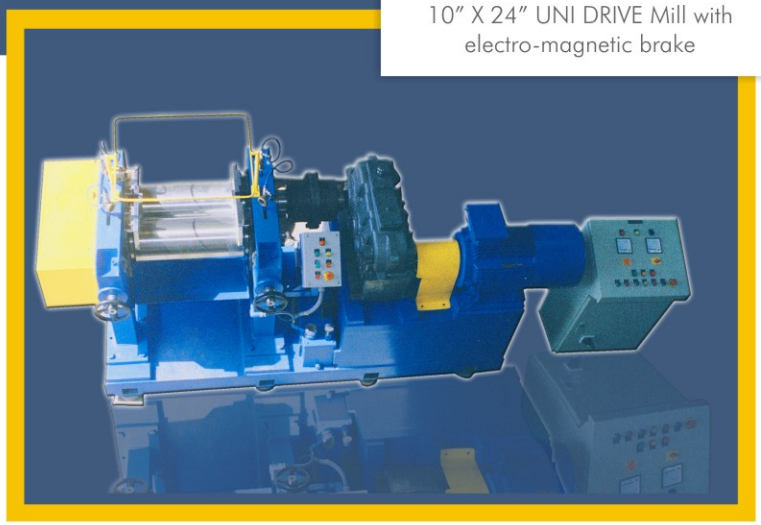
Specific Engineering Corporation offers complete range of 2-roll mills for processing wide application rubbers, such as sheeting mill, warming mills, feeding mills, compounding mills, cracker mills, refiner mills etc. In general, the mills are sturdy by construction to match the heavy duty operations of rubber processing in tyre as well as non-tyre industries. The mills, fully assembled and tested prior to dispatch stand on a robust steel structure base frame, precisely machined for accurate alignment. The mills are available in both BULL GEAR as well as UNI DRIVE design.

The bearings are provided with force feed oil lubrication or grease lubrication system with special seals to prevent ingress of deleterious particle. The rolls are ground chilled cast iron, with about 500 bhn hardness. The rolls are of core design/peripherally drilled rolls or grooved rolls for cracker mill based on the requirement.

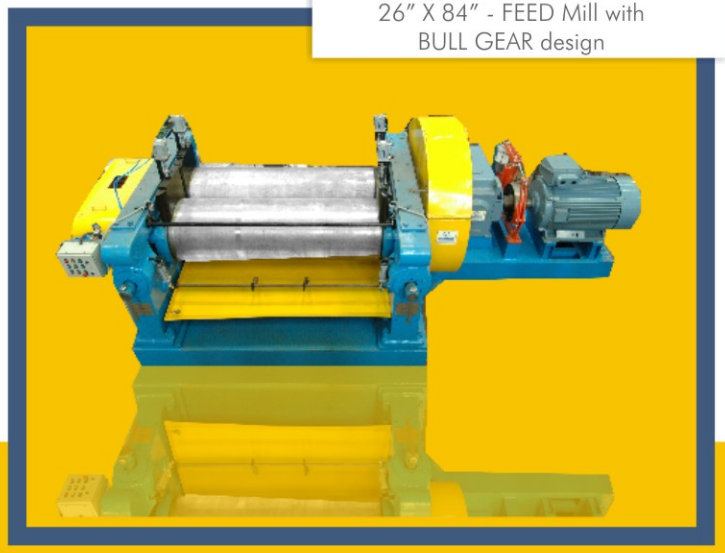
The gear boxes are of unique design and of reputed make, specially manufactured to serve their purpose.

SEC offers a wide range of mills right from smallest 6" x13" LAB Mill to 26" X 84" robust UNI DRIVE mills.

Product Pictures



10" X 24" UNI DRIVE Mill with electro-magnetic brake



26" X 84" - FEED Mill with BULL GEAR design

Machine Features

Back roller is directly connected with reduction gear box by Oldham's coupling and power is transmitted to the front roller through connecting (couple) gears, there by omitting ordinary large bull gear, pinion gear and pinion stand. This results in lower maintenance and quieter operation as well as better transmission efficiency (Reduced power consumption).

The rear roll and front roll can be made inter changeable to reduce roll inventory on request.

To reduce the vibration in the main body, reduction gear and motor are mounted on the common bed which is supported by wedge shaped special level mounts (vibro mounts).

The set position and size of level mounts are such that the wt. is evenly distributed on each level mount at an average of 5 kg/cm^2

The level mounts require no foundation bolts, consist of 3 pieces of wedge with distinctive shock absorbers & are freely adjusted up to 12mm in height by a spanner. This facilitates erection, alignment & leveling and also movement of mill from one location to the other.

This mill is comfortable to work on for an average height person.

There is minimal maintenance and power consumption.

One set of knife is provided in the front roll of the mill for sheet cutting.

Stock blenders are provided on request.

Product Pictures

16 X 42 "UNI DRIVE Mill with electro-magnetic brakes

Control Panel of 16" X 42" Mill

6" X 13" LAB Mill

Technical Data Sheet

MODEL	SEC-MM - 0613	SEC-MM1024	SEC-MM-1642	SEC-MM-2260	SEC-MM-2684
Roll Size	150 X 330 mm	250 X 610 mm	410 X 1070 mm	560 X 1525 mm	660 X 2135 mm
Type of Construction	Monoblock Single bed	Monoblock Single bed	Monoblock Single bed	Monoblock Single bed	Monoblock Single Bed
Rolls	Chilled cast iron rolls, mirror finish chill depth 10 to 12 mm hardness : 68 to 70 r.c working face	Chilled cast iron rolls, mirror finish chill depth 10 to 12 mm hardness : 68 to 70 r.c working face	Chilled cast iron rolls, mirror finish chill depth 10 to 12 mm hardness : 68 to 70 r.c working face	Chilled cast iron rolls, mirror finish chill depth 15 to 20 mm hardness : 68 to 70 r.c working face	Chilled cast iron rolls, mirror finish chill depth 15 to 20 mm hardness : 68 to 70 r.c working face
Roll Nip Gap	0 to 10 mm for working (30 mm for roll cleaning)	0 to 10 mm for working (30 mm for roll cleaning)	0 to 12 mm for working (up to 70 mm for roll cleaning)	0 to 12 mm for working (up to 70 mm for roll cleaning)	0 to 12 mm for working (up to 70 mm for roll cleaning)
Batch Capacity	7.5- 10 kgs per batch depending up on the hardness of the compound	20-25 kgs per batch depending up on the hardness of the compound	35-40 kgs per batch depending on the compound hardness	90-120 kgs per batch depending on the compound hardness	250-300kgs per batch depending on the compound hardness
Roll Speed Std RPM (surface speed & friction ratio can vary as per request)	Rear roll : 15.5 rpm Front roll : 13 rpm	Rear roll :15.5 rpm Front roll: 13 rpm	Rear roll :15.5 rpm Front roll: 13 rpm	Rear roll :15.5 rpm Front roll: 13 rpm	Rear roll :15.5 rpm Front roll: 13 rpm
Roll Cooling	Spray Pipe with bell mouth	Spray Pipe with bell mouth	Through universal rotary joint. internal pipes for increase of cooling.	Through universal rotary joint. internal pipes for increase of cooling.	Through universal rotary joint. internal pipes for increase of cooling.
Stock Guide	Stock Guide on front & rear roll (lh & rh) with polymer liners & center tongues	Stock Guide on front & rear roll (lh & rh) with polymer liners & center tongues	Stock Guide on front & rear roll (lh & rh) with polymer liners & center tongues	Stock Guide on front & rear roll (lh & rh) with polymer liners & center tongues	Stock Guide on front & rear roll (lh & rh) with polymer liners & center tongues
Roll Safety	Shear Pad assembly will be provided with spacing button between the front bearing housing and main frame				
Gross Weight	750 kgs	4500 kgs	10000 kgs	22000 kgs	34000 kgs
Required Floor Space	1000 x 1800 mm	2000 X 3000 mm	2500 X 3500 mm	3500 x 5000 mm	3800 x 6000 mm
Friction Ratio std (Special on request)	1:1.2	1:1.2	1:1.2	1:1.2	1:1.2
Drive Motor - TEFC Squirrel cage (Std)	7.5 Hp/1500 rpm	25 Hp/1500 rpm	60 Hp/1500 rpm	150 Hp/1500 rpm	290 Hp /1500 rpm
Electrical Controls	All electrical and electronic controls will be standard 415V $\pm$10%, 3phase, 50 Hz and control voltage will be 110v. AC/DC variable speed on request.				
General Base	The mills are assembled with machined pads with drive unit safety pad				
Bearing Housing & Reduction Gear	Bearing Housing assemblies with Pb2 brush. Helical Gear reduction gear				
Lubrication System	Oil cup lubrication system with gravity flow standard	Oil cup lubrication system with gravity flow standard	close loop force feed oil / grease lubrication system with motor safety interlock.	close loop force feed oil / grease lubrication system with motor safety interlock.	close loop force feed oil / grease lubrication system with motor safety interlock.

SPECIFIC
ENGINEERING CORPORATION

Specific Engineering Corporation Pvt Ltd

R-494, MIDC, TTC Area, Rabale, Navi Mumbai - 400701, India
Tel: +91 22 27641787/40044/03218, Telefax: +91 22 27603199
Cell: +919869005020, specificengg@eth.net, www.specificengg.com

An ISO 9001 - 2000 Company