EMP RANGE OF DRY RUBBER PROCESSING SYSTEMS
For TSR Rubber & NR Masterbatch Production

INTRODUCTION

Our ***EMP Range of Dry Rubber Processing systems*** are custom-designed and developed for use in the Natural Rubber Industry. Our Dry Rubber Processing Systems are capable of producing various types of technically specified rubber and NR masterbatches by using the "Dry Process". The Dry Rubber Processing systems can also be used to produce and blend different grades of rubber from different grades of rubber such as Unsmoked Sheets (USS), Air Dried Sheets (ADS), Ribbed Smoked Sheets (RSS), Crepe material and Technically specified rubber.

FEATURES

- High Output and ability to produce 1mt/hr to 5mt/hour of TSR rubber by using the Dry Process.
- Clean and Do not contaminate the environment.
- Simple in Operation and low cost in Maintenance.
- Low Capital Investment Costs
- Dry Rubber Processing Systems can be integrated into existing TSR production lines.
- NR Masterbatches can be produced by using our Dry Rubber Processing Systems.

Our ***EMP Dry Rubber Processing Systems*** consist of Initial Size Reduction machines, Homogenising/Blending machines, Cooling Tunnels, Conveying systems,Automatic Rubber Baling Press(es) and a Centralised Electrical Control Panel.
By combining these types of machines, our process lines are able to meet the desired output of our customers.

A Dry Processor

A Cooling Tunnel System

Weighing & Pressing

EMP RANGE OF DRY SLAB CUTTERS

Introduction

Our range of **Dry Slab Cutters** is used as an Initial Size-reduction machine in the processing of Natural Rubber. These Dry Slab Cutters can reduce the size of large lumps of latex coagula, smallholders' unsmoked sheets, bales of rubber and agglomerated lumps of lower grades of rubber into small discrete pieces in a single pass. Built to be an efficient and reliable machine, this Dry Slab Cutter is recommended to be used as the first machinery in the dry rubber processing line before being blended in our ***EMP Dry Processor***.

Raw material can be fed into the Dry Slab Cutters by a bucket elevator, chain conveyor, belt conveyor, skid steer loader or a pay loader.

Features

- High Throughput and suitable for breaking up USS, RSS and rubber lumps into discrete pieces.
- Heavy Duty Main Shaft ensures less breakage.
- Special rotary and static knives for cutting up large lumps.

Technical Specifications

Model	DSC 60	DSC 75	DSC 100
Nominal Capacity	2000 – 3000 kg/hr	4000 – 5000 kg/hr	5000 – 6000 kg/hr
Casing	Mild Steel	Mild Steel	Mild Steel
Rotary Knives	Casted from plain carbon steel	Casted from plain carbon steel	Casted from plain carbon steel
Static Knives	Casted from plain carbon steel	Casted from plain carbon steel	Casted from plain carbon steel
Main Shaft	Alloyed Steel with high tensile strength	Alloyed Steel with high tensile strength	Alloyed Steel with high tensile strength
Type of Bearings	Heavy duty plummer block	Heavy duty plummer block	Heavy duty plummer block
Transmission	Vee Belts/Pulley & Coupling	Vee Belts/Pulley & Coupling	Vee Belts/Pulley & Coupling
Worm/Helical Gearbox	Foot mounted Single or Double Reduction Type	Foot mounted Single or Double Reduction Type	Foot mounted Single or Double Reduction Type
Prime Mover	50 to 60 HP/45 kW SC TEFC motor	75HP/55 kW SC TEFC motor	100 HP/ 75 kW SC TEFC motor
Electrical Supply	380/440Volts 50 Hz 3 Phase 4 wires Std.	380/440Volts 50 Hz 3 Phase 4 wires Std.	380/440Volts 50 Hz 3 Phase 4 wires Std.
Baseframe	Mild Steel	Mild Steel	Mild Steel
Dimensions (cm)	260 x 190 x 140	260 x 190 x 140	260 x 200 x 150
Gross Weight	3500 kg	3750 kg	4000 kg

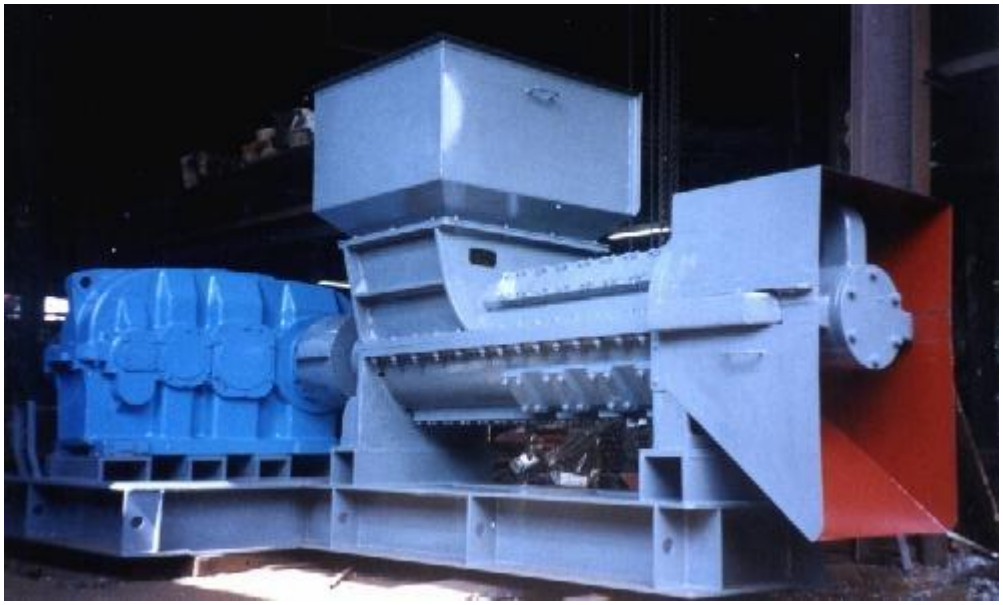
Due to a policy of continuous development, we reserve the right to alter and change our specifications without notice
February 2006.

EMP RANGE OF DRY PROCESSORS
For TSR Rubber & NR Masterbatch Production

INTRODUCTION

Our ***EMP Range of Dry Processors*** are custom-designed and developed for use in the Natural Rubber Industry. Our Dry Processors are capable of producing various types of technically specified rubber by using the ***"Dry Process"whereby no water is used.***

They can also be used for blending of off-grades of rubber using Unsmoked Sheets, Ribbed Smoke Sheets, Crepe and TSR Bales. **Specially blended rubbers** and ***carbon black masterbatches*** have been produced using our range of Dry processors.



EMP DP Mk 5 Dry Processor of capacity 5mt/hr production

Our ***EMP Range of Dry Processors*** are robustly designed and fabricated. The Dry processor and motor are coupled to a heavy duty helical type reduction gearbox and are rigidly mounted on a common steel basefame. This arrangement allows easy installation in the factory and can be transferred easily. Moreover, our dry processors are designed to take heavy loads and have low maintenance and operation costs.

EMP RANGE OF COOLING TUNNELS
For TSR Rubber & NR Masterbatch Production

INTRODUCTION

Our ***EMP Range of Cooling Tunnels*** are custom-designed and developed for use in the Natural Rubber Industry. Our Cooling tunnels are designed to cool down warm rubber crumbs to the desired temperature before they are weighed and packed into bales of 33.33 to 35 kg by our Automatic Rubber Baling Presses.

An EMP Cooling Tunnel in Operation

Our ***EMP Range of Cooling Tunnels*** are robustly designed and fabricated. High performance fans are used to cool down the crumbs after they are conveyed into the Cooling Tunnel via belt conveyors; Built in modular forms, the length of the tunnels can be extended if required.

EMP 100 Tonnes Moving Chamber Automatic Rubber Baling Press

Our ***EMP* 100 Tonnes Moving Chamber Automatic Rubber Baling Press** has been designed for high pressing capacity and reliability. It has been proven to be user-friendly and robust in operation. Rubber bales of 33.33 to 35kg have been easily pressed by our hydraulic presses.

Features

- Robust, Ease of Operation, Maintenance and Reliable in Operation.
- High Pressing Capacity of more than 90 bales per hour.
- Only a flat floor is required. No digging of pit or foundation required.

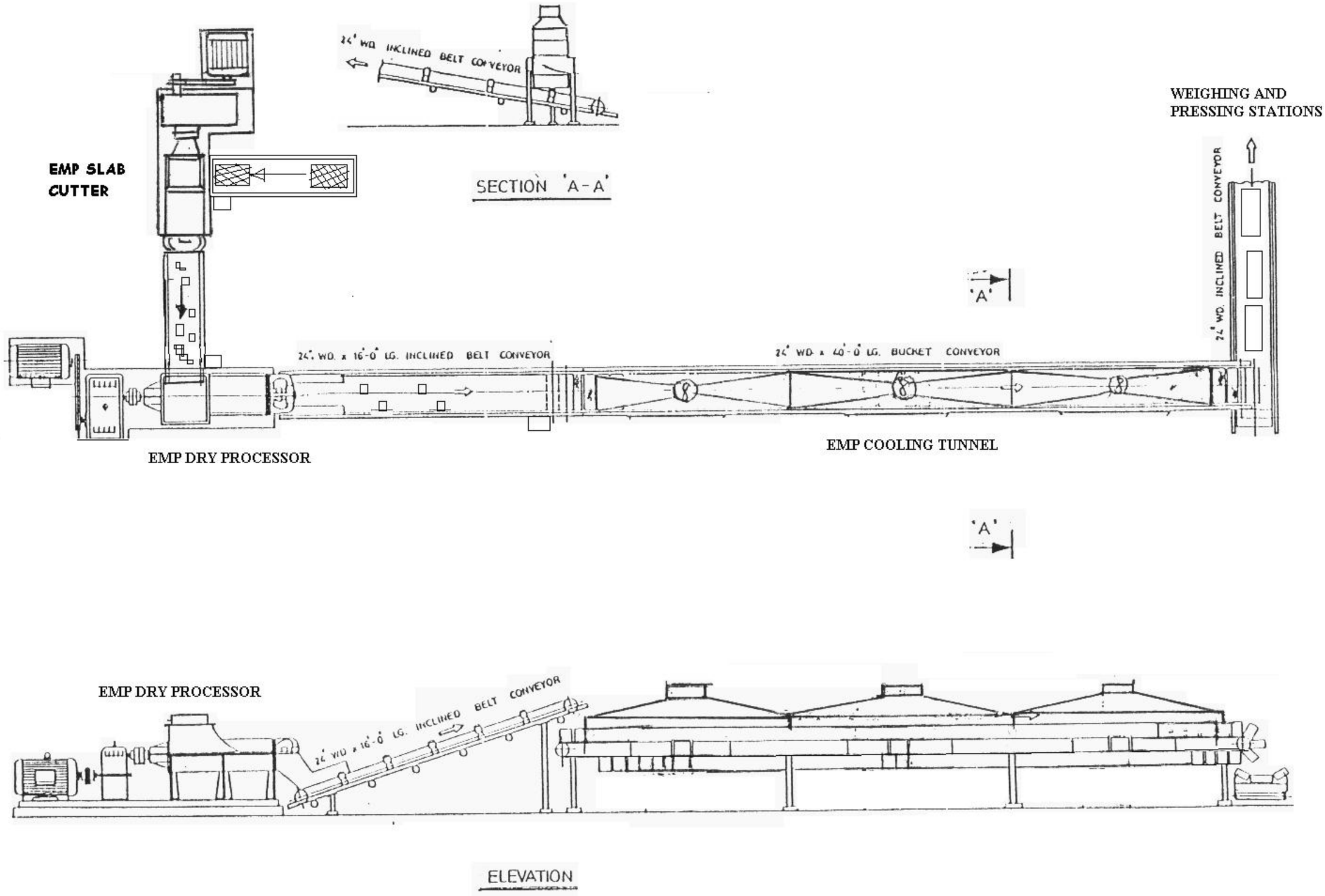
Technical Specifications

Model : EMP 100 MCT
Capacity : More than Three Tonnes of Dry Rubber per Hour or about 90 rubber bales per hour.
Press Body : Robust mild steel plate and channel.
Moving Chamber : Robust mild steel plate construction with twin hopper with Dimensions of 673.1mm (L) x 330.2mm (W) x 431.8mm (H) Chambers are moved hydraulically for smooth operation.
Hydraulic System :Vickers/Rexroth/Hawe/ or equal double pump high/low Pressure system c/w 2-stage valve, check valve, pressure Gauge and flow control module for main hydraulic ram System. Piston pump, relief valve and solenoid valve for moving Chamber hydraulic system. Hydraulic tank c/w temperature level gauge, return filter & strainers.
Hydraulic Rams : 10” bore x 24” stroke x 2.5” dia. Bore x 26” stroke.
Operational Pressure : 2800 to 3000 psi or equal.

Prime Mover : 10 to 20 HP TEFC Electric Motor
Control System : Electrical Control System with photocell system or equal, Limit switches, timers and relays.
Electrical Supply : 380/440 Volts AC 50 Hz Electrical Supply.

Due to continuous research and development, we reserve the right to change our specifications without notice.

Engmepho Professional Enterprise Sdn. Bhd.
14A, Jalan Pandan Indah 4/8, Pandan Indah,
55100 Kuala Lumpur, Malaysia.
Tel: 603-42948368, 42926368 Fax: 603-42946368
E-mail : twkang@emp.com.my Website : www.emp.com.my



EMP DRY RUBBER PROCESSING SYSTEM (2006)

DO NOT SCALE