

'SANTEC' Dispersion Kneaders are ruggedly designed for the mixing of different kind of materials ranging from low viscosity adhesives to high viscosity polymers.



# **APPLICATIONS:-**

# (A) RUBBER COMPOUNDS & END PRODUCTS

Natural Rubber, Synthetic Rubber, Mastication of NR, SBR, CR, EPDM, Fluorine Rubber, Silicone Rubber, Rubber Tires, Packing, Gaskets, Hose, Belts, Shoe Sole, Sponge, Electric Wire Covering, Casters, Golf Balls, Oil Seals, Weather Strips, Waterproof Sheet, EVA, Tread Compound, Battery Containers etc.

# (B) PLASTIC COMPOUNDS & END PRODUCTS

HDPE, LDPE, PP, PVC, ABS, PS, EVA, Thermoset Plastic Compounds & Profiles, Wire Covering, BMC etc.

### SALIENT FEATURES

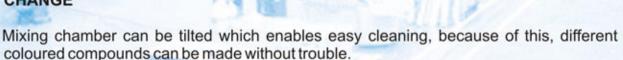
# MAXIMUM DISPERSION& HIGH PRODUCTION

Double blades, proper clearance & high cooling effect gives excellent dispersion which can not be obtained from an open Mill. Its production is 4 to 5 times more than an ordinary Mixing Mill thus saving on labour and electricity.

#### NO FOUNDATION REQUIRE

The Kneader has a common bed plate for all parts and require no foundation.

# - EASY CLEANING & COLOUR CHANGE



#### EASY OPERATION

Easy operation with Push-buttons and hand lever valves from the operation board.

#### SHORT MIXING TIME

Mixing Time ranging from 6 to 12 minutes depending on Compound's Specific Gravity.

#### ACCIDENT PROOF

No chance of an accident as possible in open roll mill.





# CONSTRUCTION :-

- Mixing Chamber & Rotors: The Mixing Chamber is fabricated from alloy steel & is W shaped. The chamber is fitted with two rotary blades. The surface is hard-chromed and has a provision for jacketing the inlet of water for cooling & steam for heating. The rotors are also made of special steel. The rotors are hard chromed, after the tips of the rotary blades are welded with stelite. These blades are coupled with rotary joints thus enabling to take steam or water.
- 2. Chamber Tilting: The process of tilting is done mechanically by driving the separate electric motor. The motor is controlled by electrical push buttons fitted in the control panel, which makes the operation easy. Chamber is tilted at an angle of 120° which ensures all the raw-material dropping out very quickly. Tilting can be adjusted at an angle or 10° plus minus.
- Dust Collector: It helps to collect spurt powder during mixing and powder can be re-used thus saving of the material wastage.
- Electrical Control Panel: This is fitted with Voltmeter, Ampere Meter, Temp. Indicator cum Controller, L & T Controllers, Timer, Buzzer, Hour Meter, Emergency Switch, Complete Inter Locking provision, different ON/OFF switches individual for all motors, hand operated valves, MCB's, Overload Relay, FRL Unit, Main Line Indicators etc.
- Thermo Couple: It is provided into the main chamber by which compound temperature measurement can be done more accurately.
- Accessories: Dust Collector, Air Filter Regulator & lubricator Unit, Air-Gun for quick cleaning of machine, Gear Covers, Hand Operated Oil Pump, Water Pump.

# **TECHNICAL SPECIFICATIONS**

N	Model	Mixing Capacity (Ltrs.)	Total Capacity (Ltrs.)	Main Power Required (KW)	Tilting Motor (H.P.)	Tilting Angle	Air Compressor (H.P.)	Air Pr. Required (Kg/cm²)	Motor for Dust Collector (H.P.)	Temp. Control	Blade Speed (R.P.M.)	Air Cylinder Bore(mm)	Dimensions (meters) (L x W)	Weight (Kgs.)
S	DE-5	5	15	7.5	Pneumatic	120°-140°	2	5	-	Automatic	Front - 30 Rear - 25	100	.75 x 1.25	2000
S	DE-15	15	35	15	Pneumatic	120°-140°	2	5	-	Automatic	Front - 30 Rear - 25	125	.75 x 1.25	4000
S	DE-25	25	45	22	2	120°-140°	3	5	1	Automatic	Front - 30 Rear - 25	225	1.2 x 2	6000
S	DE-35	35	75	45	3	120°-140°	3	6	1	Automatic	Front - 30 Rear - 25	225	1.5 x 2.2	7500
s	DE-55	55	125	55	3	120°-140°	5	7	1	Automatic	Front - 30 Rear - 25	300	1.8 x 2.6	9000
S	DE-75	75	170	75	3	120°-140°	5	7	1	Automatic	Front - 30 Rear - 25	320	1.8 x 2.8	10000
s	DE-100	100	230	90	3	120°-140°	10	8	1	Automatic	Front - 30 Rear - 25	325	2 x 3	11500
s	DE-125	125	280	110	3	120°-140°	10	8	1	Automatic	Front - 30 Rear - 25	330	2.3 x 3.3	12500
s	DE-150	150	310	125	5	120°-140°	10	8	1	Automatic	Front - 30 Rear - 25	350	2.3 x 3.5	13000
S	DE-200	200	470	150	5	120°-140°	15	10	1	Automatic	Front - 30 Rear - 25	350	2.5 x 3.6	14500

<sup>\*</sup> Above specifications may be changed any time.







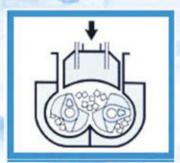
# COMPARISON CHART



PARTICULARS	2-Roll Mixing Mill	Dispersion Kneader	BANBURRY		
Initial Cost	Low	High	Very Expensive		
Mixing Quality	Good	Better	Best		
Degree of Dispersion	Good	Better	Best		
Construction	Open type	Enclosed type	Fully Enclosed		
Safety	Risky	Completely Safe	Completely Safe		
Operator's Experience	3 to 4 years Experienced Operator	Semi Skilled Operator	Fully Skilled Operator		
Mixing Time	15-50 Minutes	7-15 Minutes	3-5 Minutes		
Dispersion Effect	Good for High Viscosity Material but not for low	Good for both High & Low Viscosity Material	Good for High Viscosity Material but not for low Viscosity Material		
Production Output	Small	Very Good Production	Highly Productive		
Heat Conductivity	Good for Low Temperature Mixing but High Temperature Mixing is impossible	Good for both High & Low Temperature Mixing	Good for High Temp. Mixing but Low Temp. Mixing is impossible		
Batch Capacity	Can be increased	Constant	Constant		
Colour Charge	Easy	Easy	Difficult		

# **Process Diagram**







# SANTEC GROUP

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