VARIOUS TEXTILE PROCESSING MACHINES AND THEIR SALIENT FEATURES

PREPARATORY PROCESSING MACHINES

SHEARING

INDIAN - STAFI, GSL - Rs.20 - 30 lakh

INDIAN – GERMAN:

SHEARING MACHINE OF CALICO - KÜSTERS - Rs.70 - 80 lakh

FOREIGN – GERMAN:

MÜLLER-MULTICUT-MC-5 OF MOENUS - Rs.3 - 3.2 crores

(Due to improved cloth quality, shearing m/c is not generally used now)





- ❖ Devices for seam protection and distance adjustment between cloth and blade to suit various fabric sorts
- ❖ Vertical shearing heads for the best results even with fabrics of loose selvedges
- ❖ Pre-brushing unit, dust collection and cleaning unit to keep machine and fabric clean
- ❖ Shearing of fabric's front and back with 180° axis rotation of shearing system
- ❖ Device to open loops at selvedge and slitting to get them sheared
- ❖ Shearing speed up to 80 mtr/min and cutter speed of 960 rpm
- **\Delta** Easy lubrication and maintenance.

MÜLLER-MULTICUT-MC-5 (MOENUS)



- ❖ New machine with patented shearing cylinder to give 25% higher efficiency
- ❖ Solid machine structure with low vibration of main operating units
- ❖ Short fabric passages in the cutting area to prevent selvedge curling
- * Compact machine with low space requirement
- ❖ Electronic felt lubrication control for optimum production
- ❖ Torque-controlled take-off roller and folder to prevent fabric overstretching
- ❖ Adjustable fabric tension through controlling number of revolutions or torque
- Suction in shearing area for clean results.

SINGEING

INDIAN:

SUPER SINGE OF SWASTIK -

With conventional Burner - Rs.18 - 20 lakh

With imported Burner - Rs.60 - 70 lakh)

CALICO - KUSTER - Rs.70 - 80 lakh

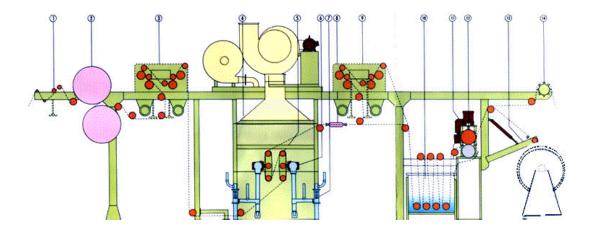
(OSTHOFF Burner Set itself cost Rs.24 - 40 lakh depending on width)

FOREIGN – GERMAN:

UNIVERSAL 2000 OF OSTHOFF- SENGE - Rs.1.5 - 2 crores

HENRY PAULUS - Rs.1.6 - 1.85 crores

SUPER SINGE (SWASTIK)



- 1. Tension unit with guide rollers & bars
- 2. S.S. Pre-drying cylinder (optional)
- 3. Pre-bushing unit with suction
- 4. Singeing chamber with exhaust
- 5. Water-cooled roller
- 6. Water-cooled burner
- 7. Carburetor with blower
- 8. Steam quenching device
- 9. Post brushing with suction (optional)
- 10. De-sizing unit st-12/st-15
- 11. Squeezing mangle 3 tons.
- 12. Main drive (a.c. Motor with frequency controller)

Salient Features of Super Singe of Swastik:

- * Two special burners in combustion chamber with water-cooling
- Simultaneous tilting of burners by 45° by use of electromagnets
- ❖ Cloth can get either one or both sides singed by proper threading
- \diamond Safety device system to push the burner away by 90° and cutting off gas supply at machine stoppage

- ❖ Works on both petrol gas and natural gas with proper air-mixing arrangement
- Claims uniform singeing effects with less gas consumption per metre of fabric as against conventional machines
- Water-cooled adjustable rollers immediately after burners to obtain soft, medium or high singeing effects
- ❖ Slit width and flame height adjustments
- ❖ Singeing speeds of 80-150 mtr/min
- **!** Efficient dust extraction device.
- ❖ Split burner for broader flame

UNIVERSAL 2000 (OSTHOFF-SENGE)



Salient Features of Universal 2000 (Osthoff-Senge)

- Double jet burners suitable for various gases and an ideal mixture distribution system
- ❖ Can set flame as per fabric width for energy saving
- Singeing positions include: onto free guided fabric, onto cooled roller or tangential

- ❖ Singeing for different fabric sorts
- ❖ Has exhaust purification and hot air use
- ❖ In-line hairiness tester using laser beam for monitoring singeing effects.

SINGEING - DESIZING

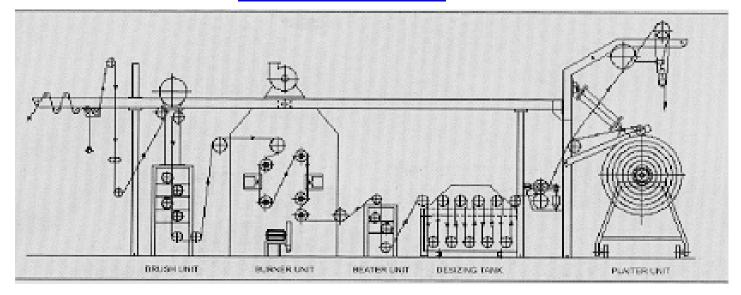
INDIAN:

GIEX 2000 SINGE OF GAYATRI – Rs. 70-80 lakh with Imported Burners SWASTIK – Rs. 25-26 lakh with conventional Burner

FOREIGN – GERMAN:

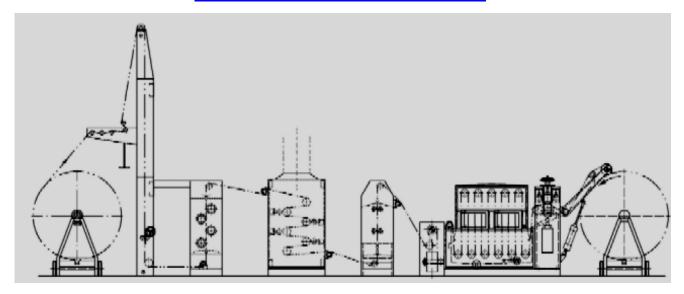
SINGEING – DESIZING RANGE OF MENZEL - Rs.1.8 - 2 crores HENRY PAULUS - Rs.1.7 lakh - 2 crores

GIEX 2000 SINGE (GAYATRI)



- ❖ High productivity with speeds up to 200 mtr/min
- Process versatility for all types and weights of fabrics
- Improved uniformity and efficiency
- ❖ Adaptable burner position
- ❖ Safety system includes a fast flame shut off system when machine is stopped
- ❖ Brushing and/or beating units on both sides of fabric for efficient singeing
- Automatic control option.

SINGEING-DESIZING RANGE (MENZEL)



- Roller width: up to 3.600 mm; speeds: 20-150 mtr/min
- ❖ Standard range consists of fabric entry, brushing unit, suction device with lint collector, standard singeing unit with 2 to 6 burners, spark extinguisher/snuffer box, brushing/beating unit, impregnation compartment with squeezer, batching system and liquor tank station
- ❖ Optional parts include driven un-winder, scray, high-velocity singeing nit, automatic dosing station and rotation station.