



A
Report on
Industrial visit to Mafatlal Industries Limited



Department of Textile Technology arranged industrial visit for B.E. II (TT) students at Mafatlal Industries limited, Denim Unit, Navsari on 29/04/2017. Prof. Shweta Doctor & Prof. Sanjay Parmar from the department led the students during visit.

The denim revolution has taken the world by storm. Comfortable and chic, rugged or classy, denims rule and they provide the same hope in India. They offer finest varieties in Denims to the customers and help them pick the best. The industry is situated in Navsari city. The visit was attributed to get the knowledge about the manufacturing of jeans which in the most usual wearing now a days for most of the people.

The process of the jeans manufacturing starts from the spinning section. The blowroom line used by the Mafatlal Industries is mainly of Trutzschler. The machineries of Trutzschler used by Mafatlal Industries are:

Blendomate BDT 019

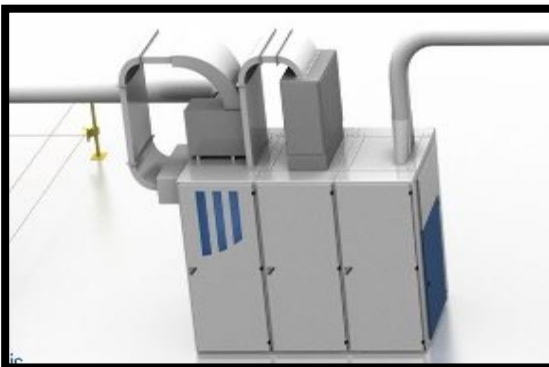


Multi Function Separator

Chute feed system



Integrated mixer



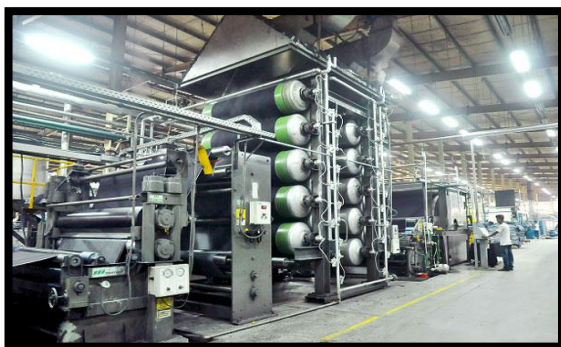
- The lap prepared from blowroom line is further sent to the carding machine and then to drawframe. The can used has very large diameter of about 48 inches.
- The slivers from drawframe are combined together and feed to the sliver lap machine and further feed to the ribbon lap machine.
- The lap prepared in the ribbon lap machine is feed to the comber. Comber gives the superior quality of sliver which helps in improving the quality and sell value of the last product.
- The comber slivers are feed to the speed frame machine and roving bobbins are prepared.
- The roving bobbins are arranged on the ring frame machine. **In ringframe machine, cotton yarn is mixed with the lycra yarn for weft yarn preparation.** This helps in giving stretchability to the end product which is jeans. The ringframe machine used here has autodoing system. When all the spindle bobbins are full, they are doffed and new empty spindles are arranged.
- **The yarn count is kept between 8-20 and hank is maintained 0.1.**
- The winding takes place on automatic winding machine from ringframe bobbin where cones are prepared of certain weight.



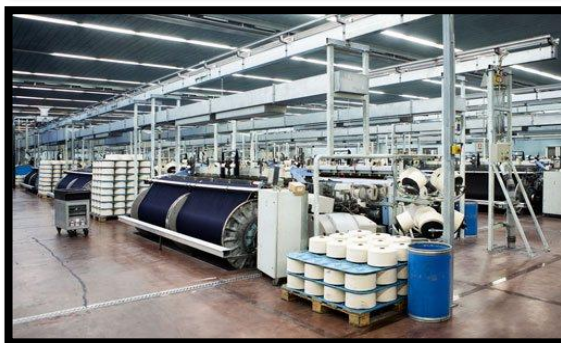
- The cones are sent to the warping section where **the creel capacity is of 564 cones** from which the beam of certain yarn length is prepared.



- **The yarns of 12 warper's beams are combined** so there will be greater than 6000 threads combined and they are further sized and dyed simultaneously.



- The dyeing of the yarn sheet is done by indigo and sulphur dyes by ring dyeing process where Sulphur Bottom & Indigo Top [SBIT] takes place.
- The dyeing machine used by Mafatlal Industries is Morrison Dyeing machine.
- The yarn sheet is passed through dye bath several times and finally weaver's beam is prepared.



- The weaving takes place on the air jet looms where warp is of dyed denim yarn and weft is of undyed cotton lycra mix and finally denim fabric is prepared.
- The denim fabric is further sent for finishing and ironing.
- After finishing, the packaging is done according to the need of the customer.

Students were very interactive during the entire visit as they got the knowledge of the garment i.e. jeans which they used to daily. Students got the fruitful information about the entire manufacturing process.

