

## **Machineries**

The garment and knit wear factory is producing quality wearing apparels. The types of machines and equipments have been carefully selected to ensure efficiency, high quality and diversification of products.

Now, lets observe the machines and equipments as stated below.

### **The cutting section:**

The cutting machines are fully automatic and equipped with auto fabric spreading machines and an auto cad system.

### **Sewing machine**

Sewing machines are equipped with auto thread trimming capabilities to ensure high quality finishing.

### **Press and finishing sections**

This section of the garment factory is equipped with washing plant, steam production facilities, auto press machines and auto packing devices.

### **Jeans and knit wear**

The overall objective of the factory is to produce various types of products from the light fabric

to different sizes for both sexes and various other products.

In the knit wear plant the following items are produced: sportswear, heavy t-shirts, with collars , polo shirts with collars, knit wear fabrics for ladies blouses and knitwear fabrics for women's pants and braziers.

### **Knit wear plant**

The knit wear factory project is integrated with the garment factory. Kebire enterprises intends to produce the knit wear products so that it can be benefited from the incentives offered by foreign governments like united states, the African growth and opportunity act and the European union.

The annual products of the knitted fabrics and knitted garments are as follows:

- Jersey with different made and structures made of cotton and polyester blends reaching up to 5001 tones
- Honeycomb with different and structured made of cotton and poly ester blend reaching 158 tones.
- Single or double rib knitted with different knits structures made of cotton and polyester blends reaching up to 60 tones.
- Fleece, for different sports wear made of cotton, viscous and blends reaching a 120 tones.

Capacity based on the various knitted products are:

- one million four thousand pieces of T-shirts. Ladies dresses, 300,000 pieces. T-shirts and under wear, 600,000 pieces .
- Polo shirts , 300,000 pieces. , sports wear: 120,000 pieces.

In order to produce the above mentioned products, the factory owns:

- 7 circular knitting machines for single jersey, Pique and their derivatives.
- 3 circular knitting machines for rib
- 2 circular knitting machines for interlock.
- 4 flat knitting machines for collars and cuffs.

Maa Garment and textiles factory has embarked in an ambitious plan for expansion by adding units like spinning, knitting and dyeing. The process to make highly sophisticated units confirming to the international standards.

Initially, the factory was involved in the garment activities only by importing the other inputs.

The production facility and organization is designed to be flexible to meet the international customers demands and deliver customer oriented products.

Considering the promising market secured in knitted garments , the expansion project was tailored to focus on the production of knitted fabric and it is composed of spinning, knitting, dyeing and finishing plants. From the expansion project , knitting, dyeing and finishing plants electro mechanical was finalized in February of 2009. The goals of the project are to ensure supply erection and performance testing of supplied machines and equipments are in conformity with respective contact agreements.

And completing knit wear plant end of December 2008. The whole project was to be completed with total budget of 300,000 million Birr.

The factory has started knitting different types of cotton closes mainly under garments. The

knitting machines has been installed some months ago. The use of local and imported materials for the knitting process has been dramatically reduced. The factory has started producing the imported materials locally in order to produce the required types of clothes.

The most highly qualified areas that requires much investment is the dyeing section. According to the samples of the customer the recipes are analysed in spectrophotometer in the lab before the dyeing process is made. The dyeing process is completely made in the textile factory. They have sophisticated types of machines as far as the technological leverage is concerned. All the jet dyeing machines are high temperature and high pressure. These are the latest version and are composed of one with capacity of 20 kg mini soft sample dyeing. One with the capacity of 180 kg ecosoft HT jet dyeing. Two with capacity of 540 kg ecosoft HT jet dyeing with coupling to be used in case of big quantities of same shade fabric. One with capacity of 900 kg ecosoft HT jet dyeing.

### **Finishing Plants**

It comprises,

- one million four thousand pieces of T-shirts. Ladies dresses, 300,000 pieces. T-shirts and under wear, 600,000 pieces .
- Polo shirts , 300,000 pieces. , sports wear: 120,000 pieces.
- super slitting and squeezing machine
- Dryer machines
- Stinter machine and
- compactor machines

### **Utilities**

It comprises water treatment plants with reverse osmosis, waste water treatment plant, steam and thermal oil boilers , air compressors and stand by generators.

Now, the factory is under erection for spinning plant. The construction of spinning plant is almost completed and installation of machines and necessary materials has been started. The spinning plan is expected to produce 10 tones of yarn per day with the following compositions:

- 3 tones of rotor spun yarn with average yarn count of 20. But this machine can produce from count 10 to 30.
- 3 tones of ring spun combed yarn at average count of 30.
- 4 tons per day of ring spun carded at average count of 25.

Generally, there are two lines, ring line and open end line. In the ring line, there will be two qualities: carded and combed.

In addition to this lines, there are different kinds of machines that can facilitate the spinning process. Some of the silent features in dealing with spinning plant with high quality yarn includes, efficient and very gentle handling , cleaning, equipments in blow room capable of producing small tones than anything else at the start of cleaning. Card cylinders of smaller diameter but larger in length. This plant is expected to be commissioned by the month of December 2009.