

4.3. Machines used in upholstery

We use different upholstery machines for the purpose of saving time in upholstery, providing serial production and catching standards.

➤ Sewing machines

Sewing machines provide the easy and short timed sewing for covering face upholstery . Powerful machines worked with electric place hand and foot typed of machines in late years.The using field of sewing machines worked with hand and foot is decreased.



Picture 3.38: Sewing machine

➤ Preparation sewing machine to sewing

Sewing in sewing machine is generally consisted of combination of fabric pieces by clamping with rope coming from top bobbin and the bottom rope which comes from lock Rope coming from top bobbin is threaded from different parts and hole of sewing needle lastly. In the bottom , on the lock stitch is placed fold by wrapping rope. Simply, the machine prepares to the sewing.



Picture 3.39: Bobbin samples and button of adjusting sewing length



Picture 3.40: System of cutting rope, box of engine and control

➤ **Overlock machines**

These are the machines that provide regular order after the cutting of fabric edges. Typed of 3 - 6 rope and 7000 cyclical are available.



Picture 3.41: Overlock machine

➤ **Maintenance of sewing machines**

- Daily maintenance should be done after the end of the work.
- Machines should keep clean and covered in the end of the work.

- The level of oil should be controlled frequently .
- The residuals of rope in the machine should be cleaned frequently.



Picture 3.42: Oil tank in low part of machine

➤ **Cloth cutting machine**

They are mechanic machines with CNC that is used spreading and cutting fabrics in a straight and serial producement . These types of machines is commonly used in big upholstery factories which have serial manufactory.



Picture 3.43: CNC spreading and cutting machine

➤ **Electrified silicon gun**

Thanks to the heated and attached stick silicon point, the process simplifies with this melting featured. Detent of resistance melts silicon stick which is pushed to the point. It is used in simple glueing process. It is not suitable for durable sticking.



Picture 3.44: Silicon gun

➤ **Wire staple gun**

Wire staple gun is gadgets and hand machines is proper to serial working and producing instead of hand hammering. It has three types using in upholstery.

➤ **Aired staple guns**

Aired staple guns have wide using field thanks to power of serial work from small workshops to big factories. Staples which is produced flat thin u shaped wire is used in the process.



Picture 3.45: Aired staple gun

➤ **Electrified staple guns**

Electrified staple guns can easily use in workshops without air pressure, homes and repair works which need to be done in place. These guns are suitable for serial workings that having feature of hammering approximately 300 nail batting in a minute



Picture 3.46: Electrified staple guns

➤ **Machine of rubber cutting**

These machines are consisted of three units which is engine, case and saw. By using different length saw, in thickness of 7-30 cm rubbers can be cut. In these machines, cutting work is provided with pair of saw which moves reversely.



Picture 3.47: Machine of rubber cutting

➤ **Glue spray gun**

These are aird spray guns which provide spreading rubbered glues easily and homogeneously. The distance of spray gun from the piece of work should be 10-15 cm and air pressure should be also 2-6 degree. Glues using with these guns are more fluid than normal rubbered glues. It is sold in big tanks and markets. Spray guns should be cleaned with a proper diluter after the every usage otherwise glues effect the spraying negatively.



Picture 3.48: Glue spray gun