

Product Name :
Single Disc Polishing Machine**Product Code :**
ELAB-MTE0005 LAB ENGINEERING**Description :**

Single Disc Polishing Machine

Technical Specification :

Disc Polishing Machines are finely polished to ensure smooth, scratch free and mirror like appearance that enable accurate metallographic interpretation.

Polishing is the final stage in producing a surface that is flat, smooth, scratch- free and mirror like in appearance. Such a surface is necessary for subsequent accurate metallographic interpretation, both qualitative & quantitative.

This machine is equipped with cooling system that can cool down the specimen during pre-grinding so as to prevent overheating and damaging the metallographic structure.

The Disc Polishing Machines are extensively used for polishing the Metallography Samples for Microscopic observation to study various metal structures.

In this Machine the drive is given the motor spindle, which is mounted on the motor shaft through friction mechanism.

Polishing discs are fitted on the shaft and locked by nut.

Shaft has two bearings, which are fitted into bearing holder for smooth working.

After mounting, the specimen is wet ground to reveal the surface of the metal.

The specimen is successively ground with finer and finer abrasive media.

Silicon carbide abrasive paper was the first method of grinding and is still used today.

Many Metallography's, however, prefer to use a diamond grit suspension, which is dosed onto a reusable fabric pad throughout the polishing process.

Diamond grit in suspension might start at 9 micrometers and finish at one micrometer.

Generally, polishing with diamond suspension gives finer results than using silicon carbide papers (Sic papers),

especially with revealing porosity, which silicon carbide paper sometimes “smear” over.

After grinding the specimen, polishing is performed.

Typically, a specimen is polished with a slurry of alumina, silica, or diamond on a nap less cloth to produce a scratch-free mirror finish, free from smear, drag, or pullouts and with minimal deformation remaining from the preparation process.

FEATURES:

It is an indispensable device for the factories, research institutions and college labs to prepare metallographic specimen.

Easy operation and reliable performance,

 **LAB ENGINEERING**

Elab Engineering Equipments Manufacturers