control practice. When supply needs are decided the information can be collated and a stock control policy devised.

## **3.17** Tools

The pumping installation should be equipped with all necessary tools, testing instruments and special tools required for repairs and testing. Their quantity and special tools depend on size and importance of installation. Generally following tools and testing instruments shall be provided:

## a) Tools

- Double ended spanner set and ring spanner set.
- Box spanner set
- Hammers (of various sizes and functions)
- Screw driver set
- Chisel
- Nose plier, cutting plier
- Flies of various sizes and smooth/rough surfaces
- Adjustable spanner
- Pipe wrenches
- Bearing puller
- Torque wrench
- · Clamps for column pipes, tube and line shaft.
- Specials tools such as grinder, blower, drilling machine.
- Tap and die set.
- Bench vice
- · Special tools for breakers
- Crimpling tool
- · Heating stove for heating sleeves.

## b) Test instruments

- Insulation tester
- Tongue tester
- AVO meter
- Test lamp
- Earth resistance tester
- Wattmeter, CT and PT
- Dial gauge
- Tachometer