

FITTER

THEORY – II

LATHE :

The independent of jaw chucks – Reversible features of jaws – the black – plate mounting and dismounting chucks – drilling in lathe – methods of holding drills in the tail stock – boring tools – Threads and threading – use of dies and taps for threading in a lathe – Method of holding ideas and taps – while its reading – simple turning on mandrels – Taper turning by compound rest – Swivelling and set over method – Forming by formed tools.

GAUGES :

Method of measuring for inspection – Gauges policy or system – Purpose of gauges – need for gauging system fixed gauges – plug and ring gauge, shape gauge squares – threads tool gauge – Radius gauge – Taper gauge specific – instructions on each with simple number of example and constructions should be formed.

LAPPING AND HONING :

Definitions of lapping and its necessary – the constructional features of lapping – Designs of laps out of cast iron, copper, lead and mild steel, Abrasive material and the form in which it is supplied popular names of abrasives – simples examples of lapping – the object of honing and its applications with examples – rotary and longitudinal motion in honing cylindrical objects – Honing tools shapes grades and abrasives – the allowances for honing.

LIMITS FITS AND TOLERANCE :

Tolerance and limits – tolerance, basic dimensions or sizes – How tolerance is denoted ? – Limits definitions – fits and allowances types of fits allowances definition. Systems of tolerance and limits – New all system I.S.I system – British Institute standard system – example of fixing limits for fits commonly met with in machine.

POWER TRANSMISSION :

Power transmission element – The object of belts their sizes and specification – materials of which the belts are made – selection of the type of belts with the methods of joining the ends of the leather belts – Vee-bolts – their advantages and disadvantages – Use of commercial belts dressing and resign creep and 1 slipping calculations for the size of new belt – Power transmission – Coupling types safety flange coupling hooks coupling – Universal coupling and their different uses – Pulleys type – solid – split and V-belt pulleys – standard calculation for determining the size crowning of pulleys – width of faces loose and fast pulleys – jockey pulleys types of the belt drives at an angle.

TAPERS :

Taper – Definition – various methods of specifying tapers in inch and metric systems – standard tapers adopted for tapered jobs – their uses in drill sockets and lathe spindles – Tapers on keys and cotters permissible for various standards.

PIPES AND PIPE JOINTS :

Pipes and pipe fitting – commonly used pipes – pipe bending methods – Use of bending fixture – Pipe threads – standard pipe threads – Die and tap threads – Pipe vices – Standard pipe fittings – method of fitting or replacing the above fitting – Repairs and erection of rain water draining pipes and house hold taps and pipe work – use of tools such as pipe cutters – pipe wrenches – pipe dies and taps – pipe bending machine etc. Methods of protecting leaks at the joints.
