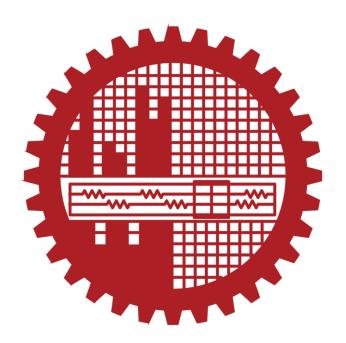
IPE-432 MACHINE TOOLS SESSONAL

Md. Hasibul Islam
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points

- Collate (Jaw) : Holds the job. Single job can hold single diameter job.
- Hexagonal turret: 6 angles, holds 6 tools.
- Square turret: 4 angles.
- Advantage of collate: centering easier, no thread.
- Lock \rightarrow handle/lever
- Pushout \rightarrow outside lock

Advantages of Turret Lathe

- Mass production / batch production
- Can set at together multiple (6 + 4 = 10) tools
- Reduce the non-production time

Steps

- Facing
- centering
- Drilling
- Internal chamfering
- Internal threading
- Outside turning
- Parting

Permanent Setup (5 steps)

- 1. Fix the collate chuck according to job diameter.
- 2. Set/Fix the tool on square turret according to machining sequences.
- 3. Set/Fix the tool on hexagonal turret according to machining sequences.
- 4. With the help of adjustable screw, fix the tools longitudinal feed.
- 5. Set the motor RPM.

Follow Lab sheet also.

Collate Chuck

- High gripping force
- self centered
- Only specific diameter job can be hold. (by a single collate)

Square Turret

- 1. Facing
- 2. Parting
- 3. Knurling
- 4. Chamfering

Hexagonal Turret

- 1. Centering
- 2. Drilling
- 3. Boring
- 4. Reaming
- 5. Taping/Threading
- 6. Turning

Important Points

- Ram is situated above the saddle.
- Capstone wheel : Convert Rotary motion into linear motion, by rack and pinion.
- Stopper can control long feed.
- Adjustable Screw : Under the tool, Adjustable screw is meshed with bevel gear.
- Offsetting cast & moveable cam : at saddle