

AMPL20 DESIGN & FABRICATION OF MOLDS

UNIT-1 COMPRESSION MOULDS

- 1.1 Positive, semi-positive and flash mould with horizontal and vertical flash,
- 1.2 Arrangement of loading shoes,
- 1.3 Simple two plate and three-plate moulds,
- 1.4 Split moulds

UNIT-2 INJECTION MOULDS

- 2.1 Two plate and three plates types,
- 2.2 Injection, venting, runner and gates,
- 2.3 Calculation of number of cavities,
- 2.4 Hot runner mould.
- 2.5 Computer software's used in designing of molds & mold flow analysis

UNIT-3 TRANSFER MOULDS

- 3.1 Principles of integral pot,
- 3.2 Auxiliary ram and separated pot mould,
- 3.3 Calculation of number of cavities.

UNIT-4 Extrusion dies:

- 4.1 Extrusion of simple shapes tubing,
- 4.2 Cable covering and sheeting dies.
- 4.3 Mould fabrication: steels for moulding tools and their treatment include processes used for mould fabrication, finishing processes.
- 4.4 Heating systems for plates and moulds,
- 4.5 Measurement and control of temperature of moulds and dies, simple blow mould.
- 4.6 Introduction to computer aided design and software design aspects for moulds and dies.

Reference Books:

1. Plastic mould engineering handbook by Du Boi's and I. Pribble.
2. Plastic moulds and Dies Laszlo Sors.
3. Injection moulds by Pye.
4. Compression and transfer moulding of plastics by J. Butler.