

MANUFACTURING DEFECTS IN TABLETS

- CAPPING
- PICKING & STICKING
- MOTTILING
- WEIGHT VARIATION
- HARDNESS VARIATION
- DOUBLE IMPRESSION

CAPPING

- Means, partial or completely remove of top or bottom portion of the tablet.

- **Reasons:**

- ✓ Excessive fines in granules.
- ✓ Defective punches & dies.
- ✓ High speed of tablet machine.
- ✓ The granules are too dry.

- **Defects can be overcome by:**

- ✓ Reduce the % of fines
- ✓ Defective punches should be replaced or polish before use.
- ✓ Regulate the speed of tablet machine.
- ✓ Maintain moisture content.



PICKING & STICKING

- Means, picked the material by upper punch & sticking case, stick the material to wall of the die.
- **Reasons:**
 - ✓ Use of small qty. of lubricants
 - ✓ Defected punch & dies used
 - ✓ Presence of moisture content in granules.
- **Defects can be overcome by:**
 - ✓ A new set of die & punches.
 - ✓ Use of required qty. of lubricant
 - ✓ Use dry granules.

MOTTLING

- Means, unequal distribution of colours on tablet surface.
- **Reasons:**
 - ✓ Not properly mix colours with granules
 - ✓ Use of different coloration of medicaments & excipients.
 - ✓ Migration of dye in the granules during the process of drying
- **Defects can be overcome by:**
 - ✓ Drying the granules at low tempr.



WEIGHT VARIATION

- **Reasons:**

- ✓ Granules are not in uniform size.
- ✓ No proper mixing of lubricants.
- ✓ No uniform flow of the granules from the hopper.
- ✓ Use of excess amount of fine powder.

- **Defects can be overcome by:**

- ✓ Use of required qty. of lubricant
- ✓ Reduce the % of fines
- ✓ Regulate the speed of tablet machine.