m

INDUSTRIAL MARKETING COMPANY

www.indmkt.com

DIE PUNCH INSPECTION KIT:



Tooling, after prolonged usages are likely to give rise to any of the following problems:

- Excessive weight variation.
- Tablet thickness / hardness variation
- Excessive powder seepage, collar formation
- Punch running tight in die. Bending of small punch tips.
- If care is not taken in due time, these problems can cause costly breakdown. To co-relate these specific problems with the inconsistencies in the tooling, the following parameters need to be checked with help of this kit.
- Working height uniformity of all punches.
- Punch tip to die bore clearance.
- Punch tip to body concentricity
- This Kit can also check Cup Depth & other parameters like Punch Diameters, Die O.D., Die Height etc.

| PROBLEM | СНЕСК | METHOD |
|--|---|-----------|
| Tablet weight, thickness and hardness variation | Inconsistent lower punches cause weight variation while upper punches cause thickness & hardness variation. Working height inconsistency can be checked by keeping the punch in upwards position The dial tip should be placed at the deepest point in cavity. Deviation in the dial reading between punches is difference in working height. | |
| Tablet center thickness variation | The total height of punch can be checked by keeping the punch in inverted position, supported in punch holding bush & comparing it with the standard height gauge. Depth of cavity is the difference between the total height & working height of the punch. | ** |
| Punch tip running tight / rubbing against the die bore | Punch body to tip concentricity by rotating the punch on a magnetic Vee block as shown. | |
| Dies are either too loose or too tight in the die-pocket | Die O.D. uniformity comparing with standard die O.D. block. | |
| Die protrudes from the die pocket | Check the height of one die using a micrometer. If height is ok, place this die under the dial and set the dial to '0' Replace this die with other die. Displacement in the dial is difference in the height. You can also check height uniformity by moving the die under dial. | |
| Powder Seepage / Collar Formation | Die bore accuracy with the help of Go / NoGo plug gauge. | |
| Punch tight in Turret / Die | Punch body & tip diameter with the Micrometer. | |
| Tablet does not match drawing | Check radius of concave tablets using the radius gauge | |







- 2 -

DIE PUNCH INSPECTION KIT:

| ITEM | SPECIFICATION | APPLICATION | DESCRIPTION |
|---------------------------------|--|---|-------------|
| Dial Gauge Comparator Stand | Suitable to accommodate punch height | To hold the dial gauge while inspecting various parameters. | |
| Micrometer | Range = 0.25mm Least Count = 0.01 mm | To check outsider dimensions: Punch O.D., Punch Tip Dia, Die Height | S. |
| Punch Holding Bush | 1 for 'B' Type 1 for 'D' Type | To hold the punch while inspecting the total & working height | 11 |
| Punch Height Gauge | Standard = 5.260'' = 133.6 mm | Master piece to set the dial for Punch Height | |
| Die O.D. Block | 'D' Type = 38.10 mm 'B' Type = 30.16 mm 'BB' Type = 24.00 mm | Maser piece to set the dial for Die O.D. | |
| Magnetic Vee Block | Suitable to accommodate punch & die | To hold the punch while checking punch body to tip concentricity | |
| Round Die Go-Nogo Plug Gauge | 6 Nos. – as per requirement | To check the die bore size | 1111 |
| Magnifying Glass | Scale = 4X | To observe the punch tip cavity and die bore finish | |
| Die Pocket Cleaner | Suitable for D/B/BB die | For Cleaning the die pockets in the turret | 388 |
| Radius Gauge | 1-7, 7.5-15, 15.5-25 mm | To check the radius of curvature of tablet | 1100 |
| Die Inserter Jig | Suitable for D/B/BB die | Used for installing the dies in turret. | 999 |