



DIE-PUNCH INSPECTION KIT






Tooling, after prolonged usage 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 the help of this kit.

- Working height uniformity of all punches.
- Punch tip to die bore clearance.
- Punch tip to body concentricity.
- It can also check Cup Depth & other parameters like Punch Diameters, Die O.D., Die Height etc.



PROBLEM	CHECK	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 upward 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 rotating 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.	

ITEM	SPECIFICATION	DESCRIPTION	APPLICATION
Dial Gauge Comparator Stand	Suitable to accommodate punch height Least Count = 0.01mm		To hold the dial gauge while inspecting various parameters.
Micrometer	Range = 0.25mm Least Count = 0.01mm		To check outside dimensions: Punch O.D., Punch Tip Dia, Die Height
Punch Holding Bush	1 for 'B' Type 1 for 'D' Type		To hold the punch while inspecting the total & working height
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		Master 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
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
Radius Gauge	1-7, 7.5-15, 15.5-25mm		To check the radius of curvature of tablet
Die Inserter Jig	Suitable for D / B / BB die		Used for installing the dies in turret

*Specifications subject to change without notice

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