

Purpose: To set Tool & die for bulk production.

Scope: For Hammer Dies, Trimming & Piercing Tools

A. Die Setting:

- 1) Ensure that dies & tools to be set up are OK in all respects from die shop
- 2) Check dowel size, Top & Bottom key are available as per requirement.
- 3) Unload the last running die.
- 4) Load the bottom die and see the alignment; fill gap between Saw Blocks & die by putting SS metal sheet of proper thickness. Do not use too many packing to fill gap.
- 5) Tight the key of bottom die.
- 6) Load the top die and see the alignment; fill gap between RAM & die by putting SS metal sheet of proper thickness. Do not use too many packing to fill gap.
- 7) Tight the key of top die.
- 8) Heat the dies by putting hot scrap parts/billets between the dies or heat the dies in a gas chamber.
- 9) Check Die temperature & ensure die temp has reached 160°C to 200°C in center of the block. Use touch probe or Pyrometer to verify die temperature.
- 10) Remove die heating billets or shut of gas supply.
- 11) Blow off scales from the dies completely.
- 12) Ensure billets to be forged are heated to desired temperature as per work instruction for Heating & Soaking **30-WI-MQC-01**.
- 13) Forge sample parts & offer for inspection.
- 14) Make necessary correction in die setup for mismatch or any other defect.
- 15) After correction produce samples and offer to QC for approval.
- 16) Check all dimensions as per the requirement; If all dimension are "OK" then only start bulk production.

B. Trimming & piercing tool Setting: -

- 1) Ensure that dies & tools to be set up are OK in all respects from die shop
- 2) Align the trim punch/piercing punch & trim plates/ piercing dies to ensure equal gap on all sides by checking in inching mode & adjust accordingly.
- 3) Trim/ pierce sample parts & offer for inspection.
- 4) Make correction as necessary & very for concentricity.

Responsibility: Production Supervisor

PREPARED BY.
Supervisor Forging

APPROVED BY.
Head Forging Shop