

SPECIALITY SINTERED PRODUCTS PVT. LTD.

Tool Control Plan-41579/41498-Sizing

Rev. No:- 01

Pre. by:- Mr.Amol Khadse

FORMAT NO-D&D 12-TOOL

30.10.2023

App. by:- Mr.Sandeep Gaikwad

Note:-

- 1) Base parameter's base OD, base thickness, height is to be accepted as per machine & tool assembly.
- 2) Clearance between each mating part should be as per STANDARD CLEARANCE CHART.
- 3) Working portion surface finish should be less than Ra 0.3 max.
- 4) For dimension which are not possible to measure/check, measure/check it on sulphur PC.
- 5) Rest parameter's to be checked as per Drawing.

PART NAME	SR. NO.	PARAMETER	SPECIFICATION	MEASUREMENT TECHNIQUE	TOOL LIFE C -Carbide S-Steel	CHAMFER TOOL LIFE FOR RESHARPENING	FREQ.	CONTROL METHOD	RESPONSIBILITY	REACTION PLAN
Sizing Die	1	ID-1	Ø 17.90 to 17.92	Bore Gauge	C - 600000 S -N/A	NA				
	2	ID-2	Ø 17.69 to 17.72	Bore Gauge						
	3	Degree With Length at ID Side	1.15x5° to 1.25x6°	Contour						
	4	Perpendicularity	0.00 to 0.020	CMM						
	5	Concentricity	0.00 to 0.020	CMM						
	6	Parallelism	0.00 to 0.020	CMM						
	7	Hardness	1210 to 1320Hv	Hardness Tester						
Sizing Core Rod	1	ID	Ø 6.010 to 6.025	Micrometer	C - 600000 S -N/A	NA				
	2	Perpendicularity	0.00 to 0.020	V Block / Dial Indicator						
	3	Concentricity	0.00 to 0.020	V Block / Dial Indicator						
	4	Hardness	1210 to 1320Hv	Hardness Tester						
Sizing Top Punch Inner	1	OD	Ø8.28 to 8.30	Micrometer	C - NA S - 450000	NA	1) New tool received. 2) Before & after production completion. 3) Tool life over 4) After chamfer resharpener	Tool History Card	Tool Inspector	Reject & Inform to Supervisor
	2	ID	Ø6.02 to 6.035	Digimatic & VMS						
	3	Perpendicularity	0.00 to 0.020	V Block / Dial Indicator						
	4	Concentricity	0.00 to 0.020	Mandrel & Between Center						
	5	Parallelism	0.00 to 0.020	V Block / Dial Indicator						
	6	Hardness	58 to 60 HRC	Hardness Tester						
Sizing Top Punch	1	OD	Ø17.89 to 17.91	Micrometer	C - NA S - 450000	NA				
	2	ID	Ø6.30 to 6.32	Bore Gauge						
	3	Profile Depth	1.49 to 1.52	Digimatic						
	4	Profile Depth	1.83 to 1.86	Digimatic						
	5	Land Relation	0.48 to 0.50	Digimatic						
	6	Concentricity	0.00 to 0.020	Dial Indicator & Mandrel						
	7	Perpendicularity	0.00 to 0.020	Dial Indicator & V Block						
	8	Parallelism	0.00 to 0.020	Dial Indicator & V Block						
Sizing Bottom Punch	1	OD	Ø17.89 to 17.91	Micrometer	C - NA S - 450000	NA				
	2	ID	Ø6.02 to 6.035	Bore Gauge						
	3	Concentricity	0.00 to 0.020	Dial Indicator & Mandrel						
	4	Perpendicularity	0.00 to 0.020	Dial Indicator & V Block						
	5	Hardness	58 to 60 HRC	Hardness Tester						

All dimension are in mm unless otherwise specified.

Rev. No	Rev. Date	Description	Remark
1	30.10.2023	Check Point added 1.15x5° to 1.25x6°	