Industrial Process Flow Chart - Manufacturing

Legend

- Process: Qualified Operator
- Functional test
- Inspection

Quality Metrics:

M1: Suppliers Rejection
KC1: Surface Finish
KC2:
KC3:
M2:

In House Processes

Additional Information	Key Characterists and Quality Metrics	Used Means	Process Flow	Process Specifications	Associated Documents	External Processes
			TRANSPORTATION STOCK TO SHOP FLOOR			Wyman Gordon To provide 3 pcs mininum
Receiving inspection Release on Gantry Plan (3 ea)	●		Verify material certifications , material dimensions and material release		ROUTING OP 10	
		Machine MF 60000291-1001 NC 17309	P1 - Machine Rough Datum Flat Side, Tooling Tab, Slots & Holes per NC Program	AIPS/AIPI-00-001	ROUTING OP 20	DBR Company
		Machine 90101 2MF 60000292-1001 NC 17310	P2 - Machine Rough Pockets an Rail Tops & Rough OML and IML per N/C/ programs	AIPS/AIPI-00-002	ROUTING OP 30	
		Machine MF 60000291-1001	P3 - Finish Machine Datum Side Complete N/C/ programs	AIPS/AIPI-00-003	ROUTING OP 40	DBR Company
		Machine 90101 2MF 60000292-1004 NC 17312, 17491	P4 - Finish Machine Pocket Side Complete N/C/ programs	AIPS/AIPI-00-004	ROUTING OP 50	
Released on Individual Plan (1 ea)	●		Material release to Individual Planning		ROUTING OP 10	
Bench Operations			Bench to Break all Sharp Edges per Inspection Instruction	AIPS/AIPI-00-004	ROUTING OP 20	
C.M.M. inspection	●	DJ 60000339-001 DJ 60000339-002	C.M.M. Inspection Hole Layout		ROUTING OP 30	
		Machine 63000 DJ 60000339-001 DJ 60000339-002	Drill holes through CMM Located Drill Jig Drill / Ream .319/.321" Dia 2 locations	AIPS/AIPI-00-005	ROUTING OP 40	
C.M.M. inspection	●		C.M.M. Verify Hole Size & Location		ROUTING OP 50	
		Machine 37204 DJ 60000352	Drill and Reams Holes through Pocket Floors per NC Program .134 / .141" Dia	AIPS/AIPI-00-006	ROUTING OP 60	
		Machine 86001 5MF-HF-60000293-1002 NC 17313	Drill and Reams Holes through Pocket Floors per NC Program (7) .123"-.137, (6) .134"-.141" (3) .319"-.322, (74) .3441"-.3449"	AIPS/AIPI-00-007	ROUTING OP 70	
		Machine 93500 6MF-2HF 60000302-1002 NC 17314	Drill and Ream Holes in Web and Moldline per NC Program (4) .099"-.106", (5) .123"-.137", (4) .130"-.137" (26) .134"-.141" (2) .268"-.271 (4) .308-.314", (2) .335"-.338"	AIPS/AIPI-00-008	ROUTING OP 80	
Bench operations			Finish bench per inspection instructions	AIPS/AIPI-00-009	ROUTING OP 90	
Manual inspection	●		Manually inspect part per drawing requirements & MVS		ROUTING OP 100	
C.M.M. inspection	●		C.M.M. inspect entire part including holes location per CMM Program		ROUTING OP110	
Bench operations			Final bench per inspection instructions	AIPS/AIPI-00-010	ROUTING OP 120	
Outside Process		PDS-13/10-2	Pickling	AIPS/AIPI-00-011	ROUTING OP 130	Coast Plating
		PDS-6B	Penetrant Inspection	AIPS/AIPI-00-012		
Outside Process			Shot Peen (If Required) (Optional)	AIPS/AIPI-00013	ROUTING OP 135	Metal Improvement
Outside Process		4B	Dry Blast	AIPS/AIPI-00-014	ROUTING OP 150	Metal Improvement
Outside Process			Protect	AIPS/AIPI-00-015	ROUTING OP 160	Coast Plating
Receiving Inspection	●		Verification of outside processes per drawing and specification requirements	AIPS/AIPI-00-016	ROUTING OP 170	
Final inspection operations	●		Part marking and prepare for shipment			
Completion			Verification of operation buy off & Preparation of Cert Packet per ship set			