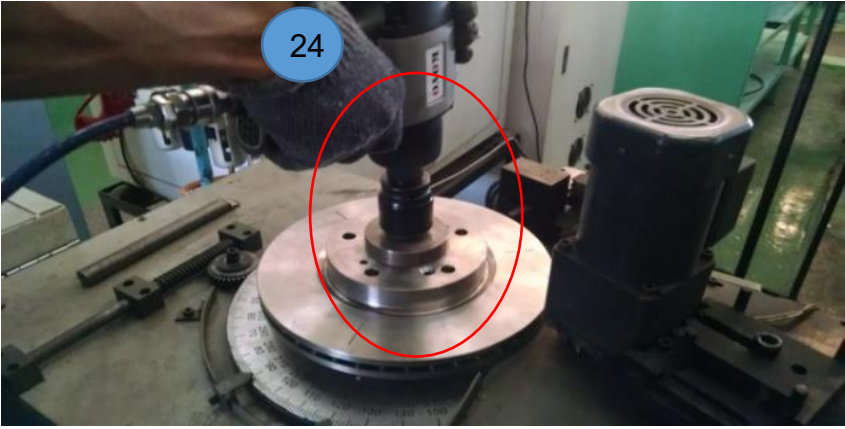
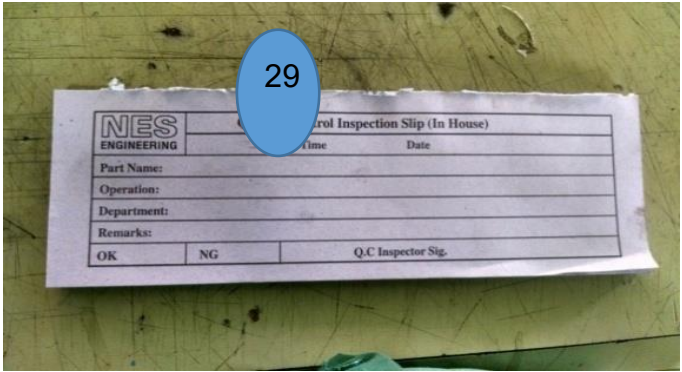
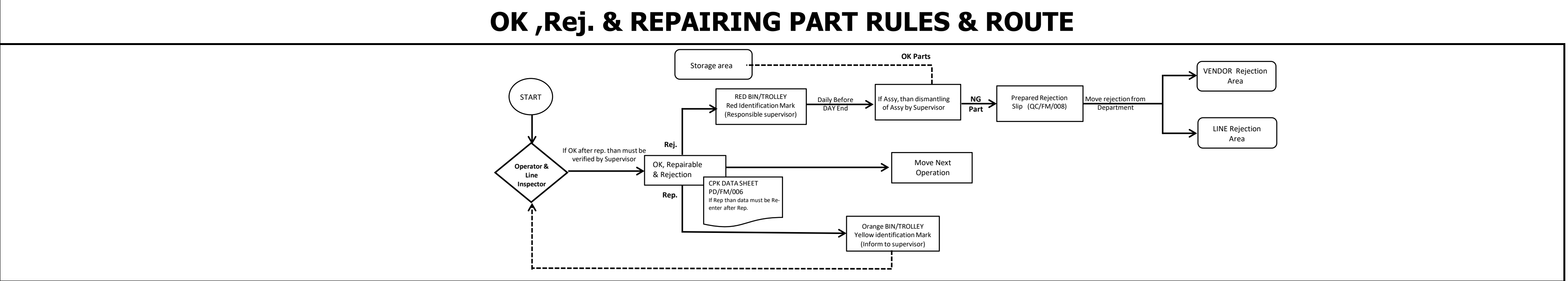


Manufacturing Operation Standard

Manufacturing Operation Standard				Preparing Department		Control No.										
				NES												
				Confirmed by	Prepared by											
						PP\FM\025 ISSUE 00 PAGE 11of17										
Model		2YN		Process / Operation Name		Balancing & Correction										
PICTORIAL VIEW				No.	Operation	Quality Standard	Working Point	Tool & Material	Comments	Safety Points						
				1	Switch on button	-	By hand switch on 1) Power Sw 2) Power System 3) Cutter Motor main breaker	1) Breakers 2) Button	It is necessary to on these button to start machine & see the display is working	Gloves / Shoes						
				2	Feed Tolerance in machine / Program Setting at start up Production	120 gf.cm MAX (12 g.mm) PP\FM\024 ISSUE 01 PAGE 9of15	Software ↓ Rotor ↓ Rotor Parameter ↓ S tol & L tol	Keyboard / Mouse	If this activity is not performed then part checking is on wrong Tolerance & part can be rejected..	Gloves / Shoes						
				3	Cutter Head Position Check	Should in contact with stopper # 1	Through Radius cutting handle move the position of cutter head	Stopper # 1 Handle	If this activity is not perform then balancing M/c will not RUN	Gloves / Shoes						
				4	Mount Fixture on machine surface	Surface should be clean	By using air gun clean the surface before mounting fixture	Ln-Key Air Gun Socket Head Bolt	If this activity is not perform then it can cause calibration out/cause an Accident	Gloves / Shoes						
				5	Close the guard & verify calibration of fixture on screen	1) Dialing Limit Maximum 0.1 mm 2) tolerance of unbalance 1 gm.mm Maximum	1)Dial the fixture with lever dial gauge & reclamp the fixture until Run out is within 0.1mm 2)Run Balancing till unbalance amount of Fixture close to 1gm.mm	Lever Dial Gauge Ln-Key weight Brass or Copper	If this activity is not perform then it can cause fixture calibration out	Gloves / Shoes						
				6	Visually Check & clamp the disk on fixture	1) No dust or burr allowed. 2) Disk & Fixture should be cleaned 3) Nut Tightening torque range 40 ~ 50 psi	Visually check the Pcs. Mount disk then add spacer and tight Nut with Air torque gun (Forward)	Air torque gun Nut Spacer	If pressure is not set within specified range then result is not accurate.	Gloves / Shoes						
				7	Run Balancing	1) All confirmation switch on reference. 2) RPM of machine should be 930 ± 10	1) Press Green button to start cycle 2) Press space button on keyboard 3) when result appears then press "H" button on keyboard 4) Stop cycle by pressing Red Button.	Green Button Keyboard Red Button Confirmation switch	If confirmation switch not ON reference then machine not start. If space button not Press during balancing it will not show machine RPM & result of on unbalance amount. To hold result for correction of unbalance amount press "H" button. if Result is in OK limit then process next operation # 10. if Result is in Repairing limit then process next operation # 08. <table><tr><td>≤ 1500 gmm</td><td>OK</td></tr><tr><td>1501 ~ 2600 gmm</td><td>Repair</td></tr><tr><td>≥ 2601 gmm</td><td>NG</td></tr></table>	≤ 1500 gmm	OK	1501 ~ 2600 gmm	Repair	≥ 2601 gmm	NG	Gloves / Shoes
≤ 1500 gmm	OK															
1501 ~ 2600 gmm	Repair															
≥ 2601 gmm	NG															
				8	Correction of unbalance amount	1)Max depth 1.5mm 2)Min thickness 3.5 mm both side of wall. 3)Max cut range 90°.	a)Un balance degree aligned on arrow (1) and then move value of arrow (2) on arrow (1) and lock it. b)Now lock disk with the help of locking gauge which is place on Rib profile of Disk. c)Now press cutter motor button ON. d)Depth of cut should not more then 0.3 ~ 0.5mm on first time cutting unbalance amount from disk. e)for cutting R100 please rotate radius cutting handle to stopper (2) f)for cutting radially in range of 30 degree rotate Radial handle	Stopper 1,2,3 Radius cutting handle Radial Handle Cutter Dia 60 locking Rib gauge Cutter motor Button.	a)If not move value of arrow (1) on arrow (2) then value is not in range. b)If do not lock the disk by rib profile gauge then unbalance can not cut from disk. c)If motor button do not press ON before cutting then motor will not work. d)If depth of cut is not in define value range, part can be reject. e) If not rotate radius cutting handle to stopper (2) then Radius R100 is not shown on disk./ work uncomplete. f) If cutting radially not in range of 30 degree then unbalance amount position will shift.	Gloves / Shoes						

PICTORIAL VIEW		No.	Operation	Quality Standard	Working Point	Tool & Material	Comments	Safety Points
					Rotate, Radius handle until the value of arrow (2) reach on a arrow (1) g)Again cutting R100 please rotate, radius cutting handle till seat on stopper (3) h)Now OFF Button Cutter Motor Switch and then rotate, radius cutting handle to its switch ref position on stopper (1)		g) If not rotate radius cutting handle to stopper (3) then Radius R100 is not shown on disk./ work uncomplete. h) If donot OFF cutter motor switch then its cause of an accident and if donot rotate radius cutting handle to its switch ref position on stopper then M/c will not work	
		9	Checking of correction unbalance amount	Follow Seq # 7	Follow Seq # 7	Following Same tools of seq # 7	If Pc is OK Then Follow Seq #10 If Pc is REPAIRE Then Follow Seq #8 If Pc is NG Then Follow Seq #10	Gloves / Shoes
		10	Unmounting / Unclamp the disk from Fixture		Unmounting the disk from fixture by using Air torque gun (Reverse)	Air torque gun	If Disk is Ok then Ok Disk shifted from the trolly and if disk is NG so disk shifted from Reject area	Gloves / Shoes
 		11	Inspection	As per document PP\FM\024 ISSUE 00 PAGE 11 of 16	Check the disk following drawing	Vernier caliper	If Disk is Ok then Ok Disk shifted from the trolly and if disk is Reject so disk shifted from Reject area	Gloves / Shoes
 		12	QC inspection	Before starting production go to QC window and check 1st part & receive OK slip	Go to QC Window	QC Slip	If part is Reject then go and come until QC didn't give you OK slip.	Gloves / Shoes
 		13	Storage & Handling Of Finish Part	Finish Disk set in Storage Location	Place the disk properly in the Disk Racks, so it doesn't hit or collide with Other Disk.	Finish Disk , Storage Rack	Disk needs to repair then place into Repairing rack and rejected Disk then place into Rejection rack.	Shoes, Gloves

Day First Part Manufacturing	
For first part manufacturing Operator must follow these process: 1,2,3,5,6,7,8,9,10,11,12	
Routine Part Manufacturing	
For Routine part manufacturing Operator must follow these process: 5,6,7,9,10 & 11.	



Designated Safety Wears									No.	Parts Number			Parts Name			QTY	Rank	Model										
									1	45251-TEA-T100-H1			DISK FR BRAKE (15" 23T)			1	HA	2YN										