



Process Flow Diagram

PART NUMBER:	3226 -T-1112 / Rev : T - 15.07.2015	DATE & REV:	REF. AMENDMENT HISTORY
PART DESCRIPTION:	CAGE THRU SHAFT	PFD NO :	PFD / CTS / 001
MACHINE :	CNC TURNING CENTRE , DOOSAN 3 & 13	PAGE NO:	1 of 2

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STEP	OPERATON	MOVE	STORE	INSPECT	OPERATION DESCRIPTION	ITEM #	PRODUCT AND PROCESS CHARACTERISTICS	QCC # and Symbol (if applicable)	CONTROL METHODS
5				√	Receiving Inspection - Casting	1	As per Supplier Report	-	Refer Supplier Report
10	√				Machining - 1st Setup	1	Bore dia U/S or O/S	-	Plug Gauge
20	√				Painting	1	Paint Peel off		Visual
30	√				Machining - 2nd Setup	1	OD Oversize / undersize		Air Gauge
						2	OD roughness Variation		Finish Tester
						3	Pilot Flange Thickness variation		Snap Gauge
40	√				Machining - 3rd Setup	1	Bearing Shoulder Runout		Spl. Gauge
						2	Bearing bore Dia over size / Under Size		Air Gauge
						3	Pilot dia Runout - Bearing & Seal bores		Spl. Gauge
						4	Seal bore Dia over size / Under Size		Air Gauge
						5	Pilot Flange Squareness & Stand Height		2D Height Gauge & CMM
						6	ID roughness Variation		Finish Tester
						7	Groove With & Position		Width Gauge
						8	Excess flash / uneven surface	-	Visual
						9	Casting roughness / Hardness Variation	-	Hardness Tester
50	√				MH Drilling and Deburring	17	Mounting Hole Ture Position		Receiver Gauge
						18	Free from burr, sharp corners, Rust etc	-	Visual
60	√				Washing	1	As per SOP	-	Visual
70	√				Dewatering & RP Oiling	1	As per SOP	-	Visual
80				√	Final Inspection (PDI)	1	As per SOP	-	Visual & Gauge Inspection
90				√	Packing & Layer Audit	1	As per SOP	-	Visual
100				√	Dock Audit	1	As per SOP	-	Visual & Gauge Inspection

Legend	- Meritor QCC Symbol (Denotes Major Characteristics)	- Meritor QCC Symbol (Denotes Safety Related Characteristics)
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Approved By: N. Parthasarathy

<u>AMENDMENT HISTORY</u>		
Rev No	Date	Nature of Change
0	21.03.2014	New Release
1	23.05.2014	QCC parameters added
2	12.06.2014	Meritor QCC Symbol added, Incoming source variation and product characteristic output updated
3	13.09.2014	Process sequence modified - MEIL,MM Nagar
4	12.11.2014	Machining location changed to M.City and process sequence changed
5	21.03.2015	Customer Drawing Revised
6	07.05.2018	In-House Painting on Flange OD and face
7	22.08.2022	Post machining Process Sequence Changed