KAVIA ENGINEERING PVT LTD

HOURLY INPROCESS INSPECTION REPORT

DATE : 7/12/22
SHIFT : I

PART NAME:	Case -Link Assy ,Stabilizer	PART NO :	210031-025
SUPPLIER / CUSTOMER NAME:	ILJIN ROUTE CARD NO :	OPERATION :	100 (2nd Setting)

SAMPLE SIZE:
TOTAL QUANTITY:

SL NO	PARAMETERS	SPECIFICATIONS	METHOD OF INSPECTION	ACTUAL MEASUREMENTS 8:00	9:00	10:00	11:00	12:00	1:00	2:00	3:00	4:00	5:00	REMARKS
*	Apperance	Free from crack,burr,rust,scratch, pitmark,damages,dents etc	VISUAL	ok	ok	ok	ok	ok	ok	ok	ok	ok		
2	Step Diameter	27.15 ± 0.05	DVC/Gauge	ok	27.15	ok	ok	ok	ok	ok	27.15	ok		
3	Groove Diameter	25.0 ± 0.10	DVC / Snap Gauge	24.99	ok	ok	ok	ok	ok	ok	24.98	ok		
4	Chamfer Dia	22.2 ± 0.2	DVC	22.20	22.21	22.21	22.20	22.24	22.22	22.26	22.28	22.26		
5	Bore Dia	19.1 ± 0.05	DVC / PLUG GAUGE	19.10	ok	ok	ok	ok	ok	ok	19.10	ok		
6	Groove Width	4.1 ± 0.1	DVC / Slip GAUGE	ok	ok	ok	ok	ok	ok	ok	ok	ok		
7	Dimension	23.50 ± 0.05	DVC/Snap Gauge	ok	ok	ok	ok	ok	ok	ok	ok	ok		
8	Dimension	1.0± 0.05	DVC	1.00	1.03	1.00	1.01	1.01	1.00	1.01	1.03	1.02		
9	Step Height	16.97 ± 0.05	Master GA/ Flush pin Gauge	ok	ok	ok	ok	ok	ok	ok	ok	ok		

REMARKS : ACCEPTED / ACCEPTED ON DEVIATION / SEGREGATION / REJECT

QUALITY ASSURANCE :		INSPECTED BY:		APPROVED BY :	

NOTE : In case of any complaint or deviation QA & CEO to sign

Note : Hourly Inspection to be carried out by Operator and patroling inspection by line inspector

* NOTE : PUT * MARK,DO THE INSPECTION & MENTION TIME AND SIGN IN HOURLY INSPECTION REPORT DURING INSERT /TOOL CHANGE

Filing Responsibility Line QC inspector and Retention perod 1 year

RETENTION PERIOD: 1 YEAR

KAVIA

DAILY MACHINE CHECK SHEET

FORMAT NO.	MNT/F/03
REVISION. NO.	2
REVISION DATE	01.09.2021

MACHINE NAME	ACE -09	MACHINE CODE	M/242/12.03.22	MONTH	DECEMBER	YEAR-2022

S.NO.	CHECK POINTS	SPECIFICATION	CHECK METHOD	ACTION FOR CHECK POINT FAIL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	REMARKS
1	Lubrication oil level	above minimum line	oil level indicator	topup oil upto maximum line	O	O			O	O	O																									
2	Hydraulic oil level	above minimum line	oil level indicator	topup oil upto maximum line	O	O			O	O	O																									
3	Chuck clamp pressure	12-20 kg/cm²	chuck pressure gauge	inform to supervisor	20	20			20	20	20																									
4	System pressure	28-40 kg/cm²	system pressure gauge	inform to supervisor	32	32			32	32	32																									
5	Machine status indication	indicator light glows in red/yellow/green colour	tower indicator lights	inform to maintenance supervisor	O	O			O	O	O																									
6	Emergency stop button working condition	emergency alaram on monitor & machine stop	emergency button	inform to maintenance supervisor	O	O			O	O	O																									
7	AC temperature	25-38 degrees	ac temperature display	inform to maintenance supervisor	30	30			30	31	28																									
8	Coolant level	above minimum line	coolant level indicator	topup coolant upto maximum level	O	O			O	O	O																									
9	Coolant concentration	4-6%	refractrometer	topup coolant oil	4	4			4	4	4																									
10	Work area	maintain 5S at work area	ensure no scrap, waste & dirts	do 5s activity	O	O			O	O	O																									
11	all motors working condition	normal & smooth sound	observe abnormal sound	inform to supervisor	O	O			O	O	O																									
12	Scrap collection	no overflow from scrap trolley	chips conveyor	check often and remove	O	O			O	O	O																									
13	All push button switch working condition	ensure no damage	operating panel	inform to supervisor	O	O			O	O	O																									
14	AC filter	free from dust and oil	ac panel	weekly cleaning of filter	O	O			O	O	O																									
15	Tool & chuck condition	chuck & tool holder free from scrap& bolts are in tightened condition	visual check during clamping & insert change	inform to supervisor	O	O			O	O	O																									
	FILLED BY	OPERATOR SIGNATURE																																	
	VERIFIED BY	MAINTENANCE SIGNATURE																																	

INSTRUCTIONS :- EVERY DAY BEFORE START PRODUCTION FILL THIS MACHINE CHECK SHEET, WRITE MEASURABLE PARAMETERS IN NUMERICAL VALUE, NON MEASURABLE PARAMETERS PUT 'O' FOR OK & PUT 'X' FOR NOT OK

IF ANY PROPLEM : (OPERATOR → SUPERVISOR → MAINTENANCE INCHARGE) TAKE ACTION IMMEDIATELY

S.NO	DATE	PROBLEM	ROOT CAUSE	ACTION TAKEN	STATUS

O △ X

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QAD/F/02A
Rev Date 01.06.19Rev No 06

FIRST OFF / MIDDLE OFF / LAST OFF / INSPECTION REPORT

DATE 7/12/22
SHIFT 1st

PART NAME	CASE LINK ASSY STABLIZER BAR	PART NO :	210031- 025	SAMPLE SIZE:
CUSTOMER NAME	ILJIN	ROUTE CARD NO :	OPERATION	100 (2nd setting)

SL NO	PARAMETERS	SPECIFICATIONS	METHOD OF INSPECTION	ACTUAL MEASUREMENTS						REMARKS
				FIRST OFF INSPECTION		MIDDLE OFF INSPECTION		LAST OFF INSPECTION		
1	Apperance	Free from crack,burr,rust,scratch, pitmark,damages,dents etc	VISUAL	ok	TIME: 08:28 AM	ok	TIME: 02:19 PM		TIME:	
2	Step Dia Meter	27. 15 ± 0.05 mm	DVC/Gauge	27.16		27.15				
3	Groov Dia	25.0 ± 0.1 mm	DVC/ Snap Gauge	24.99		24.93				
4	Chamfer Dia	22.2 ± 0.2 mm	DVC	22.20		22.21				
5	Bore Dia	19.1 ± 0.05 mm	DVC/ Plug Gauge	19.11		19.10				
6	Groov Width	4.1 ± 0.1 mm	DVC/ Slip Gauge	4.08		4.09				
7	Chamfer	C 0.3 ± 0.1 mm	Profile Projector	0.32		0.31				
8	Dimension	23.50 ± 0.05 mm	DVC / Snap Gauge	23.49		23.48				
9	Dimension	1.0 ± 0.05 mm	DVC	0.99		0.98				
10	Radios	R 0.5 ± 0.1 mm	Profile Projector	0.53		0.54				
11	Concentricity	0.15 mm A	V Block with Dial Gauge	0.03		0.02				
12	Angle	51° ± 1 °	Beval Protector	51°		51°				
13	Step Height	16.97 ± 0.05 mm	Master Gauge/Flush Pin Gauge	16.98		16.99				
14										
15										
16										
17										

REMARKS : ACCEPTED / ACCEPTED ON DEVIATION / SEGREGATION / REJECT

QUALITY ASSURANCE		INSPECTED BY:	8/7/22	APPROVED BY :		

Note :

NOTE : In case of any complaint or deviation QA &CEO TO SIGN

Set up approval & first off approval to be carried by Line setter/Supervisor/QC inspector

Set up approval to ba carried out during setting change only.

Filing Responsibility Line QC inspector and Retention perod 1 year

RETENTION PERIOD: 1 YEAR

KAVIA ENGINEERING PRIVATE LIMITED	CONTROL PLAN WITH STAGE DRAWING CUSTOMER : ILJIN	CUSTOMER	ILJIN	Doc Ref		CP/ILJIN/01
				Date of Origin		15.12.2018
Proto type ☐ Pre-launch ☐ Production ■		Key Contact/Phone	VIVEK GUPTA/ 080-27809065	Rev No / Date	R22	07.11.22
Part Number / Latest Change Level:	210031-025	CFT Team	VG / MAA / SM / AH / AP / GM	Customer Engineering Approval/Date (If reqd)		NIL
Part Name:	CASE-LINK ASSY,STABLIZER BAR	Supplier / Plant Approval / Date	NIL	Customer Quality Approval / Date (If reqd)		NIL
Customer/Supplier / Plant	Bangalore Supplier Code:	Other Approval / Date (If reqd)	NIL	Other Approval / Date (If reqd)		NIL

Part/ Process Number	Process Name / Operation Description	Machine/Device/ Jig/ Tool for Mfg	No	Product	Process Characteristic	Spl Char	Product/ Process Specification/ Tolerance	Evaluation/ Measurement Technique	Method: Sample Size	Method: Sample Freq	Method: Method	Method: Responsibility	Reaction Plan
100	2nd Setting CNC Machining	CNC M/C-ORB 2,ACE 4, ACE 6 ,ACE 7, ACE 8,ACE 9	*	Appearance			NO SKRATCH , RUST, DENT & DAMMAGE	Visual	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	BIN WITH SEPARATOR
								Visual	1	Every Hour	HIR	Operator & QC Line Inspector	
		Facing Tool Holder : Holder : MWLNR 20X20 Insert : WNMG080408	1	Step Diameter		Z	Ø27.15±0.05	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
								D. Vernier /Gauge	1	Every Hour	HIR	Operator & QC Line Inspector	
			2	Groove Diameter			Ø25±0.10	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	If Part is not OK Reset the Programme parameter / Tool by Programmer / Setter
								D. Vernier /snap ga.	1	Every Hour	HIR	Operator & QC Line Inspector	
			3	Chamfer dia			Ø22.2±0.2	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
		OD Grooving Tool Holder : TTEL 20X20 Insert : TDC 3						D. Vernier	1	Every Hour	HIR	Operator & QC Line Inspector	
			4	Bore dia		Z	Ø19.1±0.05	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
								Plug Gauge 10	1	100%	HIP	Operator & QC Line Inspector	
			5	Groove Width			4.1±0.1	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
								D. Vernier /Slip Gauge	1	Every Hour	HIR	Operator & QC Line Inspector	
		ID boaring & chamfering Tool Holder : SCLCL DIA16 AK-SCLCL-06 Insert :CCMT-06-0204	6	Chamfer			C0.3±0.1	Profile Projector	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
			7	Dimension			23.50±0.05	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
								D. Vernier /snap ga.	1	Every Hour	HIR	Operator & QC Line Inspector	
			8	Dimension			1±0.05	D. Vernier	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
								D. Vernier	1	Every Hour	HIR	Operator & QC Line Inspector	
			9	Radius			R0.5±0.1	Profile Projector	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
			10	Concentricity			⌖ Ø0.15 A	V' Block with dail gauge	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
												Operator & QC Line Inspector	
			11	Angle			51°±1°	Bevel Protractor	1	Every Setting / FML	SAR / FML	Setter & QC Line Inspector	
			12	Step Height		Z	16.97±0.05	Master gauge/Height ga/Dial ga	1	Every Setting / First Piece	SAR / FIR	Setter & QC Line Inspector	
								Flush pin Gauge/Dial ga	1	Every Hour	HIR	Operator & QC Line Inspector	
				Machine Parameter									
					Coolant Level		In Between Min. & Max.	Visual	1	Every Setup/ Shift Start	MCS	Check Machine Parameter	If Machine Parameter is not OK Reset the Machine Parameter
					Lubricating oil level		In Between Min. & Max.	Visual	1	Every Setup/ Shift Start	MCS	Report Before run the	
					(PY) Clamping Pressure		12-20 kg/cm2	Pressure Indicator	1	Every Setup/ Shift Start	MCS	Machine byOperator /	
					System Pressure		28 to 40kg/cm2 22	Pressure Indicator	1	Every Setting / First Piece	MCS	Setter / line Supervisor	
					Coolant concentraion		4 to 6%	Refractometer	1	Once/day	MCS	Setter / line Supervisor	
				Process Parameter									
					OD Rough Machining speed		2500 ~ 3200RPM	(PPCS) Programme No : 8900 (Fanuc) "PY"	1	Every Setup	PPCS	Check Process Parameter	If Process Parameter is not OK. Reset the Process Parameter & luck It
					OD Rough Machining feed		0.1-0.25 mm/rev		1	Every Setup	PPCS	Report Before run the	
					OD Finishing Grooving speed		2000 ~ 3000RPM		1	Every Setup	PPCS	Machine by Operator /	
					OD Finishing Grooving Feed		0.05-0.2 mm/rev		1	Every Setup	PPCS	Setter / line Supervisor	
					ID Rough Boaring speed		2000 ~ 3000RPM						
					ID Rough Boaring Feed		0.05-0.2 mm/rev						

SAR : Setting Approval Report
FML : First Middle & Lastl Report
HIR : Hourly Inspection Report
PPCS : Process Parameter Check Sheet
MCS : Machine Check Sheet

Facing & Step turning WNMG 060408 insert life : 550nos/Edge,Wear offset No :9,Macro No :550 "PY"

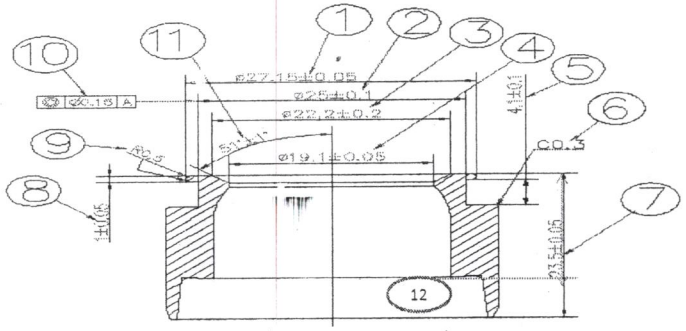
OD Grooving TDC 3 insert life : 400nos/ Edge, Wear Offset No :19,Macro No :650 18

ID Rough Boaring CCMT 09T304 insert life : 550nos/Edge,Wear Offset No 29,Macro no 750.

(Z : Kavia Critical)

Monthly SPC to be carried out for Z characteristics 15

PY- POKAYOKE



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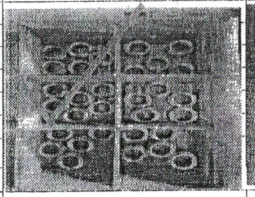
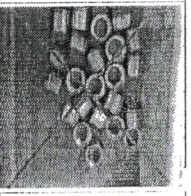
DO	DON'T
1) Reject the part produced during power failure	
2.) Use Drill Ø10.5 For Rough Drilling	
3.) Box Quantity : 300NOS.	
4)DO AIR BLAST EACH TIME BEFORE LOADING OF PART	





KAVIA PVT. LTD. CONTROLLED COPY DATE 07/11/22 SIGN