DIE BUY OFF CHECK LIST

MatcorMatsu

PART NUMBER:	PROJECT:	SPM:
PART NAME:	DIE PROCESS:	TONNAGE:
PITCH:	WIDTH:	THICKNESS:

		YES	NO	NOTES
1	DYNAMIC			
	1.- HAS THE DIE PILOTS AND / OR LOCATORS IN EACH STATION ?			
	2.- HAS THE DIE FRENCH STOP (OR SIMILAR), SENSOR FINGERS AND FINAL SENSORS?			
	3.- ARE THE TRIM AND PIERCE HOLES FREE OF SCRAP ACCUMULATION?			
	4.- DOES THE DIE HAVE ENOUGH PLUNGERS AND EJECTORS TO AVOID PART BE PULLED UP BY STRIPPER PAD?			
	5.- IS THE DIE SPEED (SPM) THE APPROPIATE ? IS THE PRESS SPM APROPIATE? WRITE IT			
	6.- IS THE PROCESS STABLE ?			
	7.- IS THE SESNORS SYSTEM WORKING PROPERLY?			
	8.- ARE ALL THE DIE COMPONENTS FUNCTIONAL AND WITHOUT INTERFERENCES ?			
	9.- IS THE PART DISCHARGED CORRECTLY TO THE CONVEYOR ?			
	10.- IS THE DIE IN THE APPROPIATE PRESS ACCORDING THE TONNAGE REQUIRED BY THE PART ?			
	11.- DOES THE PART REQUIRES LUBRICATION ?			
	12.- ARE EACH PUNCH AND BUTTON DIE ALIGNED CORRECTLY? CHECK ALL HOLES AND TRIMS IN THE PART.			
2	QUALITY	YES	NO	COMMENTS / NOTES
	1.- PART QUALITY APPEARANCE IS ACCEPTABLE RESPECT TO:			
	A) FREE OF WRINKLES			
	B) FREE OF BURRS			
	C) PART EDGES WITHOUT DAMAGE			
	D) FREE OF SPLITS			
	E) FREE OF DRAGGING			
	F) FREE OF MARKS OR HITS			
	2.- IS THE PART QUALITY DIMENSIONAL, ACCEPTABLE ACCORDING TO THE CHECKING FIXTURE ?			
	3.- THE PART COMPLIANCE WITH A 1.66 CP AND 1.33 CPK, ACCORDING TO CMM MEASURES ?			
	4.- IS THE PART AT THE LATEST ENGINEERING LEVEL ?			
	5.- IS THE MATERIAL SPECIFICATION ACCORDING TO THE APL ?			
	6.- VERIFY(CHECK WITH MICROMETER) DRAWS &/OR FORMINGS WITH RISK OF THINING, SPLITS OR CRACKS USING LIQUIDS OR SECTION CUTS FOR BETTER INSPECTION.			
3	STATIC			
	UPPER DIE.	YES	NO	COMMENTS / NOTES
	1 HAS THE DIE LIFTING HOOKS (THREAD HOLES FOR EYE BOLTS IF IS NESCESARY)?			
	2 IS THERE AN INTERFERENCE WHEN OPENING THE DIE.			
	3 IS THERE A DAMAGED COMPONENT ON THE DIE			
	4 ARE STRIPPERS ARE PROPERLY ATTACHED, BALANCED, AND LEVELED?			
	5 WHEN STRIPPERS ARE BEING DISASSEMBLIED, IS THERE ANY INTERFERENCE?			
	6 ARE THE STRIPPER PADS GUIDED WITH AMPCO GUIDES AND STANDARD LIFTER OR DADCO RETAINER?			
	7 WEAR PLATES : STEEL OVER BRONZE WITH GRAPHITE PLUGS			
	8 ARE THE NYTRO CONTROL PANEL PLACED IN A SAFETY PLACE AND			
	WITH STANDARD CONEXIÓN, AND ALL NYTRO CILINDERS COMPONENTS ARE DADCO BRAND ?			
	9 DOES EXIST A PLATE WITH NYTRO FILL INFORMATION EACH DIE STATION (CAN BE ENGRAVED ON DIE SHOE)?			
	10 ARE NYTRO CYLINDERS PROPERLY ATTACHED WITH SCREWS OR MOUNTING FLANGES ?			
	11 ARE THE NYTRO CYLINDER FULL, AND WITHOUT LEAKS ?			
	12 ARE NYTRO CYLINDERS USING 90% OF STROKE?			
	13 DOES EXIST ANY DIE COMPONENTS IN BAD CONDITIONS (PUNCHES, DIES BLADES,FORMING INSERTS, ETC.)			
	14 HAS IT PUNCHS BALL LOCK TYPE, AND ARE THEY WELL LOCKED ?			
	15 ARE ALL THE FORM, DRAW AND BENT SECTIONS WELL POLISHED ?			
	16 DOES EXIST A GAP BETWEEN THE INSERTS JOINS ?			
	17 ARE THE CAMS MADE WITH POSITIVE RETURN ARM ?			
	18 DO WE HAVE CORRECT SCREW SIZE AND PROPERLY TIGHTEN?			
	19 HAS THE STRIPPER SPRING PLUNGERS TO PREVENT THE PART STICKING ?			
	20 IS THERE ANY FRICTION BETWEEN THE STRIPPER AND THE DIE COMPONENTS ?			
	21 ARE THE PUNCH HOLDERS IN WELL CONDITIONS AND DOWELED PINS ?			
	22 HAVE THE PUNCHS SHEAR ANGLE AND EJECTORS ?			
	23 ARE ALL THE DIE COMPONENTS FREE OF WEAR?			
	24 IN DRAW, OR FORMING STATIONS, ARE THERE ACCESS FOR THE LUBE PIPING? Ø8.0MM HOLE SIZE.			

Rev Date:
2024/06/20

4	LOWER DIE.	YES	NO	COMMENTS / NOTES
	1.- DOES EXIST COMPONENTS WITH DAMAGE ?			
	2.- DOES EXIST SCRAP ACCUMULATION ON DIES OR BLADES (MAX. 5 SCRAPS) ?			
	3.- ARE ALL THE SCRAP EXITS WITHOUT OBSTRUCTIONS ?			
	4.- ARE ALL THE DIE COMPONENTS PROPERLY THIGHTEN (FORMING INSERTS, DIES, ETC) ?			
	5.- ARE FORMING AND DRAWING COMPONENTS PROPERLY POLISHED ?			
	6.- DOES EXIST STARTING AND FINAL SENSORS (IN PROGRESSIVE DIES) OR IN EACH DIE STATIONS			
	(IN TRANSFER DIES), AND THE SENSORS WIRE IS PROTECTED AND READY TO WORK IN PRESS ?			
	7.- DOES EXIST ADJUSTABLE AND FIXED FEEDING MATERIAL GUIDES?			
	(BLANK/PART LOCATORS IN TRANSFER DIES)			
	8.- ARE LIFTERS PROPERLY THIGHTEN, WITH 3 RETAINERS TO AVOID ROTATION, GAS SPRINGS WITHOUT LEAKS.			
	9.- DOES EXIST A START LINE IN RED?			
	10.- DOES EXIST A JULIAN DATE HOLDER PER PART IN EACH DIE (QUICK CHANGE FOR PROG. DIES).			
	11.- HAS THE DIE 4 STORAGE BLOCKS (NYTRO) ?			
	12.- HAS THE DIE FAST CENTERING HOLES TO CENTER IT IN THE PRESS BOLSTER ?			
5	GENERAL DIE REVIEW	YES	NO	COMMENTS / NOTES
	1.- IS THE DIE PROPERLY IDENTIFIED: PART NUMBER, PROCESS FLOW, DIE WEIGHT,			
	FRONT, ID PLATE WITH BASIC INFORMATION OF PART & DIE, ETC.			
	2.- IS THE DIE PAINTED PROPERLY ?			
	3.- ARE LIMIT BLOCKS PAINTED ON RED?			
	4.- DO DIE COMPONENTS HAVE THE RIGHT HARDNESS (DIES, PUNCHS, FORMS).			
	5.- DO ALL DOWEL PINS HAVE THREAD HOLE FOR EASY REMOVAL ?			
	6.- ARE THERE BOTTOMING MARKS (FOR DIE SH ADJUST) IN THE FORM AND RESTRIKE OPERATIONS ?			
	7.- HAS THE DIE A POST AND BUSHING DISALIGNED TO AVOID AN INCORRECT CLOSURE ?			
	8.- ARE THERE PROPER RAMPS FOR THE SCRAP EXITS ?			
	9.- HAS THE DIE THE CORRECT SHUT HEIGHT ACCORDING TO THE ASSIGNED PRESS ?			
	10.- HAS THE CLAMP SLOTS THE CORRECT HEIGHT, WIDE AND DISTANCE BETWEEN CENTERS ?			
	11.- ARE ALL DIE COMPONENTS FREE OF WELDING OR SHIMS ?			
	12.- ARE ALL DIE COMPONENTS CORRECTLY IDENTIFIES IN THE BACK SIDE ?			
	13.- ARE ALL DIE COMPONENTS, IN THE METRIC SYSTEM?			

STATIC HOME LINE REVIEW

6	DIE RECEIVING	YES	NO	COMMENTS / NOTES
	1.- PACKING CONDITION, VISIBLE DAMAGES, COMPONENTS ARE GREASED?			
	2.- ARE PIERCE PUNCHES AND FORM PUNCH IN GOOD CONDITIONS? (FREE OF DRAGGING, WEARING, ETC)			
	4.- HAS THE DIE JULIAN DATE HOLDER? IF YES, PUT THE JULIAN DATE IN.			
	5.- ARE SCREWS AND DOWEL PIN PROPERLY THIGTEN?			
	6.- HAS THE CONTROL PANEL THE CORRECT NITROGEN CHARGE? IF NOT CHARGE IT.			
	7.- ARE THERE SPARE PARTS WITH THE DIE? (DELIVER TO THE WORKSHOP LEADER).			
	8.- DO THE DIE COMES WITH SAMPLE PARTS.? IDENTIFY THEM AND SEND THEM TO QUARANTINE			
	9.- IF THE CHECKING FIXTURE IS INCLUDED WITH THE DIE - IS FREE OF VISIBLE DAMAGES ?-			
	GIVE NOTICE TO THE QUALITY ENGINEER FOR DISPOSAL.			
	10.- IS THE DIE PROPERLY IDENTIFIDED?(CUSTOMER NUM. ,PROCESS FLOW, ID PLATE, FRONT)			
	11.- IS "PROPERTY OF XXX" TAG INSTALLED PROPERLY			

DYNAMIC HOME LINE BUY OFF

7	DIE MOUNTING	YES	NO	COMMENTS / NOTES
	1.- DO DIE CENTERING HOLES MATCH WITH THE BOLSTER HOLES?			
	2.- DO THE LOWER CLAMPING SLOTS MATCH WITH THE PRESS BOLSTER ?			
	3.- DO THE LOWER CLAMPING SLOTS MATCH WITH THE PRESS RAM ?			
	4.- DO THE SCRAP CHUTES MATCH WITH THE BOLSTER WINDOWS?			
	5.- IS THE SHUT HEIGHT CORRECT ACCORDING THE PRESS			
	6.- IS THE CORRECT FEEDING HEIGTH (OR PASS LINE IN TRANSFER) ?			
8	DIE PRODUCTIVITY	YES	NO	COMMENTS / NOTES
	1.- HAS THE DIE PILOTS AND LOCATORS IN EACH STATION ?			
	2.- ARE ALL THE DIE COMPONENTS FUNCTIONAL AND WITHOUT INTERFERENCES ?			
	3.- HAS THE DIE SCRAP ACCUMULATIONS ON THE CUTTING ZONES ?			
	4.- HAS THE DIE, SCRAP ACCUMULATIONS ON THE PRESS BOLSTER ?			
	5.- IS THE DIE SPEED (SPM) THE APPROPIATE ? IS THE PRESS SPM APROPIATE? WRITE IT			
	6.- IS THE PROCESS STABLE ?			
	7.- ARE ALL THE DIE COMPONENTS FUNCTIONAL AND WITHOUT INTERFERENCES ?			
	8.- IS THE PART DISCHARGED CORRECTLY TO THE CONVEYOR ?			
	9.- IS THE DIE IN THE APPROPIATE PRESS ACCORDING THE TONNAGE REQUIRED BY THE PART ?			
	10.- DOES THE PROCESST REQUIRE LUBRICATION ?			
	A) CONTINUOS			
	B) WITH ESTABILISHED FREQUENCY (EVERY 3 OR 5 PARTS)			
	11.- HAS THE PART MINIMUM 80% OF BEARING AGAINST THE DIE? CHECK WITH BLUE PAINT ON EACH			
	STATION EVERY REQUESTED CONTACT AREA.			

9	QUALITY PRODUCT	YES	NO	COMMENTS / NOTES
	1.- PART QUALITY APPEARANCE IS ACCEPTABLE RESPECT TO:			
	A) FREE OF WRINKLES			
	B) FREE OF BURRS			
	C) PART EDGES WITHOUT DAMAGE			
	D) FREE OF SPLITS			
	E) FREE OF DRAGGING			
	F) FREE OF MARKS OR HITS			
	2.- IS THE PART QUALITY DIMENSIONAL, ACCEPTABLE ACCORDING TO THE CHECKING FIXTURE ?			
	3.- IS THE JULIAN DATE COMPLETE(ALL NUMBERS) AND IN THE CORRECT POSITION?			
	4.- THE PART COMPLIANCE WITH A 1.66 CP AND 1.33 CPK, ACCORDING TO CMM MEASURES ?			
	5.- IS THE PART AT THE LATEST ENGINEERING LEVEL ?			
	6.- IS THE MATERIAL SPECIFICATIONS ACCORDING TO THE APL ?			
	7.- VERIFY(CHECK WITH MICROMETER) DRAWS &/OR FORMINGS WITH RISK OF THINING, SPLITS OR CRACKS USING LIQUIDS OR SECTION CUTS FOR BETTER INSPECTION.			
10	CONDITIONS/ TRY OUT IMPORTANT PARAMETERS/ MOUNTING			
	1.- DIE SHUTHEIGHT:			
	2.- RECOMMENDED STROKES PER MINUTE:			
	3.- TONNAGE REQUIRED BY THE DIE DURING THE BUY OFF: PER COLUMN..... FR: FL: RR: RL: TOTAL:			
	4.- REQUIRED BLANK SIZE (THICKNESS/WIDTH/PROGRESSION):			
	5.- PITCH DISTANCE, AND LIFTERS HEIGHT FROM THE DIE BASE ON TRANSFER DIES:			
	6.- GAS SPRING CHARGE ON EACH PLATE BY STATION(INDICATE POSITION):			
	7.- STRAIGHTENER´S ROLL PRESSURE:			
	8.- OPENING DEGREES ON FEEDER´S ROLLS:			
	9.- DEGREES ON SCREEN FOR SIGNAL ACTIVATION FOR EACH SENSOR:			

OPEN ISSUES				
ITEM	**PROBLEM DESCRIPTION AND ACTIONS TO TAKE**	**LOCATION**	**RESPONSIBLE**	**DATE OF COMPLIANCE**

BUY OFF IN SOURCE			
ENGINEERING DEPARTMENT	**QUALITY DEPARTMENT**	**SUPPLIER**	**TOOL ROOM DEPARTMENT**
DATE:	**DATE:**	**DATE:**	**DATE:**

HOME LINE BUY OFF				
ENGINEERING DEPT	**QUALITY DEPT**	**SUPPLIER**	**MAINTENANCE DEPT.**	**PRODUCTION/TOOL ROOM**
DATE:	**DATE:**	**DATE:**	**DATE:**	**DATE:**