

CUSTOMER: Spartan MetalsMODEL: A51SERIAL NO: 2916INSPECTED BY: Douglas C. AkinRID: 419953RUN HRS: 825DATE: 9/20/18

UNIT	INSPECTION ITEM	OK	NEED ATTN	RESULTS
Machine Alignment	Level Adjustment	OK		
	Machine Geometry - X,Y,Z, and B axis			Document results on a <u>COPY</u> of the Machine Inspection Report / Alignment Check List. (Sample attached)
	Straightness of X,Y and Z axis movement			
	Straightness of spindle and table			
	Spindle deflection / run out			
	Machine zero point			
	Squareness			
	Spindle point			
Linear Axis	Auto Grease / lubrication to Linear Guides	OK		
	Oil level in lube tank	OK		
	Backlash in X,Y,Z	OK		
	X, Y, Z Axis Cover Condition	OK		
	X, Y, Z Axis cover wipers	OK		
	Leakage in lubrication oil or Grease hoses	OK		
	Motor couplings	OK		
	Noise or vibration	OK		
	Fan for servo motor	OK		
	Auto Grease / lubrication to X, Y, Z Ballscrews	OK		
ATC/ Magazine	Supply of grease to arm, gripper, chain, gear	OK		
	Gripper Finger wear		✓	Need to be replaced
	Alignment of sub arm to spindle	OK		

UNIT	INSPECTION ITEM	OK	NEED ATTN	RESULTS
	Alignment of tool pots to sub arm	OK		
	Limit switch	OK		
	Hydraulic / pneumatic cylinder	OK		
	Oil leakage	OK		
	ATC Arm condition	OK		Needs cleaned
	Tool Pot condition	OK		Needs cleaned
	ATC Gear box oil level		✓	Coolant in gear box
	chain tension	OK		
	ATC magazine backlash	OK		
Spindle Head	Running noise	OK		
	Oil leakage	OK		
	LS for confirming tool clamp / unclamp	OK		
	Cooling oil level	OK		
	Cooling oil flow	OK		
	Oil Seal /O-ring	OK		
	Grease / lubrication condition to Ballscrew	OK		
	Spindle orientation	OK		
	Limit switch	OK		
Drawbar	Spindle flange	OK		
	Tool seat confirmation	OK		
	Clamp force		✓	Could not check, need force guage
	Tool Knock out	OK		Measured .104mm, spindle taper runout .002mm
Machine Controller	Loose connections	OK		
	Battery condition	OK		
	Cooling Fan condition	OK		
	Filter condition	OK		
Oilmatic	Line filter	OK		

UNIT	INSPECTION ITEM	OK	NEED ATTN	RESULTS
	Cooling effectiveness (Over cooling/ No cooling)	OK		
	Oil Level and condition	OK		
	Flow Sensor condition	OK		
	Coolant infiltration	OK		
	Air Filter condition		✓	Clean/Replace
	Oil leakage	OK		
Pneumatic	Air pressure	OK		
	Air leakage	OK		
	Drainage condition of air filter	OK		
Hydraulic	Oil level and condition	OK		
	Oil pressure	OK		
	Motor fan	OK		
	Oil leakage	OK		
Machine Safety Functions	Operator door interlock	OK		
	Magazine door interlock	OK		
	Stocker door interlock	OK		
	MTC door interlock	N/A		
Table / APC	Condition of cones	OK		One dust cover spring is broken
	APC magazine alignment to machine (Z axis 2nd reference)	OK		
	B-Axis backlash	OK		
Coolant System	Coolant pump condition	OK		
	Secondary coolant system condition	OK		
	Coolant tank filter condition		✓	Clean/Replace
	Cleanliness		✓	Needs cleaning
LUCC	Noise	OK		
	Emergency stop	OK		

UNIT	INSPECTION ITEM	OK	NEED ATTN	RESULTS
	Scraper chain tension	OK		
	Drum filter		✓	Clean/Replace
Operator Panel	General condition	OK		
	Emergency stop	OK		
	LED and push buttons	OK		
Other Observations General Comments	Visual Check	OK		Entire machine needs to be cleaned.
	Customer reported faults	NONE		
				Ring magazine bearings need replaced
				Pallet lock station switch needs replaced/pneumatic

