

PM-MONTHLY-JSW and Engel

- 1 CHECK SUPPLY VOLTAGE VARIATION AT BEGINNING AND END OF SHIFT; VOLTAGE SHOULD NOT VARY MORE THAN+/- 6% TO MACHINE
- 2 CHECK AUTOMATIC GREASE SYSTEM CONDITION AND GREASE LEVEL, REPLACE CARTRIDGE AS NEEDED
- 3 INSPECT FLEXIBLE GREASE HOSE AND TUBE FOR WEAR, SCORING AND GREASE/OIL LEAKS; REPLACE OR TIGHTEN HOSE, TUBES, OR DAMAGED FITTINGS AS NEEDED
- 4 THOROUGHLY CLEAN ALL SURFACES OF THE MACHINE; REMOVE ALL EXCESS LUBRICATION, MATERIAL, CLEAN ALL WINDOWS, BLOW DEBRIS OUT FROM UNDER MACHINE
- 5 VISUALLY INSPECT MAGNETIC PLATEN
- 6 CHECK THE TIGHTNESS OF THE MAGNETIC PLATEN SCREWS
- 7 REMOVE WRINKLES OR UNEVEN AREAS
- 8 CHECK THE SURFACE OF THE MAGNETIC PLATEN
- 9 CHECK THE SIGNAL LAMPS FUNCTION; REPLACE AS NEEDED
- 10 CHECK THE PUSH BUTTONS FOR FUNCTION AND INTEGRITY
- 11 VISUALLY INSPECT THE TERMINAL BOARD OF BOTH THE MAGNETIC PLATENS AND THE CONTROLLER
- 12 INSPECT BELT FOR TEARING AND FRAYING
- 13 REMOVE CHAIN GUARD AND CHECK ROLLER BEARINGS ON BOTH SIDES
- 14 INSPECT CHAIN FOR WEAR AND PROPER TENSION
- 15 LUBE BEARINGS AND CHAIN
- 16 INSPECT MOTOR FUNCTION AND MOUNTING; INVESTIGATE WOBBLES OR SQUEAKS
- 17 CHECK ALL ELECTRICAL CORDS AND CONNECTIONS
- 18 CHECK ALL NUTS AND BOLTS; TIGHTEN AS NEEDED
- 19 CLEAN ALL MOVING PARTS
- 20 CLEAN THE BELT WITH ONLY "SIMPLE GREEN" AND WARM WATER
- 21 CHECK AND REMOVE ANY DEBRIS THAT MAY BE CAUGHT IN CONVEYOR RAILS OR SIDES
- 22 CHECK TENSION OF THE CHAIN AND ENSURE THE SPROCKETS ARE ALIGNED PROPERLY
- 23 THOROUGHLY CLEAN ALL SURFACES OF THE ROBOT; INSPECT ALL COVERS AND GUARDS
- 24 CHECK EMERGENCY STOP BUTTONS FUNCTION
- 25 CHECK FUNCTION OF PERMIT KEYS ON THE TEACHBOX
- 26 CHECK SAFETY ROLLER SWITCHES SS + S6
- 27 CLEAN AND LUBRICATE LINEAR SHAFTS, RAILS AND GEAR RACKS
- 28 TEST FUNCTION OF VACUUM SWITCHES
- 29 CLEAN AIR FILTER, DRAIN THE FILTER BOWL, AND CHECK/FILL OILER AS NEEDED
- 30 CHECK TO MAKE SURE THE BALANCE CYLINDER AIR REGULATOR IS PROPERLY FUNCTIONING (SET TO 4 BAR)
- 31 CLEAN AND INSPECT THE OPERATION OF THE CONTROL CABINET COOLING FAN
- 32 INSPECT THE DRIVE BELTS FOR TEARS, CRACKS, OR SIGNS OF WEAR
- 33 INSPECT RACK AND PINION, CHECK THE CLEARANCE (MIN. .1MM (.004"))
- 34 CHECK GEAR BOXES FOR LEAKS
- 35 INSPECT WIRING IN CABLE TRACKS, CHECK FOR PROPER ALIGNMENT OF CABLES AND ENSURE EVERYTHING IS ATTACHED CORRECTLY
- 36 INSPECT MOTOR BRAKE CLEARANCE
- 37 CHECK ROBOT SCREWS AND BOLTS FOR TIGHTNESS; INSPECT LINEAR RAILS ARE SEATED TIGHT AGAINST THE ROBOT ARMS
- 38 CLEAN ROBOT BY REMOVING DIRT, GRIME, AND MATERIALS
- 39 REVIEW ROBOT MAINTENANCE INTERVALS SCREEN PAGE; PERFORM TASKS DUE BY THE INDICATION BAR; ONLY RESET ONCE PM HAS BEEN COMPLETED
- 40 REMOVE EXCESS GREASE FROM GUIDE RAILS AND RACK
- 41 VISUALLY CHECK PNEUMATIC FILTER
- 42 CLEAN OR REPLACE CABINET FILTERS AS NEEDED
- 43 CHECK WATER TRAP AND DRAIN AS NEEDED

PM-MONTHLY CONTINUED-JSW and Engel

- 44 CHECK CENTRAL AUTO LUBE LEVEL AND FILL AS NEEDED
- 45 INSPECT GEAR WHEELS FOR WEAR AND FUNCTION; GREASE AS NEEDED
- 46 INSPECT GEAR WHEEL TOOTHED RACK FOR WEAR; GREASE AS NEEDED
- 47 VISUALLY CHECK BELTS FOR WEAR
- 48 CHECK LUBRICATION HOSES, PNEUMATIC SYSTEM, AND ELECTRICAL WIRES FOR WEAR
- 49 CHECK END STOPS OF "A", "B", AND "C" AXIS
- 50 LISTEN TO MOTOR, GEAR GUIDE, TOOTHED RACK, AND BELT FOR UNUSUAL NOISE
- 51 CHECK ALL SAFETY GUARDING AND DEVICES
- 52 LUBRICATE ROTARY NOISE
- 53 CHECK ALL PNEUMATIC CYLINDERS AND AIR REGULATORS
- 54 CHECK ALL AIR HOSES AND LISTEN FOR AIR LEAKS
- 55 CHECK ALL ELECTRICAL CONNECTIONS
- 56 CHECK WRIST HOUSING FOR DAMAGE
- 57 CHECK ALL EMERGENCY STOP BUTTONS FOR FUNCTION
- 58 LUBE ALL GREASE POINTS WITH YUSHIN GREASE OR EQUIVALENT CROSS MATCH
- 59 CHECK AND INSPECT THE OPERATION OF THE CONTROL CABINET COOLING FANS
- 60 PR 22,23,24,25 Add 10 drops of light oil to auto cell tower rail

PM-QUARTERLY-JSW and Engel

- 1 Check the ball screw for lubrication, and ensure that it is free of contaminants and scoring.
- 2 Check the servo motor cooling fans, and ensure area is free of dirt and dust.
- 3 Check control panel cooling fans, and ensure area is and dust free of dirt
- 4 Inspect the mold height adjusting device when running the same mold for a period of time.
- 5 Inspect band heaters for tightness; retighten as needed.
- 6 Inspect thermocouples for fit and condition; re-fit as needed.

PM-SEMI ANNUAL-JSW and Engel

- 1 Inspect timing belts for wear, cracks, or swelling; replace as needed.
- 2 Inspect inside control panel for the following:
 1. Tighten any loose connecting terminals.
 2. Clean deposits of dust and resin powder.
 3. Clean u
- 3 Check insulation of mold height motor within 24 hours of running with a 500V insulation tester. If it is 1 mega-ohm or less, conduct and extra inspec
- 4 Check Injection bearing casing oil level, and check for signs of leaks or contamination (1400H or lower).
- 5 Check screw motor casing oil level, and check for signs of leaks or contamination.
- 6 Retighten the nozzle end cap bolts.
- 7 Retighten the nozzle.
- 8 Replace felt wiper on autocell tower

PM-ANNUAL-JSW and Engel

- 1 Check and level machine bed.
- 2 Check all wiring on and around machine for signs of rubbing.
- 3 Replace lube oil in the injection bearing casing (1400H or lower).
- 4 Replace lube oil in the plasticization bearing casing unit.
- 5 Replace lube oil in the plasticization reduction unit.
- 6 Check hydraulic unit oil for clarity and signs of burnt material.
- 7 Remove accumulated oil and grease in clamping, bed, and swivel oil pans.
- 8 Replace SYSCOM controller battery in 2014, 2017, every and 2020 (3 years).