SAFE WORK PROCEDURE

Automatic Edge Banding Machine
Page 1 of 3

HAZARDS PRESENT
- Burns
- Noise
- Exposed feed track – pinch, amputation
- Flying debris
- Panel Loading & Un-Loading Zone – squash, pinch, shear, cut

PERSONAL PROTECTION EQUIPMENT (PPE)
- Hearing protection
- Safety footwear
- Eye protection
- Gloves – nitrile and thermal

ADDITIONAL REQUIREMENTS
- 2 people are required to operate this machine (in-feed and out-feed operators)
- Training on equipment
- WHMIS Training

HAZARDS

Adhesive melting pot is 130°C when liquid. Severe burns can occur if proper PPE is not worn at all times.

Ensure that hands are kept away from the open side of the feed track and rollers. The feed track will grab and pull anything through the machine.

SAFE WORK PROCEDURE

PRE-JOB SAFETY:

1. Check workspaces and walkways to ensure no slip/trip hazards are present and there is no oil on the floor.
2. Locate and ensure you are familiar with the operation of the ON/OFF starter.
3. Use only materials free from defects.
4. Keep all cutter heads and blades sharp and free from rust and pitch and glue.
5. Ensure that rotating tools are perfectly balanced, sharp, well coupled and locked in place.
6. Do not operate the edge bander unless adequately guarded. Repair / replace guards as necessary.
7. Do not store tools and parts on top of the machine.
8. Check the extraction outlets are properly fitted to the dust and gas extractors.
9. Do not leave the machine unsupervised when it is running or during maintenance.
10. Thermal gloves must be worn at all times and on both hands when performing maintenance on the melting pot.
11. Faulty equipment must not be used. Immediately report suspect machinery to your supervisor.
12. If the emergency stop button is pressed the Divisional S&H Officer must be contacted and the machine inspected to ensure there has been no damage or faults in the machine.

PROCEDURE:

1. Don personal protective equipment before beginning the task. Ensure clothing fits appropriately.
2. Ensure the On/Off switch is in the “off” position and plug the machine into properly grounded power source.
3. Connect the compressed air hose and open the pneumatic joint. Use the regulator to adjust pressure to 6 bar.
4. Turn on the main ON/OFF power switch to position 1.
5. Load the edge tape.
   a. Loosen the return lever
   b. Manually move the cutter towards the inside of the machine.
   c. Block the return lever and pass the edging through the economizer.
   d. Loosen the hand wheel and adjust the conveyor to the edging height.
   e. Block the hand wheel and bring the edging into contact with the first pressure roller until it touches the flush stop position behind the roller.
6. Turn on the control panel by pressing the white button.
7. Turn on the glue tank and wait for the preset temperature to be reached. Check the level of the glue tank and top up if necessary by opening the cover and pouring in more glue.
   **Hazard:** Glue is at 130°C in the melting pot. Thermal gloves must be worn when working in this area.
8. Turn on the selector switches to the position for the machining to be carried out.
9. Turn the motor start up switch to the “start” position.
10. Turn the track forward switch to the “start” position.
11. Position the panel support shoulder to provide adequate support the panel.
12. Load panels into the machine keeping them tight to the in-feed guide. Feed the panels into the in-feed track. The feed track will grab and pull the panel though the machine.
   **Hazard:** Ensure that hands are kept away from the open side of the feed track and rollers.
13. The next panel can be loaded when the end of the first panel has passed the indicated mark on the machine.
14. The second operator unloads the panels at the opposite end the machine.
15. When the work is complete, turn off the main power switch and discount the compressed air.
16. Disconnect the machine and lock out the power. Clean the outside of the machine and inside of the cabinet using compressed air to remove the accumulated dust and debris.

**Hazard:** Flying debris - ensure eye protection is worn.

**Hazard:** Moving parts of machinery – ensure the machine power is locked out prior to opening the outer casing to clean the inside of the machine.

### GENERAL CLEANING:

1. Don personal protective equipment before beginning the task: safety glasses and protective gloves (nitrile or thermal) are required.

2. Turn the machine off and the main switch in the “0” position; lock the compress air cut-off valve closed; ensure the pneumatic hook-up is disconnected. Disconnect the machine and lock out.

3. General cleaning is required every **8 working hours** and whenever else it is necessary.
   a. Remove dust and shavings from the machine using a vacuum with a suitable shaped nozzle. Pay special attention to the motor cooling zone and extractor hoods.
   b. Open the bushing valve that enables the blowers of the automatic cleaning device.
   c. Start-up the machine and allow the drive track to turn for 5 min. Turn off and close the valve. Lock out the machine again before proceeding.
   d. Grease the glue spreading roller support using the special greaser (press the greaser lever only one or two times).

4. Cleaning every **40 working hours**.
   a. Remove and clean the filter using a vacuum cleaner.
   b. Place the vacuum cleaner nozzle in correspondence to the cooling fan of the electric panel and the exhaust filter. If required change the filter.
   c. Lubricate the feed track using the greasers at the entrance to the machine.
   Note: insufficient lubrication will cause the chain to wear and excessive lubrication causes clogging.
   d. Grease the transmission chain using a jet of compressed air and grease with AGIP GR MU 2 grease.
   e. Clean the track feelers of glue residue using a cloth soaked in petrol, use in a well ventilated area.

5. Cleaning every **160 working hours**:
   a. Check the chain tension by removing the drive track fixed guard and turn the screw to tighten the chain. Replace the track guard.
   b. Clean the sliding guides with a soft cloth and lubricate with grease.

6. Cleaning every **4000 work hours** (2 years):
   a. Check the oil level in the gear motor and top up with AGIP BLASIA S320 oil. Change the oil every 10 years.
   b. Remove old adhesive and char from the melting pot. Clean completely by either removing the melting pot and craping the residue into the garbage or leaving the melting pot in place and scooping out the old glue and craping off the charred glue. Refill once cleaning is complete.
**Hazard:** Glue is at 130°C, thermal gloves must be worn at all times. Gloves may be covered with a disposable nitrile glove to prevent fingers from becoming overly sticky.

**First Aid:** in the event of glue coming into contact with skin, **DO NOT REMOVE** or touch the glue. Run under cold water until cooled. Seek medical attention at a hospital for 3rd degree burns.

**REGULATORY REQUIREMENTS**

- WS&H Act W210, Section 4, 5, 7, 7.1
- Mb. **Workplace Safety & Health** Regulations 217/2010,
  - Part 16, Machines, Tools & Robots
  - Part 6, Personal Protective Equipment
  - Part 35, WHMIS
  - Part 36, chemical & Biological Substances