ENGEL ROLL FORMER
M-500P-24

ENGEL'S FEATURES

- Heavy duty construction with 1/2" side plates for rigidity
- Needle roller bearings throughout
- Full 1/2 HP motor
- Portable
- Optional floorstand available

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Maximum Capacity Pittsburgh Lock</td>
<td>24 gauge</td>
</tr>
<tr>
<td>Number of stations</td>
<td>5</td>
</tr>
<tr>
<td>Motor</td>
<td>1/2 HP 110 / 1/60</td>
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<tr>
<td>Pitch line speed</td>
<td>30 / 35 FPM</td>
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<tr>
<td>Dimensions</td>
<td>32&quot; long, 16&quot; wide, 15&quot; high, 10&quot; pass height</td>
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<tr>
<td>Shipping Weight</td>
<td>Approx. 150 lbs.</td>
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Receiving Machine
Visibly check machine for possible shipping damage.
When damage is evident, insist on a notation on the freight bill.
If repairs are necessary, contact Engel Industries, Inc.

Unloading Procedure
When it is necessary to lift the machine off the transport vehicle and lower it to the ground, lift or support the machine by using the skids only. (NOTE: Lifting the machine by the infeed or outfeed table would result in extensive damage to the machine.)
If the machine is unloaded onto a loading dock, then rollers can be put under the skids, or the machine can be slid or dragged on the skids.

Positioning Machine
Move the machine to its desired location.
Remove the skids.
Level the machine.
Electrical Connections:
Supply electrical service to the starter box (located under the infeed table) in accordance with local electrical codes. Refer to the connecting instructions on the inside of the starter box.

Lubrication:
After approximately every 80-100 hours or every two (2) weeks, lubricate the machine in the following manner:

1. As a safety precaution, disconnect electrical supply.
2. Remove top roll cover (guard).
3. Apply open-type gear grease to the exploded surfaces of all the gears. Recommend: Chem-A-Lube (made by National Chemsearch Corp. in Dallas, St. Louis, New York, Los Angeles, Montreal) or equivalent.
4. Apply light oil to the forming rolls to prevent galvanize build-up as required.

IMPORTANT: Do not use hypoid grease, as it will cause extensive damage to gears.

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<tr>
<th>Shape</th>
<th>Material Required</th>
<th>Capacity</th>
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<tr>
<td>Pittsburgh &quot;Lobe&quot;</td>
<td>15/16&quot;</td>
<td>20-28 Gauge</td>
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<tr>
<td>Drive Cleat</td>
<td>2 1/8&quot;</td>
<td>20-28 Gauge</td>
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Adjustments
This machine is factory adjusted. However, after much usage, adjustments may be necessary. The following procedures for trouble-shooting should then be followed.

Trouble-Shooting
Disconnect power before any adjustments are made.

1. Material will not feed:
   Machine adjusting screws are either too tight or too loose.
   (Refer to drawing - page 5) When adjusting, a maximum of one quarter turn should be sufficient. If this does not solve the problem, a complete resetting should be performed as follows:
   (1a) After removing the top cover, loosen the two machine adjusting screws fully. Also, loosen the two machine assembly screws.
   (1b) Tighten the two machine adjusting screws finger tight. Then, tighten them approximately one quarter to one half turn more.
   (1c) Re-tighten the two assembly screws to their original tension.

2. Jammed Material:
   (2a) After removing the top cover, remove the two machine assembly screws.
   (2b) Remove the two machine adjusting screws along with the top set of rolls complete with upper side plates. NOTE: Be careful not to lose the
spacers that are located between the top and bottom side plates as they are needed for the required gap between the rolls.

(2c) After the part is removed, re-assemble the machine and adjust the rolls using steps 1b and 1c.

3. Material Splitting:
(3a) Faulty material
(3b) The machine adjusting screws may be too tight and require backing off.

4. Knock over edge wavering:
(4a) This cannot be avoided when using light gauge material.
WARNING

NEVER PUT YOUR HANDS IN THE POINT OF OPERATION OF ANY MECHANICAL OR ELECTRICAL DEVICE.

IF A MACHINE IS JAMMED, NEEDS ADJUSTMENTS, NEEDS DIE CHANGES, ETC. ALWAYS DO A LOCK-OUT/TAG-OUT PROCEDURE WHICH MEANS THE POWER MUST BE OFF AND LOCKED-OUT AND ANY RAMS OR BEAMS WILL BE BLOCKED TO ENSURE SAFETY. THIS IS A FEDERAL OSHA REQUIREMENT AND MUST BE A WRITTEN AND TRAINING TYPE OF PROGRAM.