PROPER TOOL POLISHING IS CRUCIAL

EXTEND TOOL LIFE
DECREASE PRESS DOWNTIME
REDUCE PRODUCTION-RELATED COSTS
IMPROVE TABLET QUALITY

Punches and dies experience a lot of wear during tablet production that can lead to tooling damage such as J-hook, scratches, abrasions, tip and head wear, and burred edges. These conditions often result in tablet quality problems like capping, sticking, picking, and lamination. The correct polishing equipment can restore punches and dies to like-new condition. A well-structured tool polishing program coupled with the proper equipment will extend tool life, decrease press downtime, reduce production-related costs, and increase high-quality tablet yields.

If you are not familiar with polishing equipment or are new to your company's tool maintenance program, please consult with your Natoli representative or call our customer service department to discuss your polishing needs.

AVOID TABLET DEFECTS, REDUCE TOOLING REPLACEMENT COSTS

Tablet compression tooling is a considerable investment for your company. Quality tooling and a proper maintenance program are integral to producing high-quality tablets efficiently. Over time, tooling loses its luster and can develop nicks, scratches, and/or a wear pattern commonly called J-hook. These imperfections can cause quality issues and unnecessary downtime in production. These defects are easily avoidable as the procedure to remove J-hook takes seconds per punch and polishes the cup to a mirror luster at the same time.

Learning how to properly polish and refurbish punches is one of the surest and most inexpensive ways to maintain tablet quality and reduce operating costs. Maintaining the quality of your punches helps eliminate tablet defects such as picking, sticking, capping, and lamination while significantly reducing costs by increasing tool life, in many cases by up to 80 percent.

Although there are several ways to polish and refurbish punches, the best method is to use a large unsewn cotton buff wheel. Restoring land is one of the most important procedures in tool refurbishing, and once a procedure is adapted to routinely refurbish land, you will immediately recognize an increase in tooling life.

Table:

<table>
<thead>
<tr>
<th>Condition/Procedure</th>
<th>Recommended Equipment to Repair or Complete Procedure</th>
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<tbody>
<tr>
<td>J-hook</td>
<td>Polishing Station, Automated Polisher</td>
</tr>
<tr>
<td>Scratches</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Remove Abrasions</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Remove Oxidation</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Restore Land</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Restore Luster to Punch Cups</td>
<td>Polishing Station, Automated Polisher</td>
</tr>
<tr>
<td>Remove Product</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Remove Burns</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>Polish Set of Tools Quickly</td>
<td>Polishing Station</td>
</tr>
</tbody>
</table>

What Is J-hook?

J-hook is the distinctive wear pattern on punch tips that is a cause of tablet defects like capping and lamination. When detected early, J-hook can be easily and quickly repaired, thereby eliminating the need to purchase replacement tools. Refurbishing punch cups with the 10” unsewn buffing wheel eliminates J-hook.
### POLISHER WITH FOOT SPEED CONTROL

**REMOVES J-HOOK, RESTORES LAND AND LUSTER**

The **Stainless Steel Polishing Station** is a must-have for maintaining and polishing the entire punch body and enables you to polish like the experts. The polishing station removes J-hook and burrs, restores land to punch tips, and restores a mirror finish to punch cups in one easy step. Proper polishing reduces tabling issues like chipping, picking, and sticking.

Self-contained and moveable, the polishing station features a ¾ hp polishing motor and a sturdy 18-gauge stainless steel cabinet base. The system also includes a vacuum system with filters, buffing wheels, and vibrant LED cabinet lights.

### RELATED ACCESSORIES

**MA 5001 - Polishing Station**

- MA 5502 6 Filters for MA 5501 or 5601
- MA 5076 2 Unsewn 10” Buffing Wheels
- MA 5044 8” Deburring Wheel
- MA 5048 2 Deburring Wheel Hubs
- MA 5302 White Fine Rouge Bar
- MA 5010 Abrasive Dressing Stick

**MA 5305 White Polishing Paste**

Brings back a mirror finish to punch cups. For use with felt bobs and fine denim brushes.

**MA 5004 Fine Dental Brushes**

Ideal for light to medium punch cup polishing on plain or embossed tools.

**MA 5006 - MA 5009Felt Bobs, assorted sizes**

Ideal for medium to heavy polishing on non-embossed punch cups.

**MA 5027 & MA 5028 Nylon Brushes**

Ideal for polishing punch cups.

**MA 5005 Green Chrome Gloss Bar**

Helps produce a bright finish on punch cup when using buffing wheel. Specially designed for sticky products.

**MA 6025 Interlocking Punch Holding Strip**

Prevents punches from rolling off work area. Interlocking ends for expandable capacity.

**MA 5301 Floor Mat**

Provides softer footing for the individual using polishing station. (36” x 24”)

Help eliminate tabling issues like picking and sticking with the **Polisher with Foot Speed Control**. This item is a crucial part of maintaining punch cups. As cups lose luster, they become more likely to cause tabling issues. This polisher returns luster to punch cups and helps keep tools in working order longer while minimizing downtime.

### COMPLETE POLISHING STATION INCLUDES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Item Description</th>
</tr>
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<tbody>
<tr>
<td>MA 5501</td>
<td>Polishing Station</td>
</tr>
<tr>
<td>MA 5502</td>
<td>6 Filters for MA 5501 or 5601</td>
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**MA 5301 Polishing Station**

- MA 5501 Polishing Station
- MA 5004 Fine Dental Brushes
- MA 5006 - MA 5009Felt Bobs, assorted sizes
- MA 5027 & MA 5028 Nylon Brushes
- MA 5005 Green Chrome Gloss Bar
- MA 6025 Interlocking Punch Holding Strip
- MA 5301 Floor Mat

**MA 5001 Polishing Station**

- MA 5501 Polishing Station
- MA 5502 6 Filters for MA 5501 or 5601
- MA 5076 2 Unsewn 10” Buffing Wheels
- MA 5044 8” Deburring Wheel
- MA 5048 2 Deburring Wheel Hubs
- MA 5302 White Fine Rouge Bar
- MA 5010 Abrasive Dressing Stick
The Natoli Automated Polishing Machine, when used in combination with the Natoli Polishing Station’s unsewn buffing wheel, provides a comprehensive tool polishing process. After reworking the punch tip, simply load punches and media into the automated polishing machine, set cycle time, and push start.

Automated polishing is an efficient method to remove product, abrasions, and harmful oxidation from punches and dies. Fully immersed tooling is moved through polishing media in a circular motion ensuring consistent, polishing results every time. Cycle times may vary depending on tooling condition and steel type.

**AUTOMATED POLISHING MACHINE**

**CONSISTENT, UNIFORM TOOL POLISHING RESULTS EVERY TIME**

<table>
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<tr>
<td>MA 5237 Polishing Compound</td>
<td>Helps ensure uniform polishing when used in conjunction with polishing media.</td>
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<tr>
<td>MA 7304 Die Holder</td>
<td>Easily alternates with punch holder. Each holds up to 16 dies.</td>
</tr>
<tr>
<td>MA 5238 Walnut Media</td>
<td>Provides efficient and effective polishing of punches and dies. Add Natoli Polishing Compound to media to help ensure a uniform result.</td>
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<tr>
<td>MA 5912 Plastic Media</td>
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</table>

**FEATURES:**
- IQ/OQ documentation
- One-Year Manufacturer Warranty
- Training USB card
- 7” Siemens touchscreen
- Recipe/batch storage
- Punch/die holders feature quick-release system
- 5-head accommodates 80 "B"/60 "D" punches
- 6-head accommodates 96 "B"/72 "D" punches
- Punch holders available for most tooling sizes
- Interior LED lights
- Small footprint machine
- Stainless steel frame and bottom cover
- Batch management with printing option
- Machine is equipped in octagonal process container, allowing optimal movement of the granulate during polishing process
- Stainless steel cover allows for easy cleaning of the polishing chamber
- Lower storage cabinet for media, additional holders and compounds
- Stainless steel media mixing paddle
- Machine alerts user when new media is required
- Dedusting nozzles at process container

**OPTIONAL FEATURES:***
- Die holders (shown below)
- Media chilling option

**POWER:**
- 230v, 50/60 Hz, 18 amps

**RELATED ACCESSORIES**
ENHANCE YOUR TOOLING MAINTENANCE PROGRAM WITH THESE NATOLI PRODUCTS & SERVICES

POLISHING TRAINING
To arrange a one-on-one polishing training session for your staff to learn both fundamental and advanced polishing techniques and procedures contact your Natoli representative today. Training classes are available on-site at your company or at one of our training facilities.

CUSTOM SOP
A well-structured polishing program can extend tool life, decrease press downtime, and increase high-quality tablet yields. Let Natoli help complete your tool maintenance program with a custom SOP to ensure your polishing program is efficient, effective, and safe.

TABLET COMPRESSION ACCESSORIES CATALOG
Prolong tool life, maintain tablet quality, and increase productivity with the industry's most comprehensive accessories catalog. Natoli’s newest edition of the Tablet Compression Accessories Catalog includes all the tablet manufacturing accessories needed to help keep your operation running efficiently and profitably.

The FREE catalog is available in printed and digital versions at natoli.com.

YOU DEMAND. WE DELIVER.
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