

POLISHING

FOR EXTENDED TOOL LIFE &
IMPROVED TABLET QUALITY



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.



Is your staff trained? Natoli offers training for your staff to learn fundamental and advanced polishing techniques and procedures. Contact your Natoli representative today to arrange a training session on-site at your facility or at one of our service centers.

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.



What Is J-hook?



BEFORE TOOL REFURBISHING

AFTER TOOL REFURBISHING

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.

Condition/ Procedure	Recommended Equipment to Repair or Complete Procedure		
	Polisher with Foot Control	Polishing Station	Automated Polisher
J-hook		●	
Scratches		●	
Remove Abrasions			●
Remove Oxidation		●	●
Restore Land		●	
Restore Luster to Punch Cups	●	●	●
Remove Product			●
Remove Burrs		●	
Polish Set of Tools Quickly			●

POLISHER WITH FOOT SPEED CONTROL

RESTORES LUSTER TO PUNCH CUPS



Help eliminate tableting 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 tableting issues. This polisher returns luster to punch cups and helps keep tools in working order longer while minimizing downtime.

MA 5001
Polarizer with
Foot Control

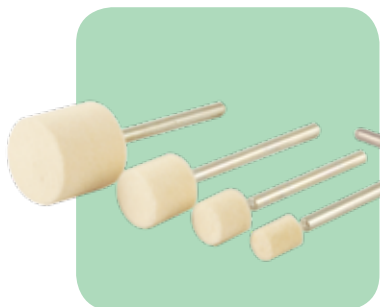
RELATED ACCESSORIES



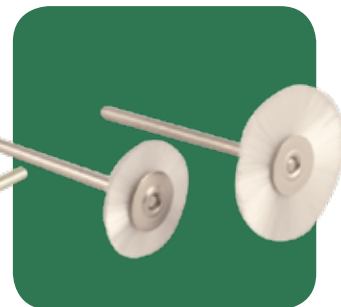
MA 5305 White Polishing Paste
Brings back a mirror finish to punch cups. For use with felt bobs and fine dental brushes.



MA 5004 Fine Dental Brushes
Ideal for light to medium punch cup polishing on plain or embossed tools.



MA 5006 - MA 5009 Felt 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.

POLISHING STATION

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 tableting issues like chipping, picking, and sticking.

Self-contained and moveable, the polishing station features a 3/4 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.



MA 5501
Polishing
Station



The polishing station provides the only polishing method to remove J-hook and restore land.



The manual polisher with foot speed control is perfect for fine detail repair and polishing work.

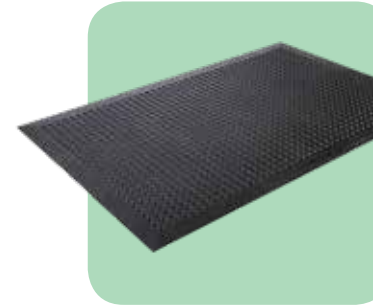


The manual polisher with foot speed control is available in 110 / 115V and 220 / 230V models.

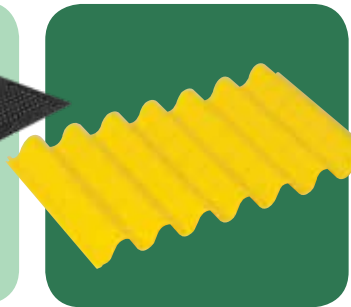
Complete Polishing Station Includes

Part No.	Item Description
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

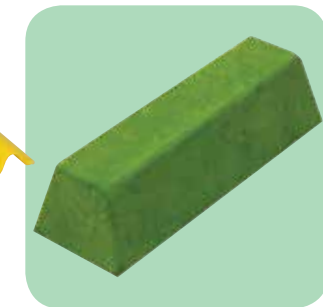
RELATED ACCESSORIES



MA 5095 Floor Mat
Provides softer footing for the individual using polishing station. (36" x 24")



MA 6025 Interlocking Punch Holding Strip
Prevents punches from rolling off work area. Interlocking ends for expandable capacity.



MA 5301 Green Chrome Gloss Bar
Helps produce a bright finish on punch cup when using buffing wheel. Specially designed for sticky products.



MA 5302 White Rouge Bar
Helps restore mirror finish to punch cup when using buffing wheel.



MA 7300
5-Head Automated
Polishing Machine

MA 7301
6-Head Automated
Polishing Machine
(Not shown)

AUTOMATED POLISHING MACHINE

CONSISTENT, UNIFORM TOOL POLISHING RESULTS EVERY TIME

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 comes with one set of punch holders.

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



MA 7304 Die Holder
Easily alternates with punch holder. Each holds up to 16 dies.



MA 5237 Polishing Compound
Helps ensure uniform polishing when used in conjunction with polishing media.

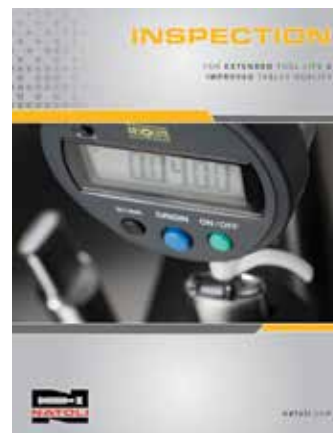


MA 5238: Walnut Media
MA 5912: Plastic Media
Provides efficient and effective polishing of punches and dies. Add Natoli Polishing Compound to media to help ensure a uniform result.

CLEANING



INSPECTION



Ask a
Natoli Sales
Representative
about Our Other
**Tooling
Maintenance
Brochures**

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.



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