

Natoli Engineering, founded in 1973, is the primary source of tablet compression tooling, presses, parts, accessories and hands-on training for hundreds of pharmaceutical, nutritional, confectionary and industrial tablet manufacturers throughout the world.

Natoli has created this catalog in support of the tablet compression industry. The color-coded sections are filled with an assortment of quality products to meet a variety of set-up, inspection and maintenance needs. Please reference the index located in the back of the catalog to locate specific items. Orders of any size and type are welcome, including special requests and custom requirements. All of the products listed in this catalog are available for shipment worldwide.

No matter what your tablet compression needs are, we look forward to helping your business succeed.

Natoli Engineering... You demand. We deliver.



POLISHING





Properly polishing your compression tooling is vital for achieving peak press performance, consistent tablet quality and maximum tooling longevity. Natoli offers highly efficient, automated punch polishing systems with a variety of features and options, hand-polishing kits and a wide range of manual application accessories including rouge bars, hyfin pastes, diamond compounds, deburring stones, embossing picks, cotton bobs, nylon brushes and much more.



Auto Punch Polishing Systems

Buffy Auto Punch Polishers

Buffy Auto Punch Polishers accommodate both round and special shape tooling, with or without embossing. The Buffy system incorporates rotation reversal on both the punch and polish brush to ensure even polishing on both sides of the embossing. Buffy Polishers are easy to use. Simply place tool in collet and press start.

Benefits

- ◆ Safe and easy to use
- ◆ Provides consistent polishing results
- ◆ Better polishing control eliminates tool damage
- ◆ Adjustments done using operator input
- ◆ All exposed parts are corrosion resistant
- ◆ Optional programmable product menu available

Features

- ◆ All electrical components are UL approved
- ◆ 115V ± 10%, 60Hz (Optional 220V, 60Hz, single-phase)
- ◆ Single or double-sided option
- ◆ Benchtop and floor units available
- ◆ Accommodates 3/4 – 1 1/4" barrel dia punches (also available for non-standard punches)
3/4" barrel punch cartridge comes standard with purchase
- ◆ Buffy I polishes one punch at a time
- ◆ Buffy II polishes two punches at a time
- ◆ Uses Natoli polishing brushes (MA 5027 or MA 5028)
- ◆ Benchtop unit dimensions: 27.5 x 32 x 14" (699 x 813 x 356mm)
- ◆ Floor unit dimensions: 27.5 x 32 x 52" (699 x 813 x 1320mm)

Abbreviations Key

- ◆ cCSAus = Canada & US Approved
- ◆ UL = Underwriters Laboratories
- ◆ rpm = Revolutions Per Minute
- ◆ ID = Inside Diameter
- ◆ OD = Outside Diameter
- ◆ dia = Diameter
- ◆ CW = Clockwise
- ◆ CCW = Counterclockwise
- ◆ V = Volt
- ◆ Hz = Hertz
- ◆ hp = Horsepower
- ◆ lb = Pound
- ◆ oz = Ounce
- ◆ g = Gram
- ◆ mm = Millimeter

Part No.	Polisher Type
MA 7500	Buffy I (Floor unit)
MA 7502	Buffy I (Benchtop unit)
MA 7501	Buffy II (Floor unit)
MA 7503	Buffy II (Benchtop unit)



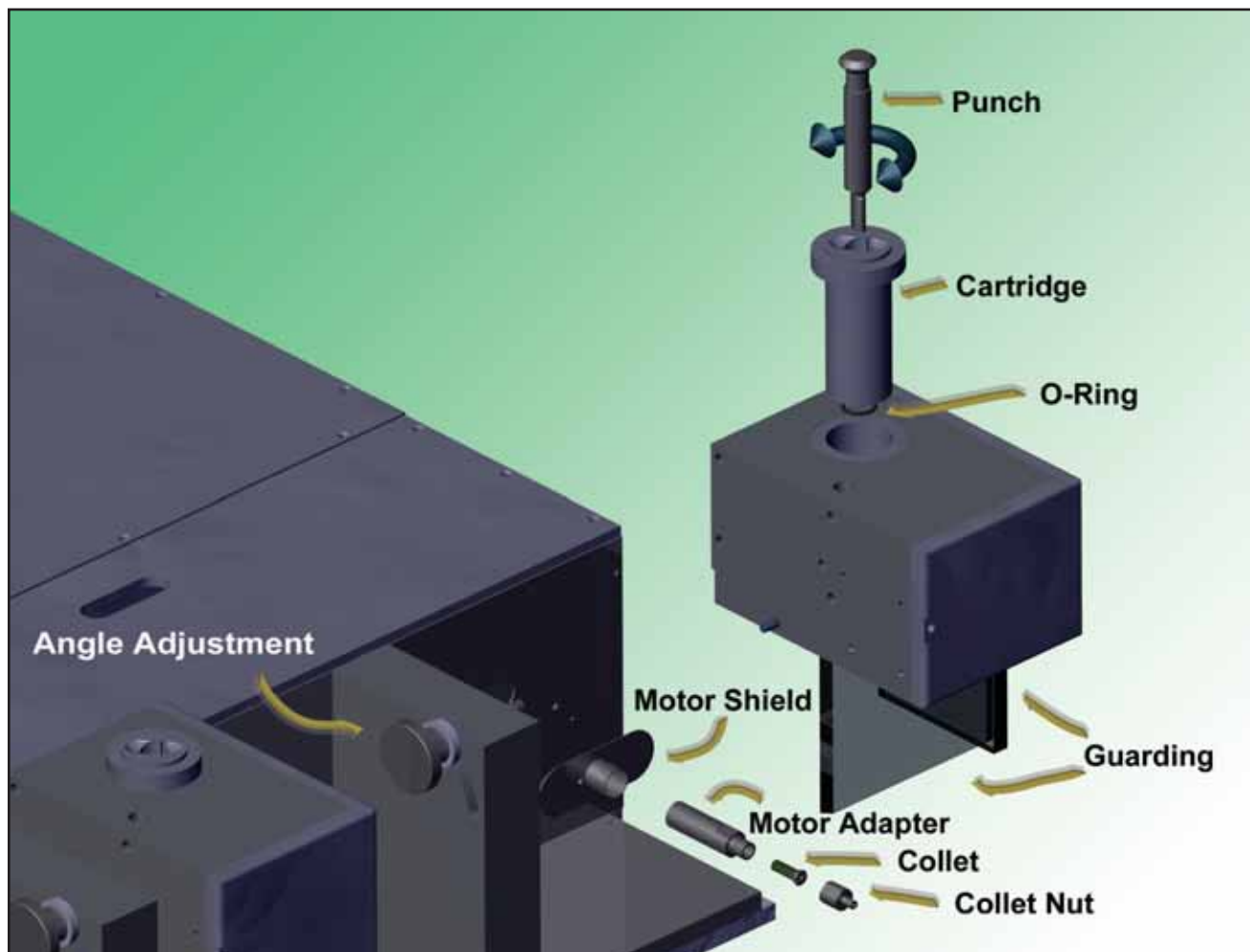
Optional Accessories

Part No.	Item Description
MA 6061	4 Polyurethane Casters with brakes (Floor units only)
MA 6059	Programmable Product Menu: Software which enables the operator to set-up and store data guidelines for each job specification, easily allowing repeat jobs with a touch screen choice (Includes multi-level password for security)
MA 6063	Additional Guarding for Buffy I: Includes 1.5" dia port for hook-up to central ventilation or vacuum system, one guard underneath the head and an interlocked guard on the right side of the head guard
MA 6057	Additional Guarding for Buffy II: See description for MA 6063
MA 6044	Convert unit to accept 220V, 60Hz, single-phase electrical supply

Replacement Items

Part No.	Item Description
MA 6077	Cartridge for 3/4" barrel dia punch
MA 6081	Cartridge for 1" barrel dia punch
MA 6082	Cartridge for 1 1/4" barrel dia punch
MA 6079	5 O-Rings* (Specify 3/4, 1 or 1 1/4" punch)
MA 6080	1/8" Collet* for holding brushes
MA 6078	3/32" Collet* for holding brushes
MA 6084	Buffy Motor Shield Assembly with spacers and screws
MA 6083	Buffy Hardened Motor Shaft Assembly with nut and setscrews

*Recommended Replacement Items



Stainless Steel Polishing Station

Stainless Steel Polishing Station

The Natoli Polishing Station includes all the necessary supplies and features to quickly and accurately rework and polish a variety of tooling. The Polishing Station provides the only polishing method to remove sharp punch tips and restore land. All items included with the station are also available for purchase individually in the Polishing Accessories Section (see page 70 – 73).

Features

- ◆ Polished 18-gauge brushed stainless steel
- ◆ 115V, ¾ hp dual-shaft buffer motor
- ◆ Dust hood with light and top shelf
- ◆ Main access door with safety switch
- ◆ Dual downdraft vacuum system with easy-access trays for cleaning
- ◆ Easy access to filters for simple replacement

Exterior Dimensions

Base footprint: 34.25 x 16" (870 x 406mm)

Floor to top of cabinet: 37" (940mm)

Across front: 46 x 20" (1168 x 508mm)

Floor to top of shelf: 52.5" (1334mm)

Part No.	Item Description
MA 5090	Complete Polishing Station

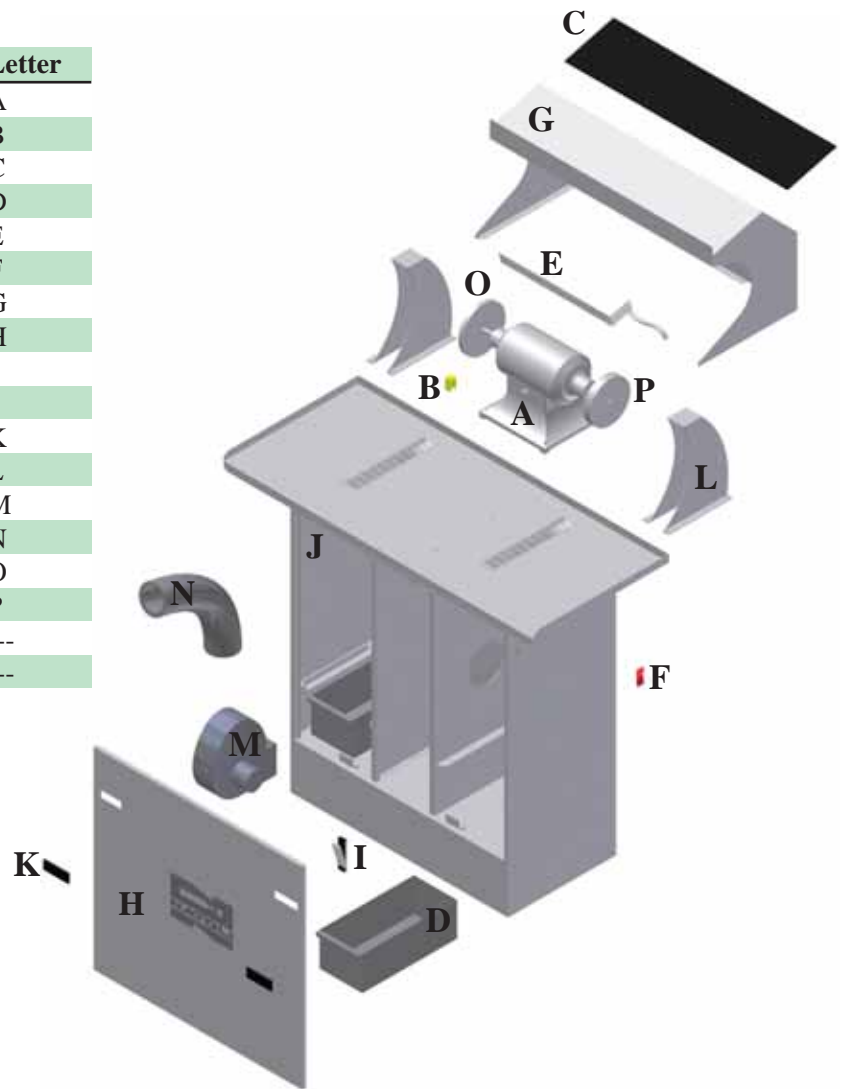


Complete Polishing Station Includes

Part No.	Item Description
MA 5093	6 Filters (10 x 10 x 2")
MA 5076	2 Unsewn 10" Buffing Wheels
MA 5044	8" Deburring Wheel
MA 5046	2 Deburring Wheel Hubs
MA 5015	White Fine Rouge Bar
MA 5010	Abrasive Dressing Stick

Replacement Items for Polishing Station

Part No.	Item Description	Letter
MA 5042	115V Dual-Shaft Buffer Motor	A
MA 5041	Buffer Motor Safety Switch	B
MA 5040	Black Mat for shelf (33.25 x 7")	C
MA 6020	Lint Bin (13.75 x 5.75")	D
MA 6022	12" Fluorescent Light	E
MA 6021	On/Off Power Switch	F
MA 5091	Buffer Motor Hood	G
MA 6015	Main Access Door	H
MA 5096	Door Safety Switch	I
MA 6016	Door Seal	J
MA 6013	Door Latch	K
MA 6014	Wheel Guard	L
MA 6019	Vacuum Assembly with Motor	M
MA 6017	Foil Vacuum Hose	N
MA 5076	Unsewn 10" Buffing Wheel	O
MA 5044	8" Deburring Wheel	P
MA 5046	Deburring Wheel Hub	---
MA 5093	6 Filters (10 x 10 x 2")	---



Punch Polishing Motors

- ◆ cCSAus approved
- ◆ 3/4 hp (3450 rpm)
- ◆ 115 or 220V
- ◆ 60Hz, single-phase
- ◆ 5/8" dia shaft
- ◆ Buffing wheels not included

Part No.	Item Description
MA 5042	115V Dual-Shaft Buffer Motor
MA 5047	220V Dual-Shaft Buffer Motor



Bench-Mounted Hoods for Polishing Motor

Protective hood with exhaust ports mounts to worktables.

- ◆ 36 x 16 x 16" (914 x 406 x 406mm)

Part No.	Item Description
MA 5057	18-Gauge Galvanized Steel Hood
MA 5058	18-Gauge 300-Series Stainless Steel Hood

Drag Finishers

MFD Series Drag Finishers

MFD Series Drag Finishers significantly reduce the amount of time and effort needed to polish punches. MFD Drag Finishers are easy to use, just place your tooling into the punch holders and allow the machine to rotate them through a compound of granule. The tools will be deburred and their edges will be rounded and uniformly polished. All MFD Drag Finishers come equipped with a stainless steel media container. Optional stainless steel panel and guards are available. Punch holders must be purchased separately.

Benefits

- ◆ Perfect internal and external polishing
- ◆ Extremely short process times
- ◆ No jamming, scratching or breaking
- ◆ Accurate edge rounding on tools

Part No.	Item Description
MA 5206	MFD 50 Tabletop Drag Finisher
MA 5201	MFD 100 Tabletop Drag Finisher

Part No.	Item Description
MA 5202	MFD 200 Freestanding Drag Finisher
MA 5203	MFD 300 Freestanding Drag Finisher

Tabletop Unit Accessories

Part No.	Item Description
MA 5206	MFD 50 Punch Holder
MA 5207	MFD 50 Electrical Lift System
MA 5208	MFD 50 Stainless Steel Guards
MA 5209	MFD 50 Stainless Steel Panel
MA 5210	MFD 50 Stainless Steel Media Container
MA 5211	MFD 50 Touch Panel
MA 5212	MFD 100 Punch Holder
MA 5213	MFD 100 Electrical Lift System
MA 5214	MFD 100 Stainless Steel Guards
MA 5215	MFD 100 Stainless Steel Panel
MA 5216	MFD 100 Stainless Steel Media Container
MA 5217	MFD 100 Touch Panel
MA 5218	MFD 100 Dust Extraction System
MA 5219	MFD 100 Mounting Frame
MA 5237	MFD Polishing Paste
MA 5238	MFD Walnut Polishing Media

Freestanding Unit Accessories

Part No.	Item Description
MA 5220	MFD 200 Punch Holder
MA 5221	MFD 200 Stainless Steel Guards
MA 5222	MFD 200 Stainless Steel Panel
MA 5223	MFD 200 Stainless Steel Media Container
MA 5224	MFD 200 Touch Panel
MA 5225	MFD 200 Media Cooling System
MA 5226	MFD 200 Top Cover Plate with Fan
MA 5227	MFD 200 Quick Fix System
MA 5228	MFD 200 Rapid Head
MA 5229	MFD 300 Punch Holder
MA 5230	MFD 300 Stainless Steel Guards
MA 5231	MFD 300 Stainless Steel Panel
MA 5232	MFD 300 Stainless Steel Media Container
MA 5233	MFD 300 Media Cooling System
MA 5234	MFD 300 Top Cover Plate with Fan
MA 5235	MFD 300 Quick Fix System
MA 5236	MFD 300 Rapid Head
MA 5237	MFD Polishing Paste
MA 5238	MFD Walnut Polishing Media



MFD 200

Freestanding Units Feature

- ◆ Fully guarded (front guard opens)
- ◆ Main drive motor with gearbox
- ◆ CW/CCW running directions
- ◆ Electro-mechanical vertical lift system
- ◆ Speed control via frequency converter
- ◆ Front guard electrical interlock switch
- ◆ Touch panel display
- ◆ Digital timer

Tabletop Units Feature

- ◆ Fully guarded (front guard opens)
- ◆ Main drive motor with gearbox
- ◆ CW/CCW running directions
- ◆ Main isolation switch
- ◆ Variable speed control
- ◆ Front guard electrical interlock switch
- ◆ Digital timer



MFD 100

Polishing Kits

Polishing Kits

The Natoli Polishing Kit includes all the necessary accessories for polishing punch faces.

- ◆ Motor specifications: 1/3 hp, 110/115 or 220/230V, 60Hz
- ◆ Accessories can also be purchased individually
- ◆ Foot speed control
- ◆ cCSAus approved

Part No.	Item Description
MA 5001	110/115V Complete Polishing Kit
MA 5000	220/230V Complete Polishing Kit



Complete Polishing Kit Includes

Part No.	Item Description
MA 5002	110V Hand Polishing Motor with foot speed control
MA 5043	220V Hand Polishing Motor with foot speed control
MA 5004	12 Fine Dental Brushes*
MA 5006	6 Cotton Bobs* 3/4 x 3/4"
MA 5007	6 Cotton Bobs* 3/8 x 3/8"
MA 5008	6 Cotton Bobs* 1/2 x 1/2"
MA 5009	6 Cotton Bobs* 1/4 x 3/8"
MA 5010	Abrasive Dressing Stick
MA 5011	Yellow #42 Medium Diamond Compound* (5g tube)
MA 5012	Green #45 Fine Diamond Compound* (5g tube)
MA 5015	White Fine Rouge Bar
MA 5017	180 Grit Deburring Stone
MA 5114	240 Grit Deburring Stone
MA 5019	320 Grit Deburring Stone
MA 5016	400 Grit Deburring Stone
MA 5020	Stoning Oil (4 oz container)
MA 5022	Clamp-on Hand Piece Stand
MA 5024	Hand Piece
MA 5026	Flexible Shaft with sheath
MA 5027	6 Nylon Brushes* with 1" dia
MA 5028	6 Nylon Brushes* with 3/4" dia
MA 5054	2 Green Chrome Gloss Bars
MA 7515	6 Linen Phenolic Embossing Picks

*Recommended Replacement Items

Hand Polishing Kit

Excellent for polishing plain punch cups, especially cups with moderate to severe abrasion. Also works for machine parts requiring a polished surface.

- ◆ Back mounted on/off switch for safety

Part No.	Item Description
MA 5045	Complete Hand Polishing Kit with molded case



Complete Kit Includes

- ◆ 22,000 rpm, 115V Dremel with 1/4" Collet
- ◆ 1/8" Precision Collet Insert
- ◆ 2 Special Narrow Wrenches
- ◆ 3 x 3/4 x 1/2" Dressing Stone
- ◆ 5g Tube of Fine Diamond Compound
- ◆ Cotton Bobs
 - ❖ 1 of each of the following sizes: 1 x 1" and 3/4 x 3/4"
 - ❖ 6 of each of the following sizes: 1/2 x 1/2", 3/8 x 3/8" and 1/4 x 3/8"

Polishing Accessories

Polishing Accessories

Natoli offers a variety of polishing compounds and accessories to ensure proper punch maintenance.

◆ MSDS (Material Safety Data Sheets) included where applicable

Polishing Compound Grade Recommendations

- ◆ Fine – Use to achieve a mirror finish
- ◆ Medium – Use for fine finishing
- ◆ Abrasive – Use to remove heavy scratches



Polishing Compounds

Part No.	Item Description	Size
◆ MA 5015	White Fine Rouge Bar	9½" x 2 x 2"
◆ MA 5049	Gray Coarse Rouge Bar	8 x 1½ x 1½"
◆ MA 5054	Green Chrome Gloss Bar*	6½ x 1½ x 1½"
◆ MA 5060	Unipol 18 Hyfin Paste	4 oz
◆ MA 5061	Unipol 18 Hyfin Paste	8 oz
◆ MA 5062	Unipol Hyfin Bar	6½ x 2 x 1¾"
◆ MA 5011	Yellow #42 Medium Diamond Compound	5g tube
◆ MA 5012	Green #45 Fine Diamond Compound	5g tube

*Specially formulated for sticky products. Green chrome gloss will not produce a mirror finish as bright as white fine rouge.

- ◆ MA 5015, 5049, 5054 and 5062 for use with cotton bobs and unsewn buffing wheels
- ◆ MA 5060, 5061, 5011 and 5012 for use with cotton bobs and fine dental brushes



Deburring Stones

Removes burrs and “J” hooks on punch tips.

Removes burrs on die ODs. Restores land on punches.

Part No.	Grit	Size
MA 5017	180	6 x ½ x ½"
MA 5114	240	6 x ½ x ½"
MA 5019	320	6 x ½ x ½"
MA 5016	400	6 x ½ x ½"



Stoning Oil

Use to lubricate deburring stones for better cutting action.

- ◆ Produces a finer finish when reworking tools

Part No.	Item Description
MA 5020	Stoning Oil (4 oz / 29.6ml)



Fine Dental Brushes

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

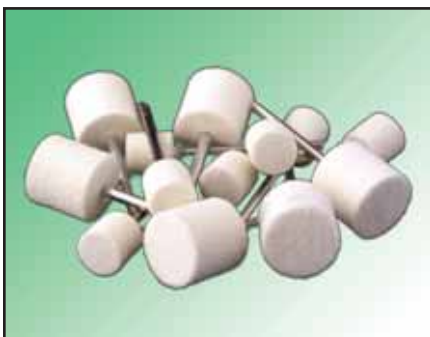
Part No.	Item Description	Shank
MA 5004	12 Fine Dental Brushes	1/8"



Nylon Brushes

Use with handheld (dremel-type) or auto punch polisher to polish punch cups.

Part No.	Item Description	Size	Shank
MA 5027	12 Nylon Brushes	1"	1/8"
MA 5028	12 Nylon Brushes	3/4"	1/8"



Cotton Bobs

Ideal for medium to heavy punch cup polishing on plain tools.

- ◆ Use abrasive dressing stick (MA 5010) to form to punch cup configuration

Part No.	Item Description	Size	Shank
MA 5106	12 Cotton Bobs	1 x 1"	1/8"
MA 5006	12 Cotton Bobs	3/4 x 3/4"	1/8"
MA 5008	12 Cotton Bobs	1/2 x 1/2"	1/8"
MA 5007	12 Cotton Bobs	3/8 x 3/8"	1/8"
MA 5009	12 Cotton Bobs	1/4 x 3/8"	1/8"



40-Ply Unsewn Buffing Wheels

◆ Recommended for polishing punch cups

Part No.	Item Description	Size
MA 5063	6" Unsewn Buffing Wheel	1/2" ID
MA 5073	8" Unsewn Buffing Wheel	1/2" ID
MA 5076	10" Unsewn Buffing Wheel	5/8" ID
MA 5176	10" Unsewn Buffing Wheel	3/4" ID
MA 5078	12" Unsewn Buffing Wheel	1 1/4" ID



40-Ply Sewn Buffing Wheels

◆ Recommended for polishing punch heads only

◆ **Do not use on punch cups**

Part No.	Item Description	Size
MA 5074	8" Sewn Buffing Wheel	1/2" ID
MA 5075	10" Sewn Buffing Wheel	5/8" ID
MA 5175	10" Sewn Buffing Wheel	3/4" ID
MA 5077	12" Sewn Buffing Wheel	1 1/4" ID



Deburring Wheel

◆ For removing discoloration, rust and foreign materials from punch barrels, heads, die ODs and die faces

Part No.	Item Description	Size
MA 5044	Deburring Wheel* (Use to refurbish punch barrel and head angles**)	8 x 2 x 3"

*Use abrasive dressing stick (MA 5010) to keep polishing wheel clean and flat.

**Do not use on head flat. It may alter critical punch working length.

Use on head angles and head OD only.



Deburring Wheel Hubs

◆ Must be used with deburring wheel

Part No.	Item Description	Motor Shaft Dia
MA 5046	Deburring Wheel Hub	3/4"
MA 5048	Deburring Wheel Hub	5/8"

Polishing Accessories

Part No.	Item Description/Usage	Size
MA 7515	6 Linen Phenolic Embossing Picks (Safely removes product from punch face)	6" Length
MA 5085	Diamond Compound Lubricant (Enhances diamond compound effectiveness)	1 Quart
MA 5010	Abrasive Dressing Stick* (For dressing cotton bob and deburring wheel)	6 x 1 x 1"
MA 5093	6 Filters for Polishing Station (MA 5090)	10 x 10 x 2"
MA 5025	20 Gray Ultra-Fine Scotch-Brite™ Pads	6 x 9"
MA 5030	20 Green Fine Scotch-Brite Pads (Use to remove surface discoloration)	6 x 9"
SU 0107	Die Bore Cleaning Brush (Use to clean die bore to prevent lower punch tips from binding in the die)	¼"
SU 0108	Die Bore Cleaning Brush	⅜"
SU 0109	Die Bore Cleaning Brush	½"
SU 0110	Die Bore Cleaning Brush	⅝"
SU 0111	Die Bore Cleaning Brush	¾"
SU 0112	Die Bore Cleaning Brush	⅞"
SU 0113	Die Bore Cleaning Brush	1"

*Use for conditioning deburring wheel and to achieve proper cup profile for cotton bobs.

