

Superior Solutions for Sheet Metal Fabricators

# VALUGRIND™ TOOL GRINDING SYSTEM

- THICK TURRET
- TRUMPF STYLE
- MURATA WIEDEMANN
- THIN TURRET



PN 2012

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**MATE®**  
**M**  
**PRECISION  
TOOLING**

TRUSTED | QUALITY | SERVICE | SOLUTIONS

# MATE PRECISION TOOLING

## COMPANY OVERVIEW

Founded in 1962, Mate has grown into a world-class manufacturer of superior products and solutions for sheet metal fabricators. We manufacture tooling for every major CNC punch press, and offer a complete line of CO2 laser products. Our mission: To be the world's leading supplier of precision tooling for CNC punch presses. Our purpose: Helping sheet metal fabricators produce quality parts faster and more efficiently.



Headquartered in Anoka, Minnesota, in a 300,000 sq. ft. state-of-the-art facility.

## COMMITMENT TO QUALITY



Mate's dedication to quality is not just demonstrated in the products and services we provide, it is a part of every aspect of our business. This commitment was formally recognized when Mate was honored with the Minnesota Quality Award, Achievement level, for 2005. We integrate the Baldrige National Quality Program's criteria into the way we operate and continually measure our progress in improving our products, processes, and service.

## CUSTOMER SATISFACTION GUARANTEED

Customer service is a critical component of Mate's business. Mate's Sales engineers are experts in their field working on site with customers to solve fabricating issues. This commitment to customer satisfaction is extended around the world with Mate tooling experts available in every industrialized country. Customer education is available for every product Mate offers and is available 24/7 at [mate.com](http://mate.com). My.mate.com, a free web-based portal, allows registered users access to previously ordered drawings of special shapes and assemblies. Mate offers an extensive standard product line that can be delivered with same day or next day service and all our products come with a 100% satisfaction guarantee.

## PRODUCTS AND SOLUTIONS THAT WORK

Mate's product engineering team currently holds several national and international patents and continues to develop products that push the boundaries of manufacturing technology. Our state-of-the-art technology center is an integral part of this process. It allows us to develop and test new tooling concepts and designs, and focus on proving the viability of value-added products while reducing the time needed to bring these products to market. The technology center also allows us to replicate the end user's environment and needs in every way. We work closely with the world's leading sheet metal fabricators and punch press manufacturers conducting research and evaluating new products. These partnerships bring to Mate a combined effort to continually offer customers superior products with proven solutions.



Customer Solution Center.

## SPANNING THE GLOBE

Mate has over 80 dealers providing products and services in every industrialized country, and Mate's European operations are headquartered in Oberursel, Germany. Our dealers are thoroughly trained to assist with all tooling needs from simple hole punching to complex special applications. Mate recognized the need for an international specialist in the punch press tooling field and has been serving the international market since 1967. Our commitment to serving manufacturers around the world was formally recognized when Mate was presented with the President's "E" Certificate for Exports by the Secretary of Commerce in 1996. Today, approximately 50% percent of Mate's revenue has come from outside the United States. We are committed to improving manufacturing technology around the world, by helping established and emerging manufacturers produce quality parts faster and more efficiently.



[Dimensions in Inches(mm)]

# MATE VALUGRIND™ TOOL GRINDING SYSTEM

Mate's ValuGrind™ Tool Grinding System regrinds punches and dies to maintain optimum condition for the highest quality punch press fabrication.

ValuGrind accommodates Thick Turret, Trumpf style, Murata Wiedemann and Thin Turret tooling (see compatibility charts below). Customized to your requirements, you select the model based on fixture style and electrical wiring needs.

- Affordable
- Compact overall size
  - 32.28(820.0) Length
  - 20.47(520.0) Width
  - 26.57(675.0) Height
- Superior finish of ground surfaces
- Simple and safe operation
- Low maintenance and low operation costs
- Easy tool set up
- Easy installation



## TOOLING SYSTEM COMPATIBILITY

<b>THICK TURRET</b>	<b>ULTRA TEC®</b>	<b>Ultra XT™</b>	<b>Original Style</b>	<b>MXC™</b>	<b>AMX™</b>	<b>MTG™</b>	<b>MT™/XMT™</b>
	A - 1/2"	A - 1/2"	A - 1/2"	A - 1/2"	A - 1/2"	3 station	8 mm
	B - 1-1/4"	B - 1-1/4"	B - 1-1/4"	B - 1-1/4"	B - 1-1/4"	8 station	16 mm
	C - 2"	C - 2"	C - 2"	C - 2"	C - 2"	8 station-long	24 mm
	D - 3-1/2"	D - 3-1/2"	D - 3-1/2"	D - 3-1/2"	D - 3-1/2"		
E - 4-1/2"	E - 4-1/2"	E - 4-1/2"	E - 4-1/2"	E - 4-1/2"			
<b>TRUMPF STYLE</b>	<b>NEXT™</b>	<b>QuickLock™</b>	<b>Standard Style</b>	<b>Multi Tool</b>			
	Size 40	Size 1	Size 0-A	3 station			
	Size 76	Size 2	Size 0-B	4 station			
			Size 1	5 station			
			Size 1-X	6 station			
		Size 2	10 station				
		Size 3					
<b>MURATA</b>	<b>Marathon™</b> B through H Station		<b>114 Style</b> A through J Station		<b>112 Style</b> A through H Station		<b>Varitool</b> 6 Station 8 Station 12 Station
<b>THIN TURRET</b>	<b>Thin Turret Style</b>		<b>3-1/2" Style</b>		<b>MTG</b>		
	1/2" Station		3-1/2" Station, Inch Shank		3 Station		
	5/8" Station		3-1/2" Station, Strippit Style		8 Station		
	1-1/4" Station						
	2" Station Strippit Style						

[Dimensions in Inches(mm)]



## BENEFITS OF VALUGRIND™

### MATE VALUGRIND™ PROVIDES:

A superior grinding finish and ground surface flatness with its:

- Belt drive that ensures optimum wheel RPM
- Large diamond grinding wheel with inner cooled cup-style design that delivers coolant exactly where needed to prevent burning or discoloration
- Rigid and robust design
- Quick setup for grinding tools, and the flexibility to grind anything that will fit on its magnetic base.

### FASTER GRINDING OF LARGER TOOLS BECAUSE IT COMES WITH:

- A Large motor that can accommodate up to Thick Turret E-station dies
- Large grinding wheel 6.29(160.0)

### NO NEED FOR ANY WIRING CHANGES BEFORE USE:

- Electrical configurations available to fit your local needs in any country so it is ready to plug in and begin grinding\*

### MINIMAL MAINTENANCE:

- Manufactured with quality components like Siemens electric motors
- Uses diamond grinding wheels that do not need to be dressed
- Sight glass to view coolant level
- Easy access coolant sump drain plug on back of grinder
- Coolant screens that greatly reduce the amount of grinding swarf and allow for easier cleaning

### EASY TO USE OPERATION:

- Portable tabletop design can be used virtually anywhere, even if space is limited
- Pre-featured to grind Thick Turret, Trumpf style, Murata Wiedemann and Thin Turret tools\*\*
- Easy to expand tool style grinding capability by simply purchasing other available fixture sets
- All you need to do is unpack it, add coolant, plug it in and grind

### SAFE TO USE OPERATION:

- Sturdy construction so it will not move or tip when in use
- Minimally exposed grinding wheel and safety stop button
- Tinted polycarbonate safety shield
- Diffuser-lined tub walls to keep coolant splatter to a minimum

\* Any changes necessary to the plug style are the responsibility of the end user and need to be done by a certified electrician.

\*\* See compatibility charts on page 3.



[Dimensions in Inches(mm)]

# TECHNICAL SPECIFICATIONS

Dimensions:	Length	32.28(820.0)
	Width	20.47(520.0)
	Height	26.57(675.0)
Weight	352.74 lb/160 kg	
208V Nominal voltage	3 Phase 208V	
208V Nominal frequency	60 Hz	
208V Nominal current	max. 5,5 A	
208V Power output	1080 W	
400V Nominal voltage	3/N/PE AC400/230V	
400V Nominal frequency	50/60 Hz	
400V Nominal current	max. 5,5 A	
400V Power output	940W	
Degree of protection	min. IP 54	
Grinding Wheel RPM	2200 / min	
Working travel of the spindle	2.20(56.0)	
Working travel scale division	0.078(0.02)	
Angular displacement of the arm	180°	
Grinding wheel:	Identification	12-160-3/6-50
	Quality	B-IIIa; B 151; K75
	Diameter	6.299(160.0)
Die Diameter	max. 6.259(159.0)	
Die Height	max. 1.57(40.0)	
Maximum length of punches A and B	8.18(208.0)	
Maximum length of punches B, C and D	3.81(97.0)	
Punch Shank Diameter	max. 4.76(121.0)	
Height Adjustment Graduations	0.078(0.02)	
Shear Angle	0°-8°	
Recommended coolant:	Type	P3 Multan 41-30
	Dilution	1:30
	Volume	About 6 litres
Level of sound pressure acting on standing operator (measured in accordance with EN 11204)	75 dB	
Weighted effective value of vibration acceleration (in accordance with ISO 5349 at grinding)	2,5 m/s <sup>2</sup>	
Warranty	12 month limited	



Treated wood transport box, not stackable	
Transport box weight	352.739 lb/160 kg
Transport box height	33.464(850.0)
Transport box length	39.370(1000.0)
Transport box width	25.590(650.0)

**FOR ADDITIONAL PRODUCT INFORMATION SEE OPERATIONS MANUAL**



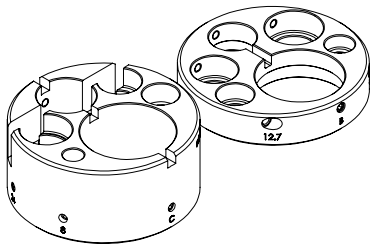
[Dimensions in Inches(mm)]

# MATE VALUGRIND™ SYSTEM ORDER GUIDE

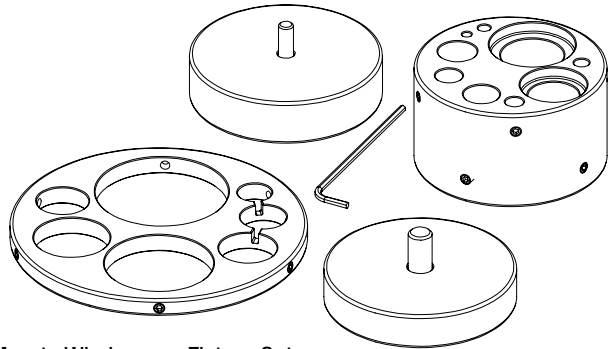
## VALUGRIND™ SYSTEM CONFIGURATION

Tool Style	Voltage	Phase	Hertz	Plug Style	Part Number
<b>THICK TURRET</b>	208 V	3	60 Hz	20 amp	MATE01946
	400 V	3	50/60 Hz	16 amp	MATE01948
<b>TRUMPF STYLE</b>	208 V	3	60 Hz	20 amp	MATE01947
	400 V	3	50/60 Hz	16 amp	MATE01949
<b>MURATA</b>	208 V	3	60 Hz	20 amp	MATE01996
	400 V	3	50/60 Hz	16 amp	MATE01998
<b>THIN TRUJET</b>	208 V	3	50/60 Hz	20 amp	MATE01995
	400 V	3	50/60 Hz	16 amp	MATE01997

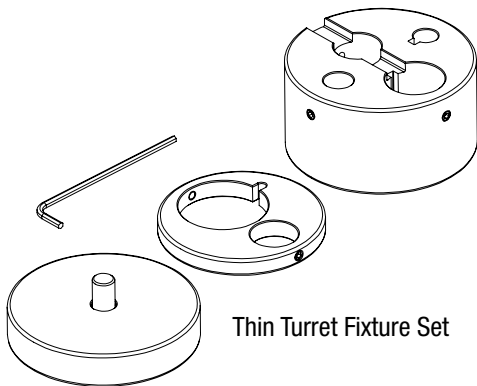
**EACH VALUGRIND SYSTEM INCLUDES GRINDING FIXTURE SET FOR TOOL STYLE SELECTED.\***



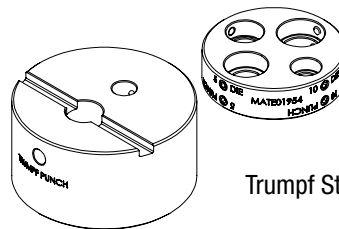
Thick Turret & MT Style Fixture Set



Murata Wiedemann Fixture Set



Thin Turret Fixture Set



Trumph Style Fixture Set

\*CAD drawings are for illustrative purposes only. Actual fixtures may differ.



[Dimensions in Inches(mm)]



20 amp Plug



16 amp Plug



# CONSUMABLE/SPARE PARTS ORDER GUIDE

Fixture	Part Number
Thick Turret and Multi Tool Style Fixture Set	MATE01953
Trumpf Style Fixture Set	MATE01954
Murata Wiedemann Fixture Set	MATE01994
Thin Turret Fixture Set	MATE01993
Accessory	Part Number
Grinding Wheel	MATE01950
Plexiglass Cover	MATE01951
Coolant Strainer	MATE01952
Phase Sequence Monitor EMR4	MATE01983
Magnetic Base / T-handle	MATE01969
Motor 1080W, 208V, 60 hz	MATE01981
Motor 940W, 400V, 50/60 hz	MATE01980
Coolant Pump 80W, 208V, 60hz	MATE01959
Coolant Pump 65W, 230V, 50hz	MATE01958
Drive Belt 10x375	MATE01960
Cleaning Stick	CLS00001



Grinding Wheel



Plexiglass Cover



Magnetic Base/T-handle



Drive Belt



Coolant Strainer



Coolant Pump

[Dimensions in Inches(mm)]





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