

Expanding Machine Capabilities

Thick Turret Forming Solutions

- ULTRAFORM®
- ULTRAFORM XT™
- ULTRAFORM FX™
- Original Style



mate.com/ULTRAFORM

Part Number 2010

Worldwide headquarters:
1295 Lund Boulevard, Anoka, Minnesota 55303 USA
Tel 763.421.0230 Fax 763.421.0285 mate.com

MATE®
M
**PRECISION
TOOLING**
TRUSTED | QUALITY | SERVICE | SOLUTIONS

Mate Precision Tooling

Company Overview

Founded in 1962, Mate has since 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.*

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, often working hands-on with customers to solve fabricating issues. This commitment to our customers is extended around the world with Mate tooling experts available in every industrialized country. Customer education is available for every product Mate offers and information is available 24/7 at mate.com, and on my.mate.com, a free web-based portal that allows registered users to access previously ordered drawings of special shapes and special assemblies. Mate offers an extensive standard product line that can be delivered with same day or next day service and 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 Customer Solution 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 Customer Solution 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.

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, and helping established and emerging manufacturers produce quality parts faster and more efficiently.



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



Mate Thick Turret Forming Solutions

Mate offers a comprehensive range of thick turret forming solutions designed to accommodate any forming application in your thick turret punch press. Use the following chart to help you decide the forming solution that's best for you.

MORE ← LESS **** *** ** *	Ultraform®	Ultraform XT™	Ultraform FX™1	Original Style
Overall Value: The combination of standard features, purchase price and operating costs.	****	***	***	**
Cost Savings: The ongoing cost savings of operating the system over an extended period of time.	****	***	***	*
Ease of Use and Set-Up: Design features that make it faster to install, easier for the operator to set up and more convenient to maintain.	****	***	****	**
Interchangeability: The ability to use the form with other Mate forming holders.	****	****	****	*
Durability/Longevity: Hardened guides and ability to transfer machine lubrication.	****	**	**	**
Purchase Price: The <i>initial</i> purchase price of the system.	****	***	**	*
1. Machine requires precise stroke control without the use of a bottom stroke feature. Tool length adjustment is not possible. Contact your Mate representative for details.				

MATE ULTRAFORM® TOOLING SYSTEM

Mate's **ULTRAFORM®** tooling system features adjustable length holders for 1-1/4" B, 2" C, 3-1/2" D and 4-1/2" E stations. Each **ULTRAFORM** holder can be used with a variety of special forming inserts. Mate **ULTRAFORM** holders include precise and convenient length adjustment mechanisms that allows fine adjustment of any forming tool to achieve high quality piece parts. The benefits of the **ULTRAFORM** tooling system include reduced tooling cost, increased flexibility and ease of length adjustment for accurate forms.

Visit mate.com/ultraform for more information



HIGHEST VALUE

GREAT VALUE

MATE ULTRAFORM XT™ TOOLING SYSTEM

Mate's **ULTRAFORM XT™** tooling system features adjustable length holders for 1-1/4" B, 2" C, 3-1/2" D and 4-1/2" E stations. Designed to use Mate's **ULTRAFORM®** tooling, each **ULTRAFORM XT** holder can be used with a variety of special forming inserts. The benefits of the **ULTRAFORM** tooling system include reduced tooling cost, increased flexibility and ease of length adjustment for accurate forms.

Visit mate.com/ultraform for more information



MATE ULTRAFORM FX™ TOOLING SYSTEM

Mate's **ULTRAFORM FX™** tooling system features fixed length holders for 1-1/4" B, 2" C, 3-1/2" D and 4-1/2" E stations. Perfect for machines with precision stroke control. Designed to use Mate's **ULTRAFORM®** tooling, each **ULTRAFORM** holder can be used with a variety of special forming inserts. The benefits of the **ULTRAFORM** tooling system include reduced tooling cost, increased flexibility and ease of length adjustment for accurate forms.

Visit mate.com/ultraform for more information.



GOOD VALUE

MATE ORIGINAL STYLE FORMING TOOLS

Mate's thick turret Original Style forming tools feature adjustable length holders for 1-1/4" B stations. Original style forming tools are designed for specific applications and machines. Eight specific form types are available. Ideal for hydraulic punch presses with programmable penetration control.

Visit mate.com/originalthickturretforming for more information



Only available for 1-1/4" B-Station



MATE ULTRAFORM® Tooling System

ULTRAFORM®, Mate's **top-of-the-line** forming tool system, is packed with features that make your job easier and help reduce your tooling costs, too! Features such as push-button length adjustment that lets you set the length in the turret without tools. Hardened guides with multiple angle settings provide flexibility and lubrication grooves help extend turret bore life. Since length adjustment takes place below the lifter flange of the tool, the risk of overpenetration that may damage the turret is eliminated. Best of all, **ULTRAFORM**, allows you unparalleled forming efficiency with its unique **ULTRAFORM** insert system.

With **ULTRAFORM**, you can have an unlimited number of forming tools and use the **same** holder, reducing your overall tooling spend. Want to use a different form? Simply swap out the forming insert. It's not only efficient; it's cost-effective. If you already have **ULTRAFORM XT™** or **ULTRAFORM FX™** holders, the inserts are completely interchangeable, further enhancing cost effectiveness. Ultraform can also take advantage of machine lubrication systems.

ULTRAFORM®. The industry's ultimate forming tool system.

Quick Length Adjustment:

The push-button length adjustment mechanism allows the overall length of the assembly to be set in 0.002(0.05) increments without disassembly or removal from the machine.

Adjustment Below The Shoulder:

Length adjustment is made below the shoulder of the assembly maintaining the gap between the ram and the tool at top of stroke to prevent the ram from hitting the tool.

Hardened Guides:

The hardened guides, combined with the lubrication grooves, reduce friction and extend turret bore life.

Multiple Angle Settings:

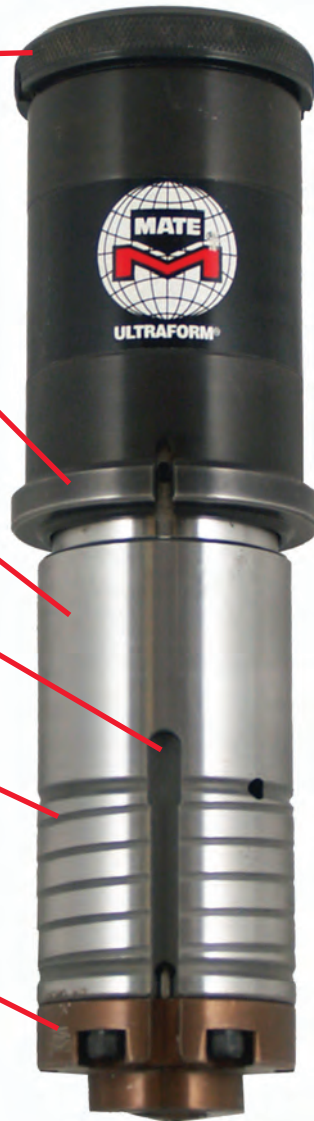
All **ULTRAFORM®** holders can be set at 0, 90, 180 and 270 degrees as a standard for maximum flexibility.

Tool Lubrication:

ULTRAFORM® holders provide internal channels and external lubrication grooves to allow lubrication of forming tools. **ULTRAFORM** is compatible with all popular punch press machine tool lubrication systems.

One Holder - Multiple Applications:

The **ULTRAFORM®** holder system is designed to allow an unlimited number of forming tools to be used with the same holder, which reduces tooling inventory costs.



Fixed Length - Between the shoulder and the punch head. Eliminates risk of over penetration that may damage the turret.

Adjustable Length - Between the shoulder and the tip of the forming tool, for precise form height adjustment.

Available for:

- 1-1/4" B-station
- 2" C-station
- 3-1/2" D-station
- 4-1/2" E-station

MATE ULTRAFORM XT™ Tooling System

ULTRAFORM XT™ is Mate's answer for those situations where you desire flexibility but adjust tool length infrequently. Grooved guides enhance lubrication and feature multiple angle settings for maximum flexibility. Incorporating Mate's unique **ULTRAFORM®** insert system, **ULTRAFORM XT** lets you change forms efficiently, quickly and economically. You can have an unlimited number of forming tools with the same holder, reducing your overall tooling cost. Since length adjustment takes place below the lifter flange of the tool, the risk of overpenetration that may damage the turret is eliminated. What's more, if you already have **ULTRAFORM** or **ULTRAFORM FX** holders, the inserts are completely interchangeable, further enhancing your economies of scale.

ULTRAFORM XT™. Ultimate flexibility. Ultimate efficiency.

Length Adjustment:

Adjust the overall length of the assembly by simply loosening screws and turning the punch head to the desired length.

Adjustment Below The Shoulder:

Length adjustment is made below the shoulder of the assembly maintaining the gap between the ram and the tool at top of stroke to prevent the ram from hitting the tool.

Multiple Angle Settings:

All **ULTRAFORM®** holders can be set at 0, 90, 180 and 270 degrees as a standard for maximum flexibility.

Tool Lubrication:

ULTRAFORM XT™ holders provide external grease grooves to allow lubrication of forming tools.

One Holder - Multiple Applications:

The **ULTRAFORM®** holder system allows an unlimited number of forming tools to be used with the same holder, which reduces tooling inventory costs and increases efficiency.

Available for:

1-1/4" B-station
2" C-station
3-1/2" D-station
4-1/2" E-station



Fixed Length - Between the shoulder and the punch head. Eliminates risk of over penetration that may damage the turret.

Adjustable Length - Between the shoulder and the tip of the forming tool for precise form height adjustment.

NOTE: Machine lubrication system compatibility available as an option.



MATE ULTRAFORM FX™ Tooling System

You want forming flexibility, but your machine has precision stroke control. Mate's solution: *ULTRAFORM FX™*, a fixed length forming tool that still provides you with the efficiency you desire. The grooved guides enhance lubrication and feature multiple angle settings for maximum flexibility. *ULTRAFORM FX* uses Mate's *ULTRAFORM®* insert system so you can have an unlimited number of forming tools with the same holder, reducing your overall tooling cost. Need a different form? Change it efficiently, quickly and economically. Already have *ULTRAFORM* or *ULTRAFORM XT™* holders? The inserts are completely interchangeable.

ULTRAFORM FX™. Fixed length. Flexible. Economical.

Multiple Angle Settings:

All *ULTRAFORM®* holders can be set at 0, 90, 180 and 270 degrees as a standard for maximum flexibility.

Tool Lubrication:

ULTRAFORM® holders provide external grease grooves to allow lubrication of forming tools. *ULTRAFORM* is compatible with all popular punch press machine tool lubrication systems.

One Holder - Multiple Applications:

The *ULTRAFORM®* holder system is designed to allow an unlimited number of forming tools to be used with the same holder, which reduces tooling inventory costs.

Available for:

1-1/4" B-station
2" C-station
3-1/2" D-station
4-1/2" E-station



Fixed Length - *ULTRAFORM FX* holders are designed for machines with precision stroke control eliminating the need for length adjustment.
Contact your Mate representative.

NOTE: Machine lubrication system compatibility available as an option.

System Overview



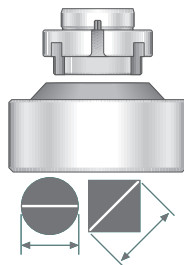
ULTRAFORM FX™
1-1/4" B Station
Forming Unit
Guide Assembly
MATE01798



ULTRAFORM®
1-1/4" B Station
Forming Unit
Guide Assembly
AFKB2



ULTRAFORM XT™
1-1/4" B Station
Forming Unit
Guide Assembly
MATE01755



Upper Insert Assembly
*Priced upon application
Consult your MATE
representative*

Lower Insert Assembly
*Priced upon application
Consult your MATE
representative*



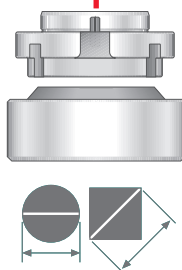
ULTRAFORM FX™
2" C Station
Forming Unit
Guide Assembly
MATE01800



ULTRAFORM®
2" C Station
Forming Unit
Guide Assembly
AFKC2



ULTRAFORM XT™
2" C Station
Forming Unit
Guide Assembly
MATE01821



Upper Insert Assembly
*Priced upon application
Consult your MATE
representative*

Lower Insert Assembly
*Priced upon application
Consult your MATE
representative*



System Overview



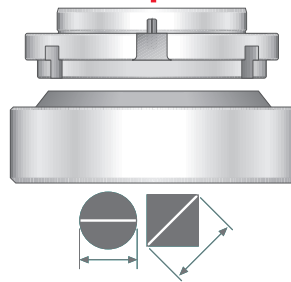
ULTRAFORM FX™
3-1/2” D Station
Forming Unit
Guide Assembly
MATE01802



ULTRAFORM®
3-1/2” D Station
Forming Unit
Guide Assembly
AFKD2



ULTRAFORM XT™
3-1/2” D Station
Forming Unit
Guide Assembly
MATE01824



Upper Insert Assembly
*Priced upon application
Consult your MATE
representative*

Lower Insert Assembly
*Priced upon application
Consult your MATE
representative*



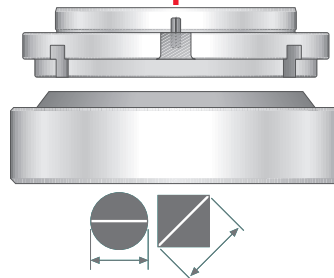
ULTRAFORM FX™
4-1/2” E Station
Forming Unit
Guide Assembly
MATE01804



ULTRAFORM®
4-1/2” E Station
Forming Unit
Guide Assembly
AFKE2



ULTRAFORM XT™
4-1/2” E Station
Forming Unit
Guide Assembly
MATE01827



Upper Insert Assembly
*Priced upon application
Consult your MATE
representative*

Lower Insert Assembly
*Priced upon application
Consult your MATE
representative*

Thick Turret 1-1/4" B-Station Original Style Forming Tools

Mate Original Style thick turret 1-1/4" B-Station forming tools offer economy, simplicity and convenience. With fewer features, less adjustability and no form insert interchangeability, Original Style thick turret forming tools are more economical. Engineered for specific material type, material thickness and machine type provides application-specific convenience. Combining integrated tool body construction with the hexagon shaped punch head makes it simple to use. Eight specific form types are available. Original Style thick turret 1-1/4" B-Station forming tools are ideal for hydraulic punch presses with programmable penetration control.



Length Adjustment:
Adjustment is above the shoulder and allows variable tool height.

Application Specific Tool:

- Specific material type
- Specific material thickness
- Specific machine

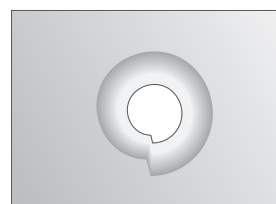
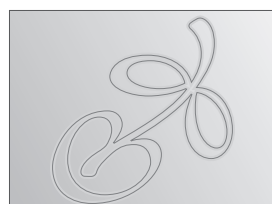
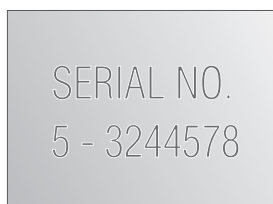
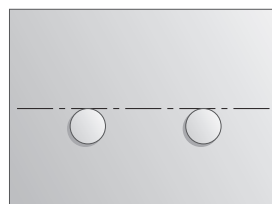
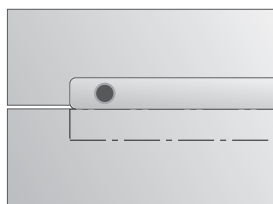
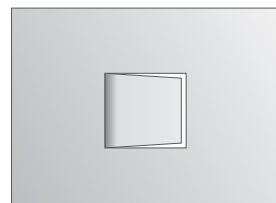
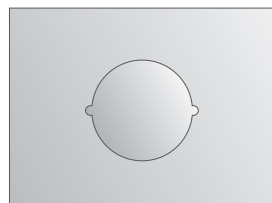
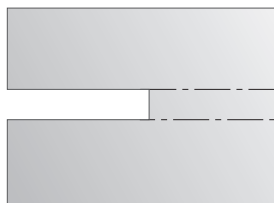
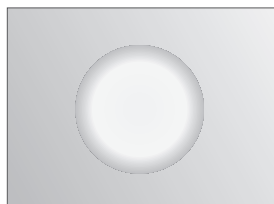
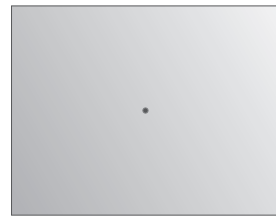
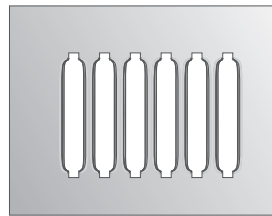
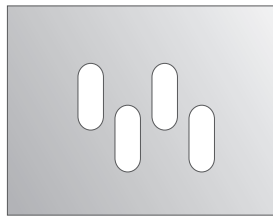
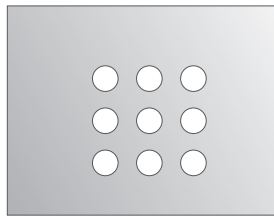
Switching between machines may cause damage to the tool or machine.

Holder Dedicated To Specific Form:
Eight standard form types available.

	Dedicated Countersink Down Complete Assembly with blank die Replacement Countersink Tip	XAABD0B399 XAABD0B316		Round Embossed Countersink Up Complete Assembly with spring loaded lower	XAABD0E999
	Dedicated Countersink Up Complete Assembly non-spring loaded lower	XAABD0B199		Round Extrude Up Complete Assembly with spring loaded lower Replacement Lower Insert	XAABD0D199 XAABD0D104
	Round Emboss with Dome Top Complete Assembly with spring loaded lower	XAABD0E099		Single Round Knockout Up Complete Assembly with spring loaded lower	XAABD0K199
	Round Emboss with Flat Top Complete Assembly with spring loaded lower	XAABD0E199		Shear Button Up Complete Assembly with spring loaded lower Replacement Lower Insert	XAABD0S199 XAABD0S104



Special Assemblies





The Mate logo is a registered trademark of Mate Precision Tooling Inc. in the USA, Canada, China, Germany, India, Sweden, and U.K.
ULTRAFORM is a registered trademark of Mate Precision Tooling Inc. Ultraform XT and Ultraform FX are trademarks of Mate Precision Tooling Inc.
All trademarked names mentioned in this document are the property of their respective owners.

Mate Tooling Lasts Longer

1295 Lund Boulevard, Anoka, Minnesota 55303 USA
Call 763.421.0230 • Fax 763.421.0285 • mate.com