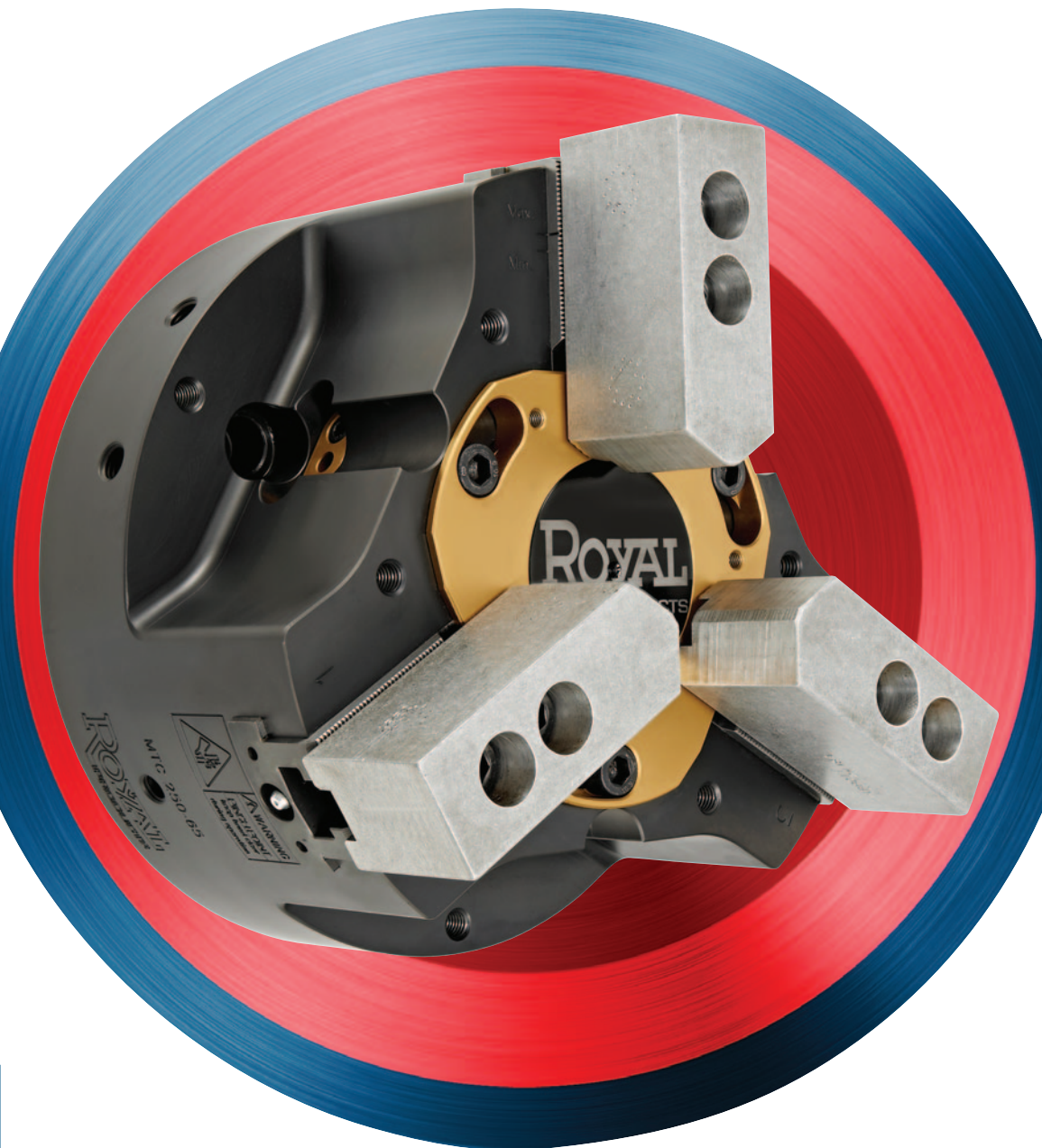




# **MTC™ MULTI-TASKING CHUCK**

**A REVOLUTIONARY 3-JAW CHUCK, COLLET CHUCK,  
AND I.D. WORKHOLDING SYSTEM ALL-IN-ONE.**

**NEW**



**ROYAL**  
PRODUCTS  
Optimize everything.



## ROYAL MTC™ MULTI-TASKING CHUCK

### A True All-in-One CNC Lathe Chuck

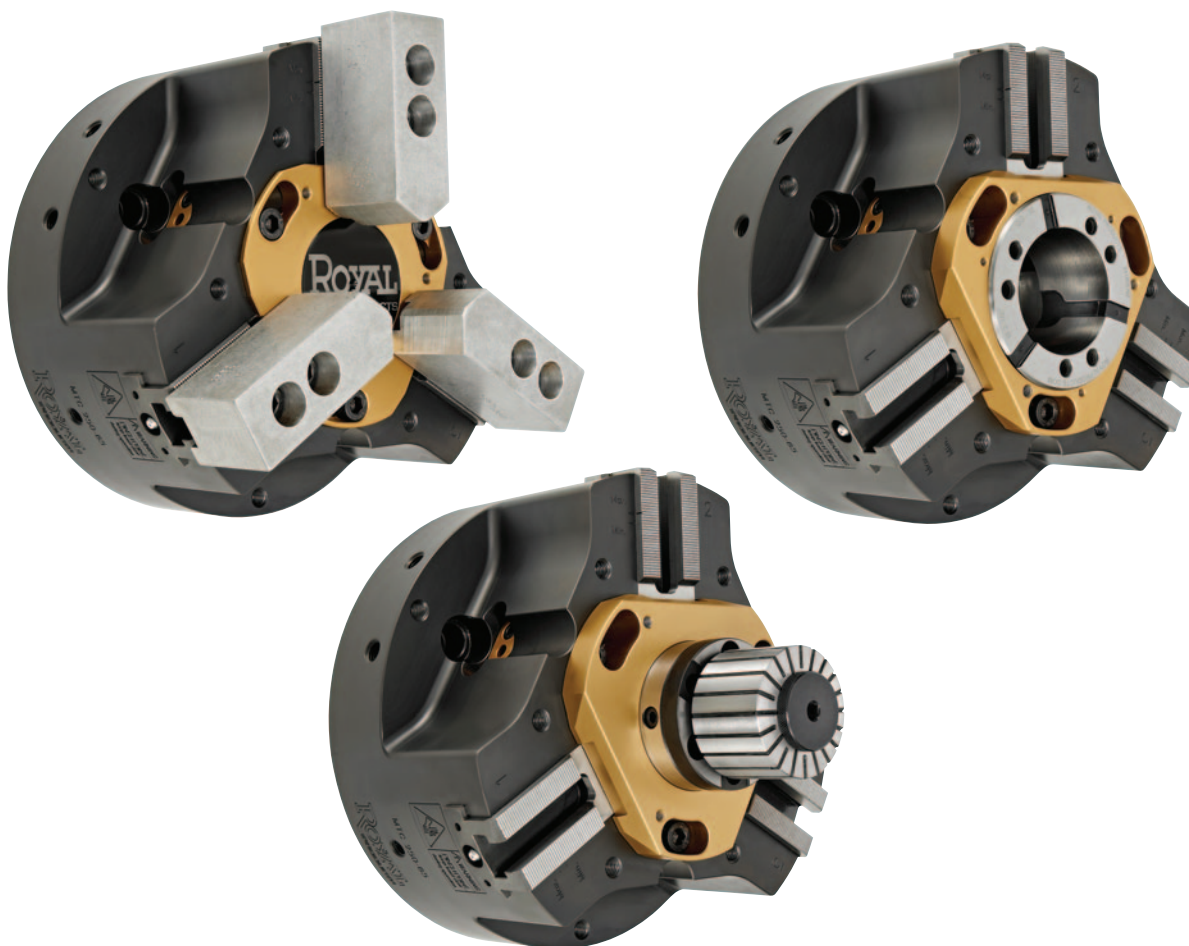
**The Royal MTC™ is a Revolutionary 3-Jaw Chuck, Collet Chuck, and I.D. Workholding System All-in-One**

#### No Need to Ever Change Your Chuck Again

Switching your lathe workholding as jobs demand can be a difficult process and eats up valuable production time. But no longer! With the Royal MTC™ it's a snap to change over between:

**NEW**

- ✓ 3-Jaw Chuck
- ✓ Quick-Grip™ CNC Collet Chuck
- ✓ I.D. Workholding System
- ✓ And much more...



Converting Between Jaw/Collet/I.D. Applications Takes Just Minutes and is Accomplished by **Simply Swapping the Quick-Change Center Hub**. The Chuck Body Never Needs to be Removed from the Lathe Spindle!



# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck



### Setup Times Slashed

Change from jaw chuck to collet chuck to I.D. mandrel in minutes without ever removing the chuck from the spindle.

### Ingenious Patent-Pending Design

Simply change out the hardened and ground TiN coated center hubs as applications require – chuck body always remains mounted to the lathe spindle.

### Standard Top Tooling

All Royal MTC™ chucks incorporate base jaw serrations of 60° x 1.5mm as standard. Alternative base jaws with inch serrations or quick-change configurations are available as specials.

### Extreme Rigidity

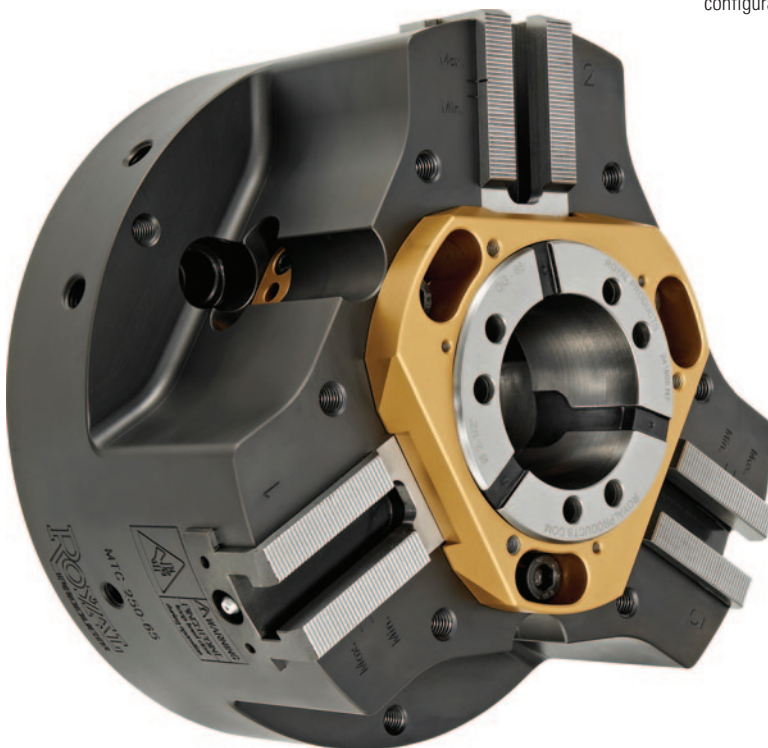
Much more stable than other systems because MTC™ is a true jaw-chuck with both collet and I.D. capabilities – not a collet chuck with a heavy jaw chuck hanging off the front end.

### High Accuracy

Jaw repeatability is 0.0002" – 0.0003" and the QG collet hub is guaranteed to be within 0.0003" TIR.

### Great Tool Clearance

All chuck bodies are relief milled for optimized tool clearance and reduced rotational mass.



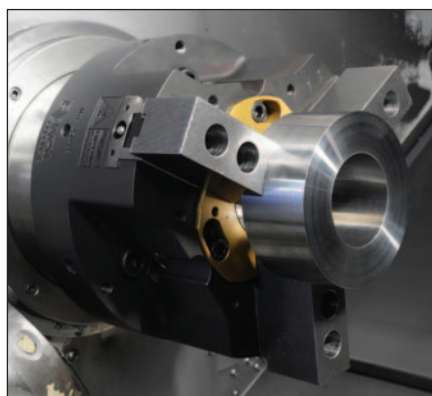
### Multiple Sizes

Royal stocks the MTC™ in 8", 10", 12", and 15" versions. Backplates are available to suit all standard spindle mounts.

### Unmatched Flexibility

Run virtually any job on a single CNC lathe – modular design provides the ability to seamlessly integrate additional components (5C collet adapter, face driver, etc.) as needed.

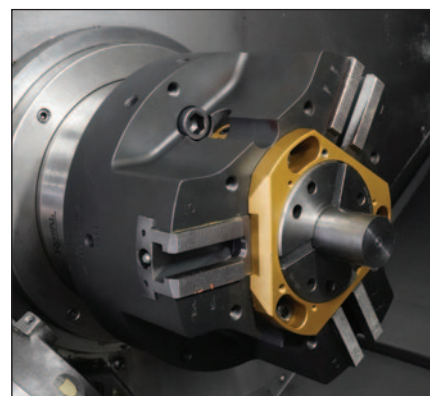
## The Royal MTC™ – The Only CNC Lathe Chuck You'll Ever Need!



**Jaw Mode**



**I.D. Gripping Mode**



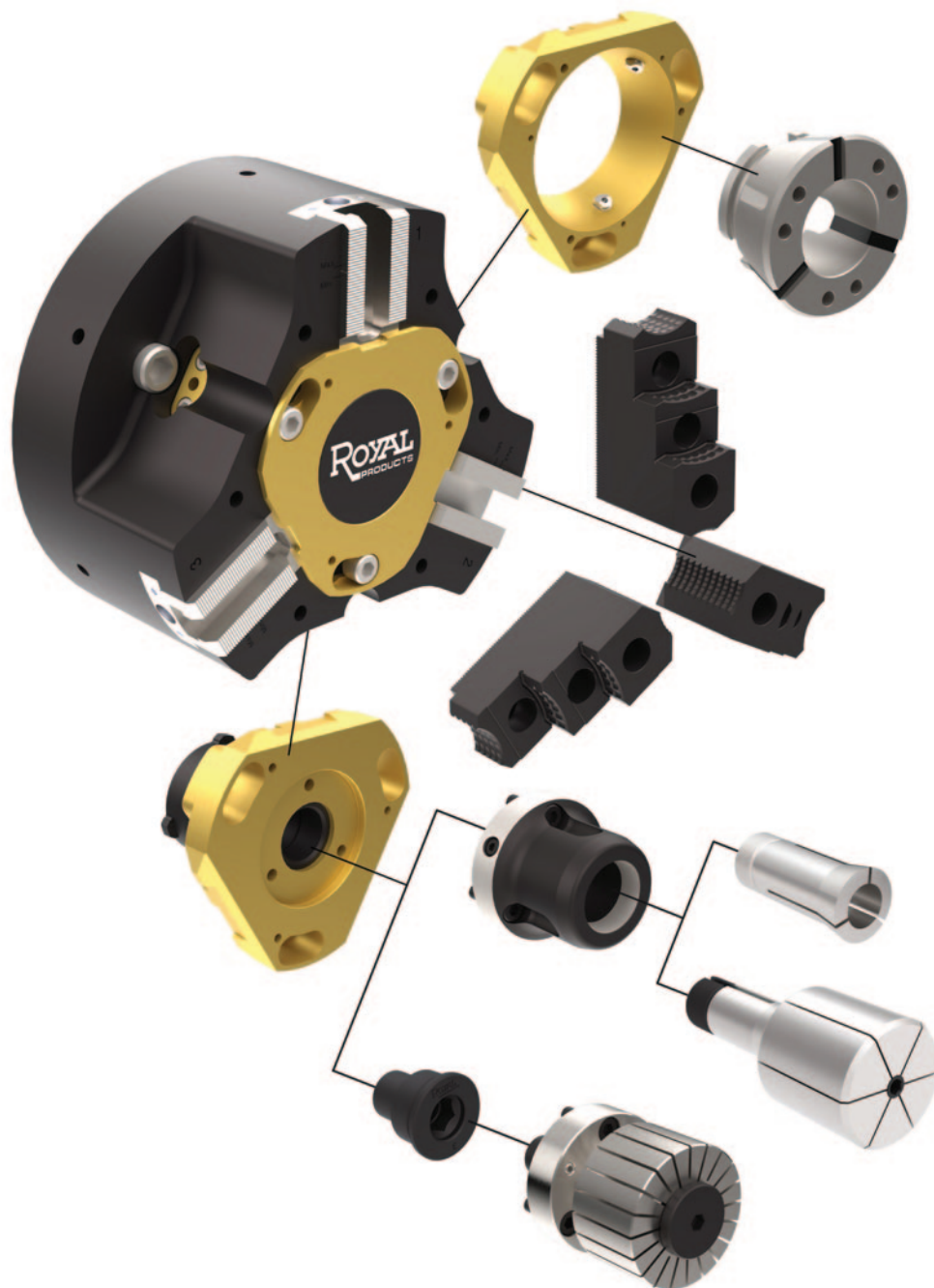
**QG Collet Mode**



## **ROYAL MTC™ MULTI-TASKING CHUCK**

**A True All-in-One CNC Lathe Chuck**

**Completely Modular – Add Components as You Land New Jobs**



**Check out the Royal MTC™ Video**  
**at [www.royalproducts.com](http://www.royalproducts.com)**

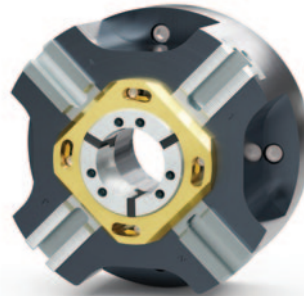
# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck



### NEW for 2026 - Two and Four-Jaw MTC™ Models

- ✓ Great for non-cylindrical workpieces.
- ✓ The four-jaw model is a true 2+2, enabling non-symmetrical parts to be clamped on centerline.
- ✓ Contact Royal for ordering information.



### Easy Single-Part Number Ordering

The following items are included with every Royal MTC™ Multi-Tasking Chuck:

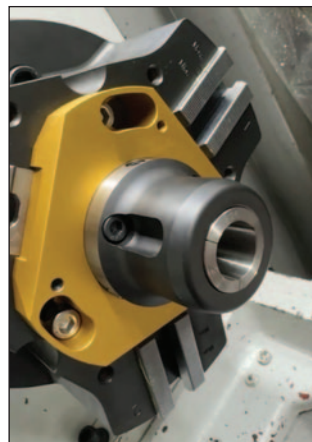


- ✓ A 3-Jaw chuck featuring industry standard 60° x 1.5mm base jaws to accept a wide array of top jaws.
- ✓ A Quick-Grip™ center hub hardened and precision ground to accept Royal Quick-Grip™ Collets.
- ✓ A thru-hole center hub to accommodate long-parts when using as a jaw chuck.
- ✓ A center cap to block chips from entering the drawtube when using the jaw chuck for slug work.
- ✓ A removable internal workstop for use with both jaws and collets.
- ✓ A center hub removal tool.
- ✓ A grease gun and tube of chuck grease.
- ✓ A hardened and ground backplate to suit your particular lathe's spindle nose (not shown).
- ✓ A custom-machined drawtube connector for hassle-free installation.

### 5C Collet Adapter



View the Royal MTC™ in action  
at [royalproducts.com](http://royalproducts.com)



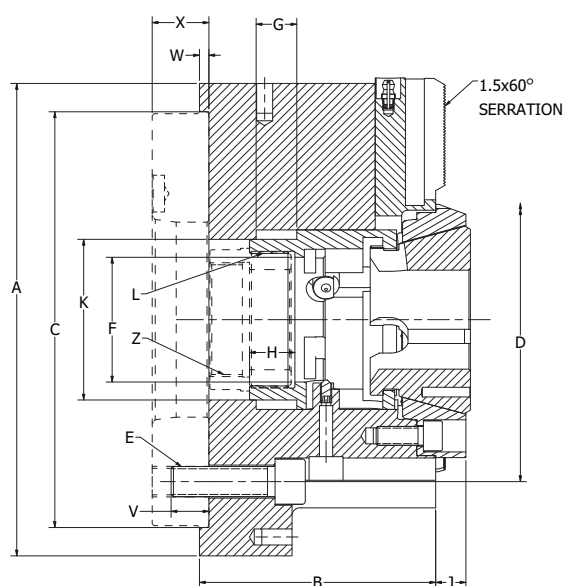
- 5C collet adapter is great for workpieces smaller than 1" dia.
- Utilizes the same center hub as the I.D. mandrel
- Provides excellent tool clearance for small dia. work



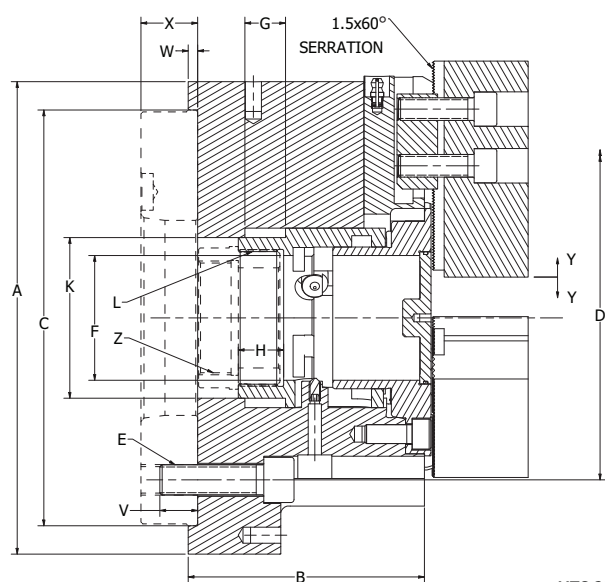
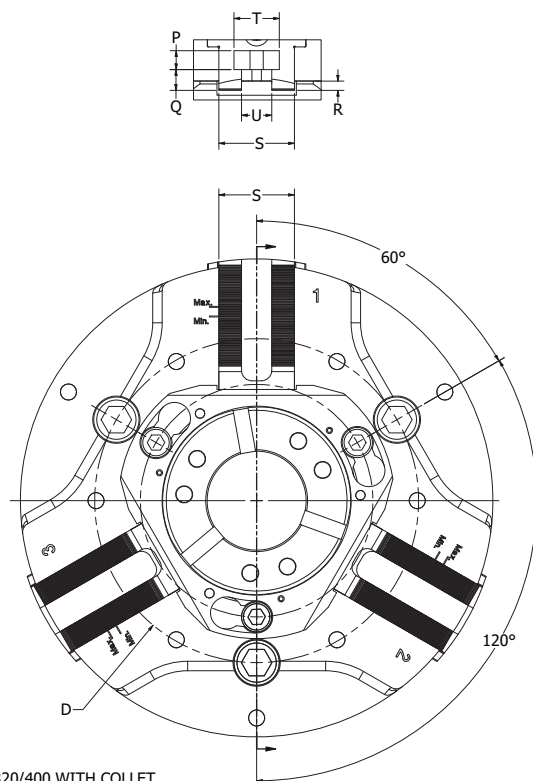
# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck

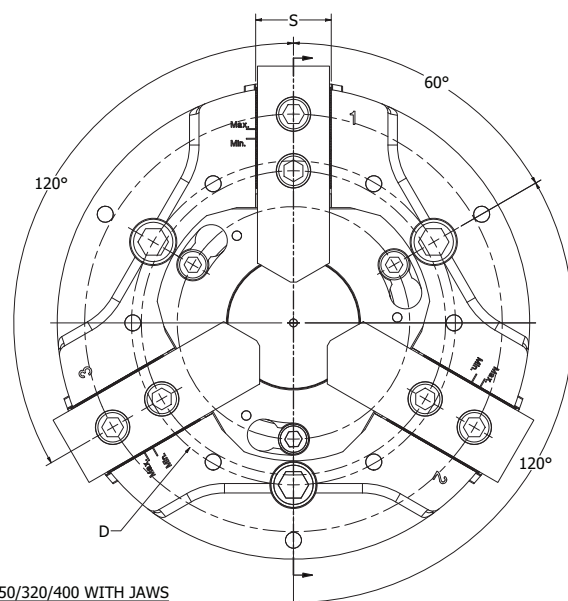
### Dimensions



MTC-200/250/320/400 WITH COLLET



MTC-200/250/320/400 WITH JAWS





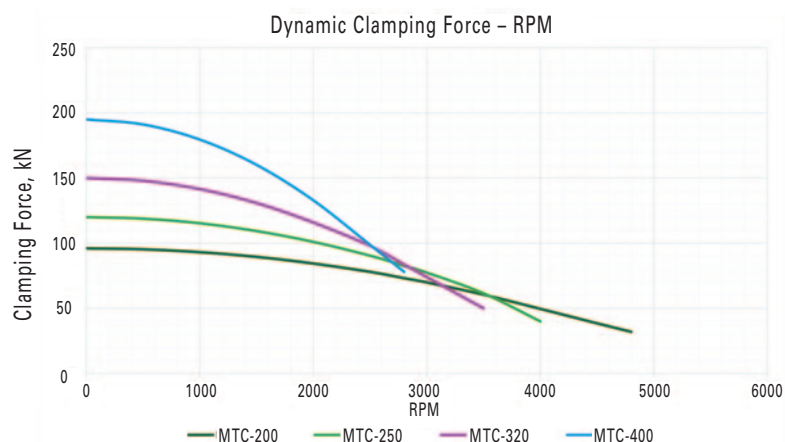
# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck



### Dimensions

	MTC-200		MTC-250		MTC-320		MTC-400	
	INCH	METRIC	INCH	METRIC	INCH	METRIC	INCH	METRIC
A	7.87	200	9.84	250	12.60	320	15.75	400
B	4.33	110	4.92	125	5.91	150	6.89	175
C	6.69	170	8.66	220	11.02	280	13.78	350
D	5.25	133.4	6.75	171.4	9.25	235	12.21	310
E	M12		M16		M20		M20	
F	2.09	53	2.60	66	3.19	81	4.09	104
G (optimal)	0.79	20	0.95	24	1.10	28	1.34	34
G (minimum)	0.59	15	0.71	18	0.83	21	1.00	25.5
H	0.91	23	0.95	24	1.10	28	1.50	38
J	0.43	11	0.63	16	0.63	16	0.71	18
K	2.95	75	3.35	85	4.13	105	5.91	150
L	M64x1.5		M72x1.5		M92x2		M130x2	
P	0.39	10	0.39	10	0.47	12	0.59	15
Q	0.43	11	0.43	11	0.47	12	0.51	13
R	0.20	5	0.20	5	0.20	5	0.20	5
S	1.58	40	1.58	40	1.77	45	2.05	52
T	0.95	24	0.95	24	1.19	30.1	1.19	30.1
U	0.63	16	0.63	16	0.83	21	0.83	21
V	0.79	20	0.79	20	1.02	26	0.98	25
W	0.20	5	0.20	5	0.20	5	0.20	5
X	Varies		Varies		Varies		Varies	
Y	+/-0.08	+/-2.0	+/-0.10	+/-2.5	+/-0.12	+/-3.0	+/-0.14	+/-3.6
Z	Varies		Varies		Varies		Varies	



**Warning:** While the static clamping force of all three-jaw chucks is a function of the machine's hydraulic actuator (piston surface area, input pressure, etc.), it is essential to understand that the dynamic clamping force acting on a workpiece is affected by additional factors such as rpm and top jaw weight. This graph represents the maximum dynamic clamping force of all Royal MTC™ chuck models throughout the stated rpm range.

Be sure to understand the relationship between input pressure and drawtube axial force for your machine's specific hydraulic actuator and **ensure that all relevant parameters are sufficient to keep workpieces safely clamped.** If you have any questions or concerns regarding the safe use of this product, please contact a Royal Products applications engineer at 1-800-645-4174 before use.

MTC-200 Top Jaw Weight 4.9 lbs.  
MTC-250 Top Jaw Weight 6.2 lbs.  
MTC-320 Top Jaw Weight 7.9 lbs.  
MTC-400 Top Jaw Weight 10.1 lbs.



# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck

### Specifications

#### Royal MTC™ with Chuck Jaws

	MTC-200		MTC-250		MTC-320		MTC-400	
	INCH	METRIC	INCH	METRIC	INCH	METRIC	INCH	METRIC
OPTIMAL DRAWTUBE STROKE	0.79	20	0.95	24	1.10	28	1.34	34
CLAMPING RANGE (JAW/DIAMETER) AT OPTIMAL DRAWTUBE STROKE	0.16/0.32	4/8	0.20/0.40	5/10	0.24/0.48	6/12	0.28/0.56	7.2/14.4
MINIMUM DRAWTUBE STROKE	0.59	15	0.71	18	0.83	21	1.00	25.5
CLAMPING RANGE (JAW/DIAMETER) AT MINIMUM DRAWTUBE STROKE	0.12/0.24	3/6	0.15/0.30	3.75/7.5	0.18/0.35	4.5/9	0.21/0.43	5.4/10.8
MAXIMUM ACTUATING FORCE	9,217 (lbs.)	41 (kN)	11,690 (lbs.)	52 (kN)	14,613 (lbs.)	65 (kN)	19,109 (lbs.)	85 (kN)
CLAMPING FORCE PER JAW	7,194 (lbs.)	32 (kN)	8,992 (lbs.)	40 (kN)	11,240 (lbs.)	50 (kN)	14,613 (lbs.)	65 (kN)
TOTAL CLAMPING FORCE	21,582 (lbs.)	96 (kN)	26,977 (lbs.)	120 (kN)	33,721 (lbs.)	150 (kN)	43,838 (lbs.)	195 (kN)
MAXIMUM RPM	4800		4000		3500		2800	
WEIGHT*	44 (lbs.)	20 (kg)	66 (lbs.)	30 (kg)	132 (lbs.)	60 (kg)	249 (lbs.)	113 (kg)

\*Chuck only. Does not include backplate or top jaws.

#### Royal MTC™ with Collet

	MTC-200		MTC-250		MTC-320		MTC-400	
	INCH	METRIC	INCH	METRIC	INCH	METRIC	INCH	METRIC
QG COLLET MODEL	QG-52		QG-65		QG-80		QG-100	
MINIMUM ACTUATING FORCE	0.16	4	0.16	4	0.16	4	0.16	4
MAXIMUM ACTUATING FORCE	9,217 (lbs.)	41 (kN)	10,116 (lbs.)	45 (kN)	11,240 (lbs.)	50 (kN)	14,613 (lbs.)	65 (kN)
CLAMPING FORCE	21,132 (lbs.)	94 (kN)	23,605 (lbs.)	105 (kN)	25,853 (lbs.)	115 (kN)	33,721 (lbs.)	150 (kN)
MAXIMUM FORCE	5500		4600		4000		3200	

**Important:** Please ensure that your machine's hydraulic actuator meets at least the minimum drawtube stroke requirements as outlined above. Also see warning on the preceding page to ensure that your specific actuator/input pressure achieves adequate dynamic clamping force to eliminate the risk of a workpiece becoming dislodged during use. If you have any questions or concerns regarding the safe use of this product, please contact one of our applications engineers at 1-800-645-4174.



# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck

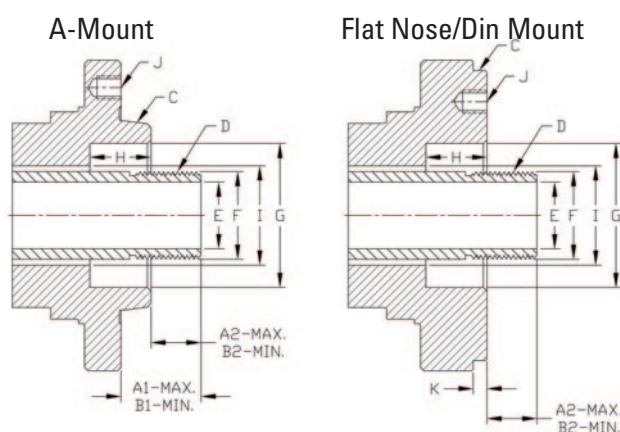


### What to Know Before You Order

In addition to the safety considerations regarding actuator force and drawtube stroke (highlighted on the previous pages), Royal may also require some specific dimensional information for your lathe to ensure that we supply the correct backplate and drawtube connector.

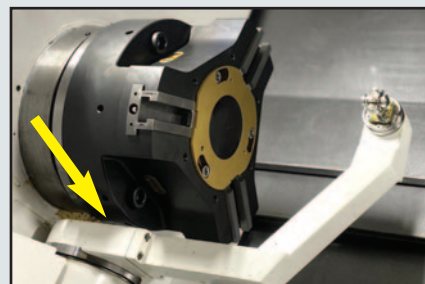
We maintain an extensive machine tool database populated with thousands of actuator and drawtube specs, but sometimes changes/substitutions are made to the machine that we aren't aware of. **For safety purposes and to ensure a hassle-free installation experience, the information requested below may need to be supplied with your MTC™ order.** If you have any questions, please contact a Royal Products applications engineer at 1-800-645-4174.

#### Spindle Nose With Chuck Removed



Note:

A drawtube sometimes unscrews from the actuator when the 3-jaw chuck is removed. Make sure drawtube is fully screwed in before taking dimensions.



#### Important

Machine tool components such as a tool eye, parts catcher, chuck guarding, etc. may result in interference with the MTC's outer diameter and/or length – especially if you are looking to upsize your chuck.

If your machine is equipped with any potential interference components, please contact Royal prior to ordering to discuss possible solutions.

Machine (make & model) \_\_\_\_\_

Machine Serial Number \_\_\_\_\_

Existing Chuck (make & model) \_\_\_\_\_

(if applicable)

Actuator (make & model) \_\_\_\_\_

Spindle - Main \_\_ Sub \_\_

A1 – Max. (tube extended) \_\_\_\_\_

B1 – Min. (tube retracted) \_\_\_\_\_

A2 – Max. (tube extended) \_\_\_\_\_

B2 – Min. (tube retracted) \_\_\_\_\_

C-Spindle Type & Size \_\_\_\_\_

(i.e. A2-6, 110mm, etc.)

D-Drawtube Thread \_\_\_\_\_

Pitch \_\_\_\_\_

Internal or External \_\_\_\_\_

Length of Thread \_\_\_\_\_

E – Drawtube I.D. \_\_\_\_\_

F – Drawtube O.D. \_\_\_\_\_

G – Counterbore I.D. \_\_\_\_\_

H – Counterbore Length \_\_\_\_\_

I – Spindle Through Hole Diameter \_\_\_\_\_

J – Mounting Hole (DIN & A2-15 Spindles ONLY)

Thread Size \_\_\_\_\_

Quantity \_\_\_\_\_

Spacing \_\_\_\_\_

Bolt Circle Diameter \_\_\_\_\_

K-Pilot Length (DIN Spindles ONLY) \_\_\_\_\_

Max. Actuator Pull Force \_\_\_\_\_

Any items in machine work envelope that need to be evaluated for potential interference such as a tool eye, parts catcher, etc.? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes, please describe \_\_\_\_\_



# ROYAL MTC™ MULTI-TASKING CHUCK

## A True All-in-One CNC Lathe Chuck

### Easy Single Part Number Ordering

The following items are included with every Royal MTC™ Multi-Tasking Chuck:

- ✓ A 3-Jaw chuck featuring industry standard 60°x1.5mm base jaws to accept a wide array of top jaws.
- ✓ A Quick-Grip™ center hub hardened and precision ground to accept Royal Quick-Grip™ Collets.
- ✓ A thru-hole center hub to accommodate long-parts when using as a jaw chuck.
- ✓ A center cap to block chips from entering the drawtube when using the jaw chuck for slug work.
- ✓ A removable internal workstop for use with both jaws and collets.
- ✓ A center hub removal tool.
- ✓ A grease gun and tube of chuck grease.
- ✓ A hardened and ground backplate to suit your particular lathe's spindle nose (not shown).
- ✓ A custom-machined drawtube connector for hassle-free installation.

### Royal MTC™ Multi-Tasking Chucks

CHUCK MODEL	SPINDLE TYPE	PART NUMBER	PRICE*
MTC-200	A2-5	51202	\$33,905
MTC-200	A2-6	51204	33,905
MTC-200	140 MM	51206	33,905
MTC-250	A2-6	51208	37,405
MTC-250	A2-8	51210	37,405
MTC-250	140 MM	51212	37,405
MTC-320	A2-6	51213	41,985
MTC-320	A2-8	51214	41,985
MTC-320	A2-11	51216	41,985
MTC-400	A2-8	51217	48,260
MTC-400	A2-11	51218	48,260
MTC-400	A2-15	51220	48,260

\*Price includes a hardened and ground backplate up to 3" long. If your machine requires an extended backplate we will advise and quote a special plate.

### Additional Accessories

- The center hub for I.D. workholding is designed with a 75mm recess and is compatible with all Royal I.D. mandrels and sleeves (see page 84-85 for details).
- If you currently use a different brand of I.D. workholding, it may be possible for Royal to supply a custom center hub that would enable its use with the MTC – contact us to discuss.
- **The lifting/installation tool is highly recommended for fast and easy installation.** This device affixes to the chuck body in the same manner as the center hubs do, balancing the chuck's mass and enabling it to be easily threaded onto the machine's drawtube.

### Royal MTC™ Accessories

DESCRIPTION	FITS CHUCK MODEL	PART NUMBER	PRICE
Center Hub for I.D. Workholding* and 5C Collet Nose	MTC-200	51230	\$4,485
	MTC-250	51231	4,820
	MTC-320	51232	5,800
	MTC-400	51233	8,970
5C Adapter	ALL	65138	1,235
Lifting/Installation Tool	MTC-200	51225	2,890
	MTC-250	51226	3,035
	MTC-320	51227	3,340
	MTC-400	51228	3,710

\*Order mandrels and sleeves separately.

