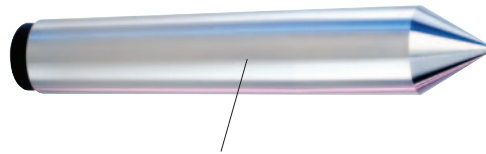




# ROYAL DEAD CENTERS

- Dead centers are typically used for **grinding** and are also sometimes used in **high-precision turning** applications.
- Royal manufactures a wide range of standard dead centers to suit most applications, including: full, half, carbide-tipped, and extended-point models.
- All solid dead centers are made from ball bearing steel and are hardened to Rc 61-63 for wear resistance and durability.
- On carbide-tipped models, the carbide blank is brazed into a **close-tolerance socket for maximum strength and rigidity**.
- All Royal dead centers are ground to an angle of  $60^\circ \begin{smallmatrix} +15 \\ -0 \end{smallmatrix}$  and guaranteed to  $\pm 0.00005''$  TIR.



**Type 1**  
Standard Dead Center  
add "1" to part number below.

Ball bearing steel hardened and ground to Rc 61-63 for long life.



**Type 2**  
Standard Dead Center with carbide tip  
add "2" to part number below.

Carbide blank is brazed into a close-tolerance socket for maximum strength and rigidity.



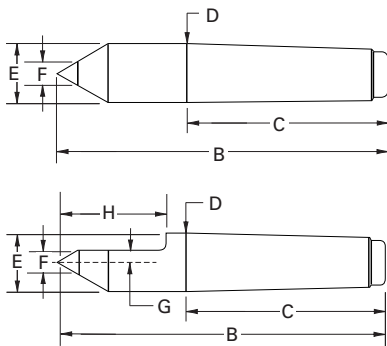
**Type 3**  
1/2 Dead Center  
add "3" to part number below.  
Note – Type 3 models are being phased out. Please call for availability.

Half centers are relieved for grinding wheel clearance.



**Type 4**  
1/2 Dead Center with carbide tip  
add "4" to part number below.

A safety groove shows the maximum allowable regrind range for carbide-tipped models.



## Royal Dead Centers

Example: A 2MT dead center with a carbide tip is PART NUMBER 11012.

TAPER A	B	C	D	E	F	G	H	PART NUMBER	PRICE			
									TYPE 1	TYPE 2	TYPE 3	TYPE 4
2 MT	4.19	2.56	.700	0.700	0.38	0.19	1.38	1101-	<b>\$155</b>	<b>\$206</b>	<b>CALL</b>	<b>\$240</b>
3 MT	5.25	3.19	.938	0.938	0.50	0.22	1.69	1102-	<b>240</b>	<b>279</b>	<b>CALL</b>	<b>316</b>
4 MT	6.75	4.06	1.231	1.231	0.50	0.25	2.25	1103-	<b>345</b>	<b>368</b>	<b>CALL</b>	<b>403</b>
5 MT	8.50	5.19	1.748	1.748	0.63	0.38	2.75	1104-	<b>517</b>	<b>569</b>	<b>CALL</b>	<b>600</b>

# ROYAL "OIL COUNTRY" BULL HEAD DEAD CENTERS



- Designed for turning large tubes and pipes on lathes with live tailstocks.
- Can also be used in large-diameter grinding applications.
- Interchangeable heads (sold separately) offer maximum versatility.
- ±0.0002" TIR guaranteed.
- Extraction nut (included) allows for easy removal from tailstock.
- Special extended models offered for Mazak\*\* lathes.



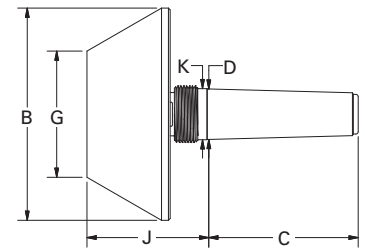
## Modular Heads for Royal "Oil Country" Bull Head Dead Center

HEAD MODEL	B	G	HEAD WEIGHT (LBS.)	PART NUMBER	PRICE
A	4.62	1.63	7	10791	<b>\$741</b>
B	7.37	4.38	18	10792	<b>1,145</b>
C	10.12	7.13	33	10793	<b>1,777</b>
D	12.87	9.88	51	10794	<b>2,541</b>
E	15.62	12.63	65	10795	<b>4,429</b>



## Royal "Oil Country" Bull Head Dead Center Shanks\*

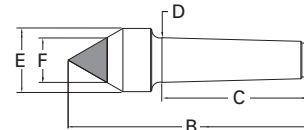
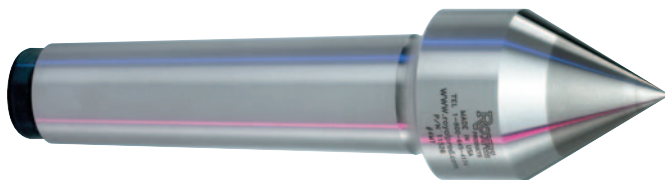
TAPER	MODEL	C	D	K	J WITH HEAD A	J WITH HEADS B-E	THREAD	PART NUMBER	PRICE
4MT	Standard	4.06	1.231	N/A	4.63	3.91	M42 x 1.5	11576*	<b>\$488</b>
4MT	Mazak**	4.06	1.231	1.260	4.85	4.13	M42 x 1.5	11577*	<b>488</b>
5 MT	Standard	5.19	1.748	N/A	4.63	3.91	M50 x 1.5	11578*	<b>536</b>
5 MT	Mazak**	5.19	1.748	1.772	5.06	4.34	M50 x 1.5	11579*	<b>536</b>
6 MT	Standard	7.25	2.494	N/A	4.69	3.97	M70 x 2	11580*	<b>1,032</b>
6 MT	Mazak**	7.25	2.494	2.500	5.29	4.57	M70 x 2	11581*	<b>1,032</b>



\* Head not included – order separately

\*\* Mazak is a registered trademark of Yamazaki Mazak Corporation

# OVERSIZED CARBIDE POINT DEAD CENTERS



## Royal Oversized Carbide Point Dead Centers

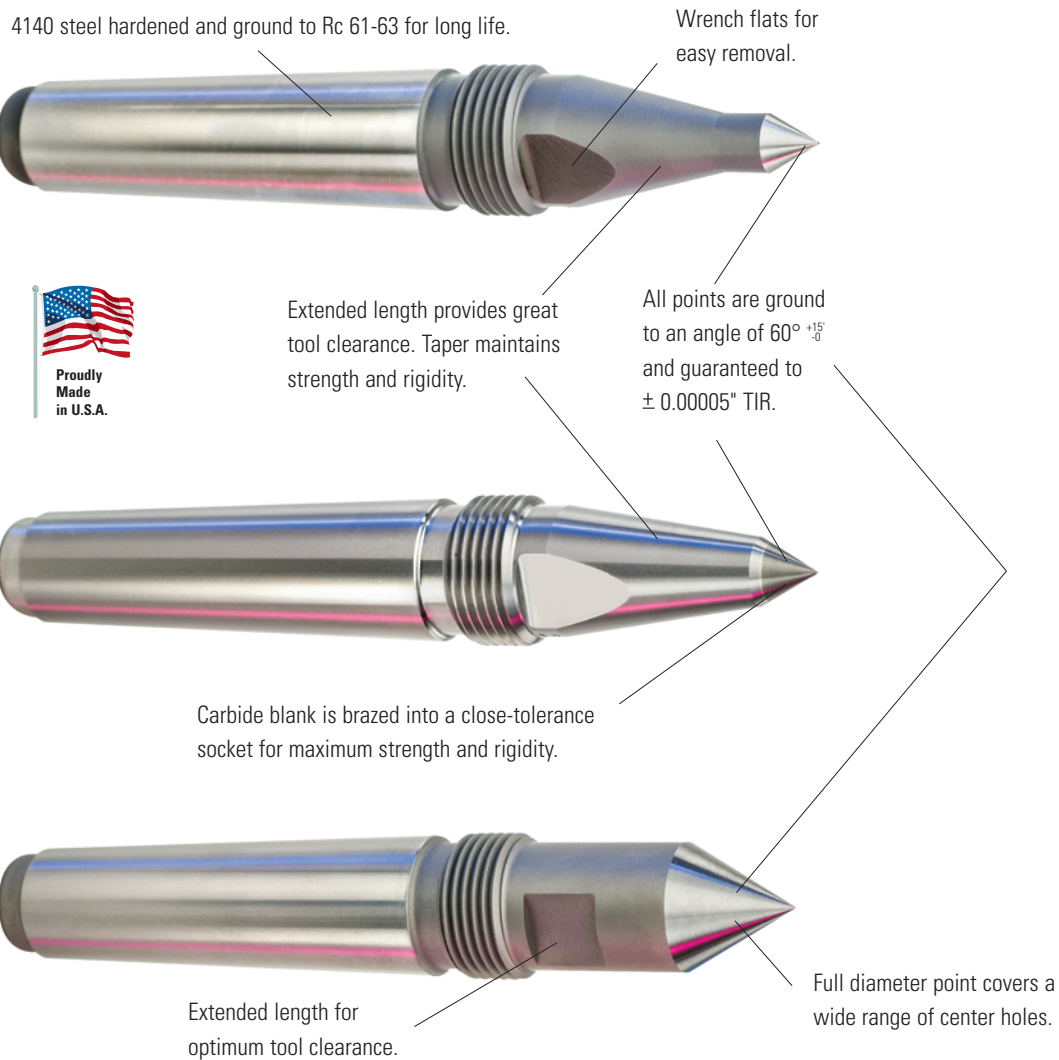
- Excellent for grinding and high precision turning applications.
- Oversized carbide point covers a wider range of center holes and provides great wear resistance.

TAPER A	B	C	D	E	CARBIDE DIAMETER F	PART NUMBER	PRICE
4 MT	6.75	4.06	1.231	1.75	1.25	11526	<b>\$629</b>
5 MT	8.50	5.19	1.748	1.75	1.25	11527	<b>846</b>

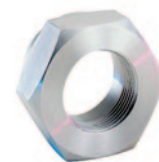


# ROYAL CNC THREADED DEAD CENTERS

## Great For Live Tailstocks and Precision Grinding

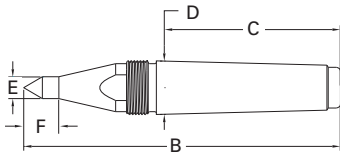


- ❑ Royal threaded dead centers are designed for use in CNC turning centers with **live tailstocks**.
- ❑ These dead centers are also widely used in precision grinding applications.
- ❑ Available in several styles to suit a wide range of applications.
  - CNC Point
  - Carbide-Tipped CNC Point
  - Full Diameter Extended Point
- ❑ Longer than normal gage length on all models provides outstanding clearance.
- ❑ Extraction nut and wrench flats enable easy removal from tailstock/spindle.



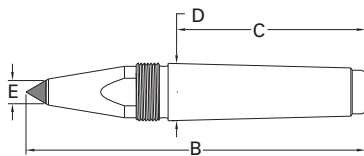
Extraction nut allows for easy removal from spindle. Order separately.

# ROYAL CNC THREADED DEAD CENTERS



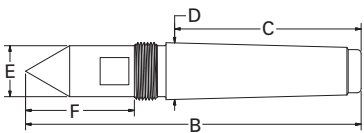
## Royal CNC Threaded Dead Centers

TAPER A	B	C	D	E	F	THREAD	DEAD CENTER		EXTRACTION NUT	
							PART NUMBER	PRICE	PART NUMBER	PRICE
3 MT	5.94	3.19	0.938	0.38	0.63	1"-14	11530	<b>\$288</b>	11550	<b>\$70</b>
4 MT	7.31	4.06	1.231	0.50	0.81	1¼"-14	11531	<b>349</b>	11551	<b>84</b>
4 MT	7.31	4.06	1.231	0.75	1.18	1¼"-14	11535	<b>349</b>	11551	<b>84</b>
5 MT	8.44	5.19	1.748	0.50	0.81	1¾"-12	11532	<b>498</b>	11552	<b>95</b>
5 MT	8.44	5.19	1.748	0.75	1.18	1¾"-12	11537	<b>498</b>	11552	<b>95</b>



## Royal CNC Threaded Dead Centers with Carbide-Tipped Point

TAPER A	B	C	D	E	THREAD	DEAD CENTER		EXTRACTION NUT	
						PART NUMBER	PRICE	PART NUMBER	PRICE
3 MT	5.94	3.19	0.938	0.38	1"-14	11540	<b>\$391</b>	11550	<b>\$70</b>
4 MT	7.31	4.06	1.231	0.50	1¼"-14	11541	<b>470</b>	11551	<b>84</b>
5 MT	8.44	5.19	1.748	0.50	1¾"-12	11542	<b>605</b>	11552	<b>84</b>



## Royal Full Diameter Extended Point Threaded Dead Centers

TAPER A	B	C	D	E	F	THREAD	DEAD CENTER		EXTRACTION NUT	
							PART NUMBER	PRICE	PART NUMBER	PRICE
3 MT	5.94	3.19	0.938	0.86	1.88	1"-14	11534	<b>\$288</b>	11550	<b>\$70</b>
4 MT	7.31	4.06	1.231	1.11	2.37	1¼"-14	11536	<b>349</b>	11551	<b>84</b>
5 MT	8.44	5.19	1.748	1.25	2.36	1¾"-12	11539	<b>498</b>	11552	<b>95</b>