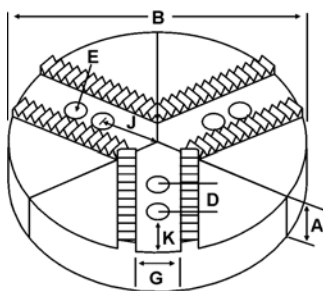
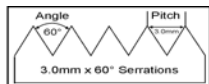
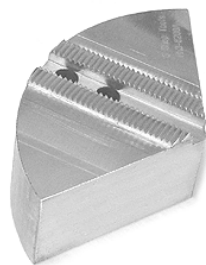


ROUND JAWS- 3.0 mm x 60° Serrations

FOR USE ON: **MMK Matsumoto, Howa & Other Chucks**



WARNING!
These jaw have 3.0mm x 60° serrations. Jaws using 1.5mm x 60° serrations can be found on pages 18-31



- Round Jaws allow for complete gripping of workpiece
- Oversized jaws available
- Ideal for thin-walled or irregular shaped workpieces.
- Can be machined to fit workpiece
- Max. length of serrations: 5.75"
- All jaws have 2 holes
- Special "J" dimensions available
- Available in Aluminum, Cast Iron & Steel
- **Made in the USA**

Group

K3



Group No.	Chuck Size	Critical Dimensions				Hole to Front J	Pie Dia B	Height Inch A	Industry Ref #	ALUMINUM		CAST IRON		STEEL	
		Groove Width G	Screw Size E	Hole Space D	Part Number					Price Set of 3	Part Number	Price Set of 3	Part Number	Price Set of 3	
K3-12-20	6	0.472 (12mm)	10mm	0.787 (20mm)	1.375	6	2.00	-	RH3-6200A	\$69.10	RH3-6200CI	\$89.60	RH3-6200S	\$161.92	
							4.00	-	RH3-6400A	\$108.34	-	-	-	-	
K3-14-25	8	0.551 (14mm)	12mm	0.985 (25mm)	2.250	8	2.00	HOW8P	RH3-8200A	\$87.00	RH3-8200CI	\$115.20	RH3-8200S	\$235.52	
							4.00	HOW8P1	RH3-8400A	\$130.77	RH3-8400CI	\$217.59	-	-	
							2.00	-	10-RH3-8200A	\$136.45	-	-	-	-	
							10	2.00	-	12-RH3-8200A*	\$177.32	-	-	-	-
K3-15-30	10	0.591 (15mm)	12mm	1.181 (30mm)	2.250	12	2.00	-	RH3-10204A	\$136.45	RH3-10204CI	\$172.80	-	-	
						2.375	10	4.00	-	RH3-10404A	\$210.47	-	-	-	-
K3-16-30	10	0.630 (16mm)	12mm	1.181 (30mm)	2.375	10	2.00	-	RH3-10200A	\$120.78	RH3-10200CI	\$172.80	RH3-10200S	\$338.55	
						3.000	10	2.00	HOW10P	RH3-10200A4	\$120.78	-	-	-	-
						2.375	10	4.00	-	RH3-10400A	\$187.42	-	-	-	-
						3.000	10	4.00	HOW10P1	RH3-10400A4	\$187.42	-	-	-	-
						10	5.00	-	RH3-10500A*	\$280.05	-	-	-	-	-
						12	2.50	-	12-RH3-10250A*	\$220.64	-	-	-	-	-
						4.00	-	12-RH3-10400A*	\$351.92	-	-	-	-	-	
						2.50	-	15-RH3-10250A*	\$340.00	-	-	-	-	-	
						4.00	-	15-RH3-10400A*	\$481.98	-	-	-	-	-	
						21	2.50	-	21-RH3-10250A*	\$719.47	-	-	-	-	
K3-18-30	12	0.709 (18mm)	14mm	1.181 (30mm)	3.625	12	2.00	HOW12P	RH3-12200A	\$177.32	RH3-12200CI	\$255.99	-	-	
						2.50	-	RH3-12250A	\$220.64	-	-	-	-		
						3.00	-	RH3-12300A	\$247.46	-	-	-	-		
						4.00	HOW12P1	RH3-12400A	\$306.48	-	-	-	-		
						5.00	-	RH3-12500A	\$392.41	-	-	-	-		
						2.50	-	15-RH3-12250A	\$340.00	-	-	-	-		
						3.00	HOW15-12P	15-RH3-12300A	\$425.00	-	-	-	-		
						18	3.00	HOW18-12P	18-RH3-12300A	\$555.00	-	-	-		

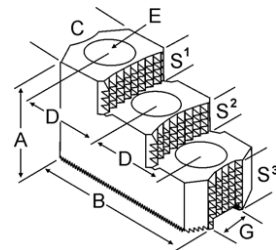
Round Jaw Material: ALUMINUM-6061-T6 Bar Stock, CAST IRON-Gray, STEEL-1018, 18" & Larger- Aluminum Casting T6
For complete list of applicable chucks, see pages 632-644. * denotes non-stock item. Please allow 1 week manufacturing time.

HARD JAWS-2 STEP 3.0mm X 60° SERRATIONS



FEATURES:

- Designed for first operation roughing, expect standard runout between 0.005-0.010
- Reversible-suitable for OD & ID workholding.
- **XTRA BITE** - very aggressive bite. Has conical teeth for extra gripping power and ground body to provide improved runout.
- 1 & 2 step jaws available.



Group Number	Chuck Size	Critical Dimensions				Width Inch C	OAL Inch B	Height Inch A	No. of Holes	No. of Steps	Top Step Ht S1	Mid Step Ht S2	Bot Step Ht S3	Part Number	Price Per Set
		Groove Width G	Screw Size E	Hole Space D	Hole Space D										
K3-16-30	10	0.630 (16mm)	12mm	1.181 (30mm)	1.750	4.250	2.500	3	2	0.650	0.650	1.200	H3-100HJ2-X	\$617.50	
K3-18-30	12	0.710 (18mm)	14mm	1.181 (30mm)	1.750	4.875	2.469	3	2	0.650	0.650	1.169	H3-120HJ2-X	\$665.00	
	15-20	1.023 (26mm)	20mm	1.969 (50mm)	2.500	6.500	3.469	3	2	0.950	0.950	1.569	H3-150HJ2-X	\$791.67	

Call Us Today For All Of Your Machine Tool Needs!

2010-11 Master Catalog

SOFT JAWS- 3.0 mm x 60° Serrations

C

LATHE CHUCKS
LIVE CENTERS

VICE JAWS
VICE ACCESSORIES

STRAIGHT SHANK
COLLET HOLDERS

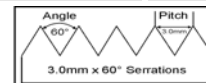
LATHE BUSHINGS
DRILL CHUCKS

CARBIDE INSERTS
THREADING/GROOVING

CUTTING TOOLS
MACHINERY

PRECISION TOOLS
DEBURRING

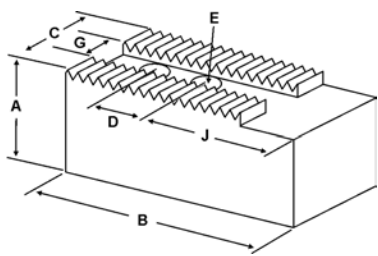
COOLANT/LUIDS
TOOL STORAGE



WARNING!
These jaw have **3.0mm x 60°** serrations. Jaws using **1.5mm x 60°** serrations can be found on pages **18-31**

- Supplies maximum concentricity on finish turning operations
- Can be bored or turned to fit workpiece
- Steel jaws can be hardened
- Available flat ended or pointed for smaller diameter parts
- Special orders available
- Available in Aluminum, Steel & Aircraft Aluminum (where noted)
- **Made in the USA**

QUANTITY DISCOUNTS!
Order **5 SETS OR MORE** of the same part number soft jaw and receive a **5% DISCOUNT!**



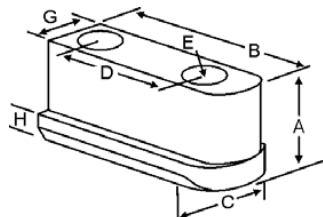
Group No.	Chuck Size	Critical Dimensions				ALUMINUM				STEEL			
		Groove Width G	Screw Size E	Hole Space D	Hole to Front J	Width Inch C	Length Inch B	Hght Inch A	No. of Holes	FLAT END Part Number	Price Set Of 3	FLAT END Part Number	Price Set Of 3
K3-12-20	6	0.472 (12mm)	10mm	0.787 (20mm)	1.375	1.250	2.750	1.50	2	H3-6150AF	\$37.74	H3-6150F	\$40.58
H-6,HA5-6 HO1MA6								2.50	2	H3-6250AF	\$52.08	H3-6250F	\$55.88
K3-14-25	8	0.551 (14mm)	12mm	0.985 (25mm)	2.000	1.500	3.750	2.00	2	H3-8200AF	\$50.14	H3-8200F	\$53.58
HJ-08 HO1MA8								4.00	2	H3-8400AF	\$66.41	H3-8400F	\$70.41
K3-15-30	10 to 12	0.591 (15mm)	12mm	1.181 (30mm)	2.625	1.500	4.750	2.00	2	H3-10204AF	\$54.57	H3-10204F	\$58.18
								4.00	2	H3-10404AF	\$72.46	H3-10404F	\$76.56
K3-16-30	10 to 12	0.630 (16mm)	12mm	1.181 (30mm)	2.625	1.500	4.750	2.00	2	H3-10200AF	\$54.57	H3-10200F	\$58.18
HW-10,HW-12 HO1MA10								4.00	2	H3-10400AF	\$72.46	H3-10400F	\$76.56
K3-18-30	10 to 14	0.709 (18mm)	14mm	1.181 (30mm)	3.125	2.000	5.500	2.50	2	H3-12250AF	\$72.39	H3-12250F	\$76.56
HO1MA12								4.00	2	H3-12400AF	\$94.67	H3-12400F	\$99.51

For "Pointed" Soft Jaws, please substitute "P" for "F" in the part number. Example: H3-6150AF will be H3-6150AP
For Pointed Jaws: Up to 10" add \$3.25. 12" and over add \$6.50
Soft Jaw Material: ALUMINUM-6061-T6 Bar Stock, STEEL-1018, "B" JAWS-7075-T6 Aircraft Aluminum
For complete list of applicable chucks, see pages 632-644. * denotes non-stock item. Please allow 1 week manufacturing time.

JAW NUTS & SCREWS



FREE SCREWS!
2 High Grade Socket Head Cap Screws Provided With Each Jaw Nut!



Chuck Make & Model	Critical Dimensions				2 Screws Included With Each Jaw Nut						
	Heel Height H	Groove Width G	Screw Size E	Hole Space D	Hght Inch A	Width Inch C	Length Inch B	Jaw Nut Part Number	Price Each	Screw Part Number	Price Each
MMK:HO15M6,HO22M6,HO24M6, HO27M6 Howa: HJ-06	0.295	0.472 (12mm)	M10-1.60 x 30mm	0.787 (20mm)	0.847	0.669	1.460	H3-60JN	\$26.50	M1016030	\$2.00
-	0.340	0.628 (16mm)	M12-1.75 x 35mm	1.181 (30mm)	1.000	0.910	2.000	H3-100JN	\$51.54	M1217535	\$2.00

POWER CHUCK LUBRICANT



- FEATURES:**
- Double to Triple Clamping Pressure.
 - Keeps Work Piece Clamped in Place.
 - Provides Boundary Lubrication Protection.
 - Lowers Friction and Wear.
 - Assists in Wear-In of New Chucks
 - Lowers Maintenance Costs.
 - High Resistance to Centrifuge Force.

REMINDER!
For optimum performance, it is recommended that you grease your chuck *once per shift.*



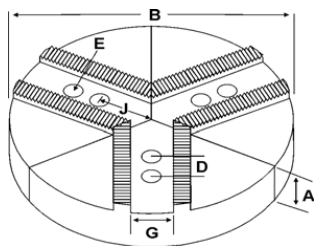
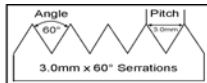
Quantity Discounts	
Each	List
12-23	Save 10%
24-35	Save 12%
36 +	Save 15%

Container Size	Case Qty	Part Number	Price Each
4 Oz Cartridge	24	EZ-21471	\$5.86
4 Oz Cartridge w/ grease gun	each	EZ-OKIT-21471	\$31.93
16 Oz Cartridge	12	EZ-21478	\$17.93
10 Lb Pail	each	EZ-21444	\$146.98
40 Lb Pail	each	EZ-21445	\$561.04
135 Lb Keg	each	EZ-21446	\$1,848.83
450 Lb Drum	each	EZ-21448	\$5,894.85

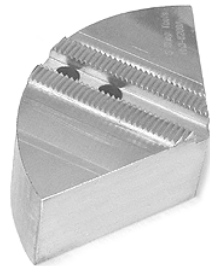
Call Us Or Visit Our Website For Our Complete Selection!

ROUND JAWS- 3.0 mm x 60° Serrations

FOR USE ON: **MMK Matsumoto, Howa & Other Chucks**



WARNING!
These jaw have 3.0mm x 60° serrations. Jaws using 1.5mm x 60° serrations can be found on pages 18-31



- Round Jaws allow for complete gripping of workpiece
- Oversized jaws available
- Ideal for thin-walled or irregular shaped workpieces.
- Can be machined to fit workpiece
- Max. length of serrations: 5.75"
- All jaws have 2 holes
- Special "J" dimensions available
- Available in Aluminum & Cast Iron
- **Made in the USA**

Group **K3**



Group No.	Chuck Size	Critical Dimensions			Hole to Front J	Pie Dia B	Height Inch A	Industry Ref #	ALUMINUM		CAST IRON					
		Groove Width G	Screw Size E	Hole Space D					Part Number	Price Set of 3	Part Number	Price Set of 3				
K3-21-40	15	0.827 (21mm)	16mm	1.575 (40mm)	3.187	15	2.50	-	RH3-15258A	\$331.00	RH3-15258CI	\$447.98				
						4.125	15	3.00	HOW7MA15P	RH3-15308A4	\$425.00	-	-			
						3.187	15	4.00	-	RH3-15408A	\$481.98	-	-			
					0.826		4.125	15	4.00	HOW7MA15P1	RH3-15408A4	\$481.98	-	-		
K3-22-50	15-18	0.866 (22mm) (some mfg's refer to this as 0.868)	20mm	1.969 (50mm)	3.750	15	2.50	-	RM3-15250A	\$331.00	RM3-15250CI	\$447.98				
							4.125	15	3.00	MTT15P	RM3-15300A4	\$425.00	-	-		
							3.750	15	4.00	-	RM3-15400A	\$481.98	-	-		
							4.125	15	4.00	MTT15P1	RM3-15400A4	\$481.98	-	-		
							3.750	15	6.00	-	RM3-15600A*	\$777.87	-	-		
							4.125	15	6.00	MTT15P6	RM3-15600A4	\$777.87	-	-		
							3.750	18	2.50	-	18-RM3-15250A	\$499.54	-	-		
							4.125	18	3.00	MTT18-15P	18-RM3-15300A4	\$555.00	-	-		
							3.750	18	4.00	-	18-RM3-15400A	\$674.80	-	-		
							4.125	18	4.00	MTT18-15P1	18-RM3-15400A4	\$674.80	-	-		
							3.750	21	2.50	-	21-RM3-15250A	\$699.00	-	-		
							4.125	21	3.00	MTT21-15P	21-RM3-15300A4	\$699.00	-	-		
							3.750	21	4.00	-	21-RM3-15400A	\$899.87	-	-		
							4.125	21	4.00	MTT21-15P1	21-RM3-15400A4	\$899.87	-	-		
							3.750	24	2.50	-	24-RM3-15250A	\$867.50	-	-		
			3.750	24	4.00	-	24-RM3-15400A*	\$1,252.35	-	-						
K3-25-60	18-24	0.984 (25mm) (some mfg's refer to this as .985)	20mm	2.360 (60mm)	4.000	15	4.00	-	15-RK3-21400A	\$481.98	-	-				
									18	2.50	-	RK3-18250A	\$499.84	-	-	
										4.00	-	RK3-18400A	\$674.80	-	-	
								2.362 (60mm)	4.750	18	3.00	KTT18-21P	18-RK3-21300A4	\$555.00	-	-
										4.00	KTT18-21P1	18-RK3-21400A4	\$674.80	-	-	
									21	2.00	KTT21P2	RK3-21200A4	\$548.00	-	-	
								2.360 (60mm)	4.000	21	2.50	-	RK3-21250A	\$699.00	-	-
										4.00	-	RK3-21400A	\$899.87	-	-	
								2.362 (60mm)	4.750	21	3.00	KTT21P	RK3-21300A4	\$699.00	-	-
										4.00	KTT21P1	RK3-21400A4	\$899.87	-	-	
									24	2.00	KTT24-21P2	24-RK3-21200A4	\$798.00	-	-	
								2.360 (60mm)	4.000	24	2.50	-	24-RK3-21250A	\$867.50	-	-
										4.00	-	24-RK3-21400A	\$1,252.35	-	-	
									6.000	24	2.50	-	24-RK3-21250A-6	\$867.50	-	-
								2.362 (60mm)	4.750	24	3.00	KTT24-21P	24-RK3-21300A4	\$970.00	-	-
						4.00	KTT24-21P1	24-RK3-21400A4	\$970.00	-	-					
					7.500	24	2.00	KTT24P2	RK3-24200A	\$798.00	-	-				
						3.00	KTT24P	RK3-24300A	\$970.00	-	-					
						4.00	KTT24P1	RK3-24400A	\$1,252.35	-	-					
					4.750	28	3.00	KTT28-21P	28-RK3-21300A	\$1399.00	-	-				
						4.00	KTT28-21P1	28-RK3-21400A	\$1990.00	-	-					
					7.500	28	3.00	KTT28-24P	28-RK3-24300A	\$1399.00	-	-				
						4.00	KTT28-24P1	28-RK3-24400A	\$1990.00	-	-					
K3-25-80	24	0.984 (25mm)	20mm	3.150 (80mm)	3.850	24	2.50	-	RK3-24250A	\$867.50	-	-				
							4.00	-	RK3-24400A	\$1,252.35	-	-				
K3-26-42	15	1.023 (26mm)	20mm	1.656 (42mm)	3.437	15	2.50	-	RH3-15254A	\$331.00	RH3-15254CI	\$447.98				
			1.025	20mm	1.653	4.313	15	3.00	HOW27M15P	RH3-15404A	\$481.98	-	-			
							4.00	-	RH3-15404A	\$481.98	-	-				
							3.00	HOW27M15P	RH3-15304A4	\$425.00	-	-				
K3-26-50	18-20	1.023 (26mm)	20mm	1.969 (50mm)	3.437	15	2.50	-	RH3-15250A	\$331.00	RH3-15250CI	\$447.98				
											4.00	HOW15P1	RH3-15400A	\$481.98	-	-
											24	2.50	-	24-RH3-15250A*	\$867.50	-

Round Jaw Material: ALUMINUM-6061-T6 Bar Stock, CAST IRON-Gray, STEEL-1018. 18" & Larger- Aluminum Casting T6
For complete list of applicable chucks, see pages 632-644.
* denotes non-stock item. Please allow 1 week manufacturing time.

Call Us Today For All Of Your Machine Tool Needs!

2010-11 Master Catalog

SOFT JAWS- 3.0 mm x 60° Serrations

C

LATHE CHUCKS
LIVE CENTERS

WISE ACCESSORIES

STRAIGHT SHANK
COLLET HOLDERS

LATHE BUSHINGS
DRILL CHUCKS

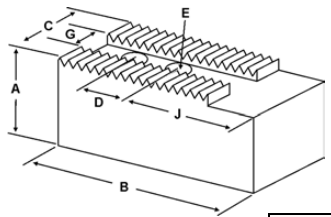
CARBIDE INSERTS
THREADING/GROOVING

CUTTING TOOLS
MACHINERY

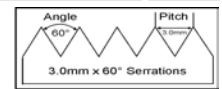
PRECISION TOOLS
DEBURRING

COOLANT/FLUIDS
TOOL STORAGE

FOR USE ON: **MMK Matsumoto, Howa & Other Chucks**



WARNING!
Make sure that you are looking for jaws with **3.0mm x 60°** serrations. Jaws using **1.5mm x 60°** serrations can be found on pages **18-31**



Group **K3**

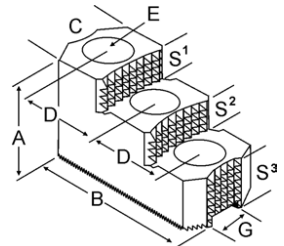
QUANTITY DISCOUNTS!
Order **5 SETS OR MORE** of the same part number soft jaw and receive a **5% DISCOUNT!**

Group No.	Chuck Size	Critical Dimensions				Hole to Front J	Width Inch C	Length Inch B	Hght Inch A	No. of Holes	ALUMINUM		STEEL	
		Groove Width G	Screw Size E	Hole Space D	FLAT END Part Number						Price Set Of 3	FLAT END Part Number	Price Set Of 3	
K3-21-40	15	0.827 (21mm)	16mm	1.575 (40mm)	3.187	2.000	6.000	2.50	2	H3-15258AF	\$93.73	H3-15258F	\$99.51	
4.00								2	H3-15408AF*	\$117.05	H3-15408F*	\$122.46		
4.50								2	H3-15458AF	\$116.09	H3-15458F	\$122.46		
K3-22-50	15 - 18	0.866 (22mm)	20mm	1.969 (50mm)	3.187	2.500	6.250	2.50	2	M3-15250AF	\$104.20	M3-15250F	\$110.23	
3.00								2	M3-15300AF	\$108.95	M3-15300F	\$114.82		
4.00								2	M3-15400AF	\$131.17	M3-15400F	\$137.78		
5.00								2	M3-15500AF	\$208.71	M3-15500F	\$215.00		
6.00								2	M3-15600AF	\$264.29	M3-15600F	\$255.85		
K3-25-51	18 - 21	0.984 (25mm)	20mm	2.000 (51mm)	5.430	2.50	8.500	4.00	2	K3-21403AF*	\$156.03	K3-21403F*	\$169.28	
K3-25-60	18 - 21	0.984 (25mm)	20mm	2.360 (60mm)	3.070	2.500	7.000	2.50	2	K3-21250AF	\$114.17	K3-21250F	\$120.72	
4.00								2	K3-21400AF	\$137.64	K3-21400F	\$144.26		
6.00								2	K3-21600AF	\$283.68	K3-21600F	\$250.24		
K3-25-80	24	0.984 (25mm)	20mm	3.150 (80mm)	3.850	3.000	8.500	2.50	2	K3-24250AF	\$221.34	K3-24250F	\$235.52	
4.00								2	K3-24400AF	\$291.73	K3-24400F	\$309.11		
K3-26-42	15	1.023 (26mm)	20mm	1.656 (42mm)	2.687	2.000	5.750	2.50	2	H3-15254AF	\$79.53	H3-15254F	\$84.19	
4.00								2	H3-15404AF	\$101.86	H3-15404F	\$107.17		
K3-26-50	18 - 20	1.023 (26mm)	20mm	1.969 (50mm)	3.187	2.500	6.250	2.50	2	H3-15250AF	\$104.20	H3-15250F	\$110.23	
4.00								2	H3-15400AF	\$131.17	H3-15400F	\$137.78		
5.00								2	H3-15500AF	\$181.57	H3-15500F	\$191.36		

For "Pointed" Soft Jaws, please substitute "P" for "F" in the part number. Example: H3-15258AF will be H3-15258AP. Pointed Jaws Add \$6.50.
Soft Jaw Material: ALUMINUM-6061-T6 Bar Stock, STEEL-1018, "B" JAWS-7075-T6 Aircraft Aluminum
For complete list of applicable chucks, see pages 632-644. * denotes non-stock item. Please allow 1 week manufacturing time.

HARD JAWS-2 STEP 3.0mm X 60° SERRATIONS

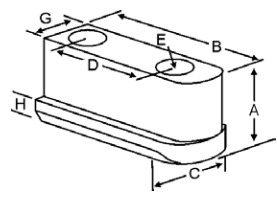
- Designed for first operation roughing, expect standard runout between **0.005-0.010**
- Reversible-suitable for OD & ID workholding.
- **XTRA BITE** - very aggressive bite. Has conical teeth for extra gripping power and ground body to provide improved runout.
- 1 & 2 step jaws available.



XTRA BITE

Group Number	Chuck Size	Critical Dimensions											Part Number	Price Per Set
		Groove Width G	Screw Size E	Hole Space D	Width C	OAL B	Height A	No. of Holes	No. of Steps	Top Step Ht S1	Mid Step Ht S2	Bot Step Ht S3		
K3-22-50	15	0.866 (22mm)	20mm	1.969 (50mm)	2.500	6.500	3.469	3	2	0.950	0.950	1.569	M3-150HJ2-X	\$791.67
K3-25-49	18-24	0.984 (25mm)	20mm	1.907 (48.5mm)	2.500	6.500	3.469	3	2	0.950	0.950	1.569	K3-240HJ2-X	\$791.67

JAW NUTS & SCREWS



FREE SCREWS!
2 High Grade Socket Head Cap Screws Provided With Each Jaw Nut!

USST

Chuck Make & Model	Chuck Size	Heel Height H	Critical Dimensions				Hght Inch A	Width Inch C	Length Inch B	2 Screws Included With Each Jaw Nut			
			Groove Width G	Screw Size E	Hole Space D	Jaw Nut Part Number				Price Each	Screw Part Number	Price Each	
MMK: HO15M15	15	0.413	0.826(21mm)	M16-2.00 x 40mm	1.575(40mm)	1.141	1.000	2.560	H3-158JN	\$39.75	M1620040	\$2.00	
Kitagawa: B-21,B-24	18 - 24	0.748	0.984(25mm)	M20-2.50 x 50mm	2.362(60mm)	1.772	1.476	3.543	KT-240JN	\$53.28	M2025050	\$3.00	
-	21-24	0.748	0.984(25mm)	M20-2.50 x 50mm	T-Nut	1.772	1.476	1.811	KT-210JN	\$43.46	M2025050	\$3.00	
MMK: HO27M15	15	0.669	1.022(26mm)	M20-2.50 x 50mm	1.654(42mm)	1.570	1.339	2.750	H3-154JN	\$39.75	M2025050	\$3.00	
-	18 - 20	0.669	1.022(26mm)	M20-2.50 x 50mm	1.968(50mm)	1.575	1.339	3.250	H3-150JN	\$56.30	M2025050	\$3.00	

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