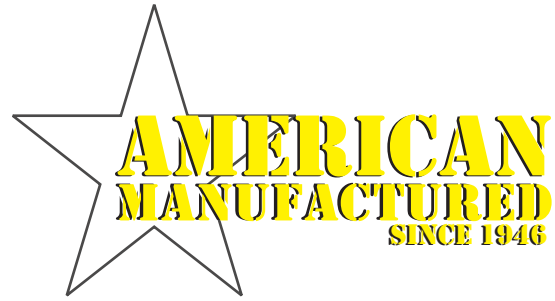


HOWA POWER CHUCKS

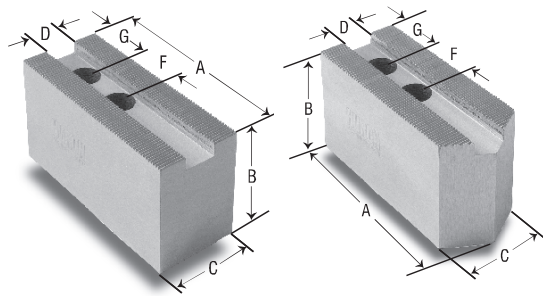
MODEL: HO1MA & FUJI CHUCKS

JAW LOCK: SERRATED 3mm (.1181) X 60°



SOFT JAWS

AVAILABLE IN STEEL, ALUMINUM, OR SPECIAL



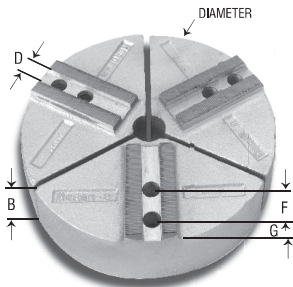
CHUCK SIZE	S T E E L						CRITICAL DIMENSIONS			
	STANDARD HEIGHT			EXTRA HIGH			D	F	G	SCREW SIZE
	ORDER #	A	B	C	ORDER #	B				
6	6FSH	2.75	1.50	1.25	6FEH	3.00	.472	.787	.591	M10
8	8FSH	3.75	2.00	1.50	8FEH	4.00	.551	.984	1.00	M12
10	10FSH	4.75	2.00	1.75	10FEH	4.00	.630	1.181	1.888	M12
10HD	11FSH	4.75	2.00	1.75	11FEH	4.00	.591	1.181	1.125	1/2
12	12FSH	5.50	2.50	2.00	12FEH	4.00	.710	1.181	1.188	M14
15	15FSH	5.75	2.50	2.50	15FEH	4.00	1.023	1.969	.985	M20

SOFT JAWS are for minimum marring and can be bored and turned to suit any work piece. POINTED SOFT JAWS are used for small diameter parts. STEEL soft jaws are made from 1018 Cold Roll and can be case hardened. ALUMINUM soft jaws are made from 6061-T6 weldable.

When ordering ALUMINUM SOFT JAWS put an "A" before order # EX: A6FSH. When ordering POINTED SOFT JAWS put a "P" after order # EX: 6FSHP

FULL GRIPS

AVAILABLE IN ALUMINUM, CAST IRON, STEEL OR SPECIAL



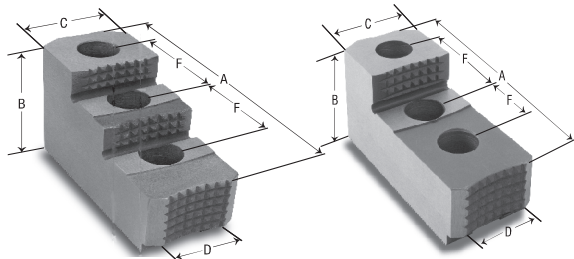
CHUCK DIAM. SIZE	A L U M I N U M						CRITICAL DIMENSIONS				
	STANDARD HEIGHT			EXTRA HIGH			D	F	G	SCREW SIZE	
	ORDER #	B	B*	ORDER #	B	B*					
6	6	A6FSHFG	2.00	1.75	A6FEHFG	4.00	2.75	.472	.787	.591	M10
8	10	A8FSHFG	2.00	1.75	A8FEHFG	4.00	3.25	.551	.984	1.00	M12
10	10	A10FSHFG	2.00	1.75	A10FEHFG	4.00	3.25	.630	1.181	1.888	M12
10HD	10	A11FSHFG	2.00	1.75	A11FEHFG	4.00	3.25	.591	1.181	1.125	1/2
12	12	A12FSHFG	2.00	2.00	A12FEHFG	4.00	3.50	.710	1.181	1.188	M14
15	15	A15FSHFG	2.50	2.13	A15FEHFG	4.00	3.63	1.023	1.969	.985	M20

FULL GRIPS are for thin wall and irregular shaped parts and can be machined to suit any work piece. ALUMINUM full grips are made from SR319 weldable. CAST IRON full grips are made from F/6 weldable gray class 30 with 30,000lbs. Tensile strength.

B* is the dimension for CAST IRON Full Grips. When ordering CAST IRON FULL GRIPS put a "C" before Order # EX: C6FSHFG. When ordering STEEL FULL GRIPS drop "A" OR "C" before order # EX: 6FSHFG.

HARD JAWS

AVAILABLE IN STEEL OR SPECIAL

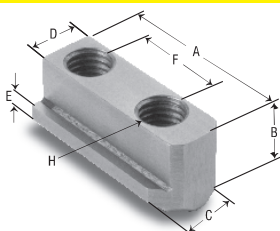


CHUCK SIZE	S T E E L								CRITICAL DIMENSIONS		
	1-STEP		2-STEP		1-STEP		2-STEP		D	F	SCREW SIZE
	ORDER #	ORDER #	A	B	B	C	HEIGHT TO 1st STEP	HEIGHT TO 2nd STEP			
6	6FSHRJ	6FSHRJ2S	2.724	1.75	2.00	1.25	1.140	1.500	.472	.787	M10
8	8FSHRJ	8FSHRJ2S	3.576	2.00	2.50	1.50	1.130	1.812	.551	.984	M12
10	10FSHRJ	10FSHRJ2S	4.009	2.00	2.50	1.50	1.125	1.812	.630	1.181	M12
12	12FSHRJ	12FSHRJ2S	4.020	2.25	2.50	1.75	1.250	2.000	.710	1.190	M14

HARD JAWS are reversible for ID & OD gripping and are for first operation roughing. HARD JAWS are made from 1018 case hardened to 56-58 rockwell .020 to .030 deep.

For Immediate Assistance Call 1-800-327-8186

JAW NUTS



CHUCK SIZE	S T E E L					CRITICAL DIMENSIONS			
	ORDER #	A	B	C		D	E	F	THREAD SIZE
6	HO15M6JN	1.50	.846	.669		.472	.295	.787	M10-1.50
8	HO15M8JN	1.81	.925	.787		.551	.335	.984	M12-1.75
10	HO1MA10JN	2.09	.925	.905		.629	.334	1.181	M12-1.75
12	HO1MA12JN	2.36	1.29	1.102		.709	.551	1.181	M14-2.00
15	HO1MA15JN	3.23	1.57	1.340		1.02	.669	1.969	M20-2.50

JAW NUTS are for locating and positioning top jaws to the chuck's master jaw. JAW NUTS are made from 4140 Pre-Heat Treat to RC 28-32.