



TEN SOON

Users' Experience is our Priority!

MACHINE TOOL ACCESSORIES
PRODUCT
CATALOGUE
2018

Provides Solution

to all your machining requirements.

Committed to customer satisfaction through quality product and service provision, Ten Soon Machine Tools provides precision cutting tools, Machine Tool Accessories and Machine Tool Holders; enabling its clients to focus on efficient machining. It offers variety of innovative products contemporaneous with the industrial and technological progress.

After-sales is also a paramount as Ten Soon closely collaborates with its clients during its growth process, creating mutual benefit, growth, and sustainable development through excellent products with them.



Ten Soon Machine Tools, Inc.

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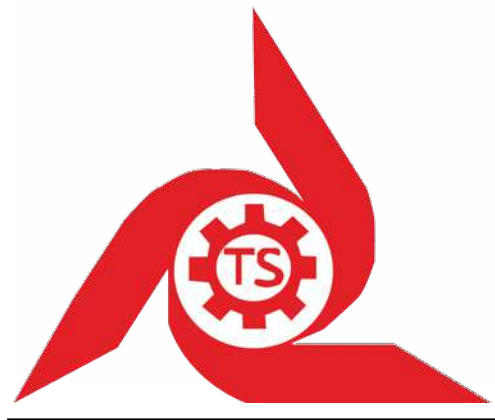


Company Profile

Ten Soon Machine Tools, Inc. (Terng Shuenn) was founded in 1989 at Taipei, Taiwan. With its high quality products and customer-oriented service, Ten Soon became the most famous machine tool accessories supplier in Taiwan.

In 1992, it expanded its business in China with the establishment of Jousn (Ten Soon China) at Dongguan, China, and has established almost 13 branches around the country.

In 2018, Ten Soon Machine Tools was established in Laguna Technopark, Biñan City, Laguna, Philippines. With its company tagline of "*Users' Experience is our Priority*", Ten Soon Machine Tools, Inc. aims to become the leading local and professional machine tools supplier across the national market by providing quality and superior products and service to attain customers' need and satisfaction.



TEN SOON
MACHINE TOOLS, INC.

Users' Experience is Our Priority

is an
authorized distributor
of



Ask for a CATALOG now!



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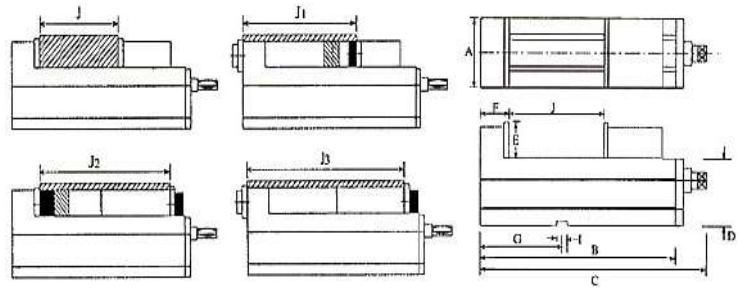
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Milling Machine Accessories

Precision Machine Vise

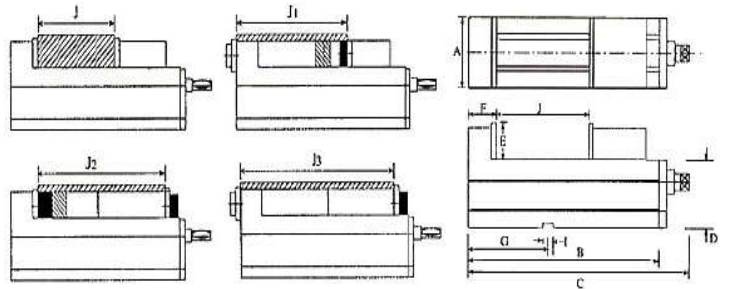
■ RICH-BHV MC Hydraulic Precision Vise



unit: mm

Model	A	B	C	D	E	F	G	I	Jaw Opening (Max)				Clamp Force	Weight (kg)
									J	J1	J2	J3		
RICH BHV - 100V	101	380	480	85	148	80	125	16	135	200	240	330	4000 kgf	27
RICH BHV - 130V	131	445	545	95	55	85	150	18	190	250	300	390	5000 kgf	40
RICH BHV - 160V	161	535	635	105	58	100	165	18	250	330	370	480	5500 kgf	58
RICH BHV - 160VL	161	585	685	105	58	100	165	18	300	380	420	530	5500 kgf	62
RICH BHV - 200V	201	610	710	110	63	108	190	18	300	370	430	550	6900 kgf	81

■ RICH-BV MC Angle Lock Precision Vise



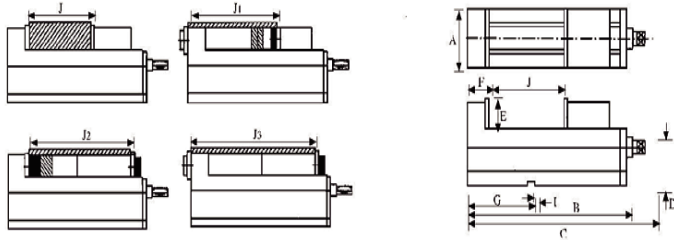
unit: mm

Model	A	B	C	D	E	F	G	I	Jaw Opening (Max)				Weight (kg)
									J	J1	J2	J3	
RICH BV - 100V	101	380	440	85	48	80	125	16	125	190	230	330	26
RICH BV - 130V	131	445	505	95	55	85	150	18	180	240	290	390	39
RICH BV - 160V	161	535	595	105	58	100	165	18	250	330	370	480	59
RICH BV - 160VL	161	585	645	105	58	100	165	18	300	380	420	530	61
RICH BV - 200V	201	610	670	110	63	108	190	18	300	370	430	550	80

MILLING
LATHE
GRINDING
MAGNETIC
MEASURING
OTHERS
HOT SALES

Precision Machine Vice

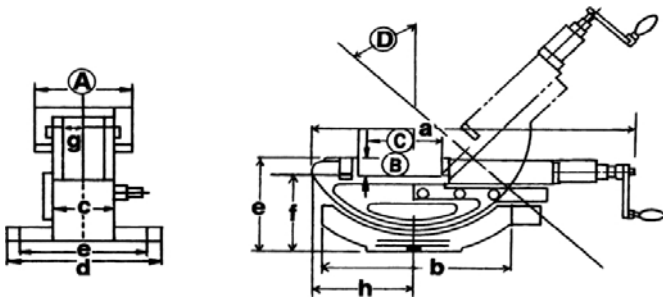
■ RICH-RMV MC Power Vice - Machine Type



unit: mm

Model	A	B	C	D	E	F	G	I	Jaw Opening (Max)				Clamp Force	Weight (kg)
									J	J1	J2	J3		
RICH RMV - 100V	101	400	490	85	48	80	125	16	155	200	240	330	3000 kgf	27 kgs
RICH RMV - 130V	131	465	555	95	55	85	150	18	230	250	300	390	3500 kgf	40 kgs
RICH RMV - 160V	161	555	645	105	58	100	165	18	300	330	370	480	4000 kgf	60 kgs
RICH BMV - 200V	201	630	720	110	63	108	190	18	300	370	430	550	4500 kgf	81 kgs

■ RICH-AHT Tilting Hydraulic Machine Vice

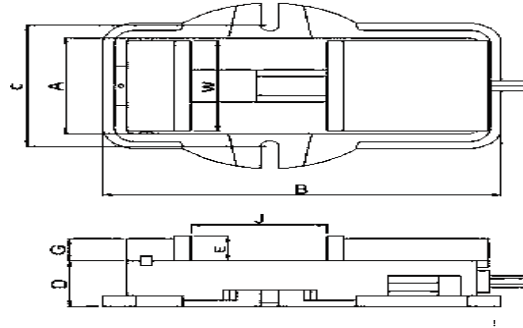


unit: mm

Model	A	B	C	D	a	b	c	d	e	f	g	h	Clamp Force	Weight	
														(Bench)	Rotary Table
RICH AHT4	100	36	0-170	50°	505	325	65	160	177	141	80	184	2500kgf	23	4
RICH AHT6	150	51	0-300	50°	775	410	95	240	237	186	100	240	5000kgf	63	10

Precision Machine Vise

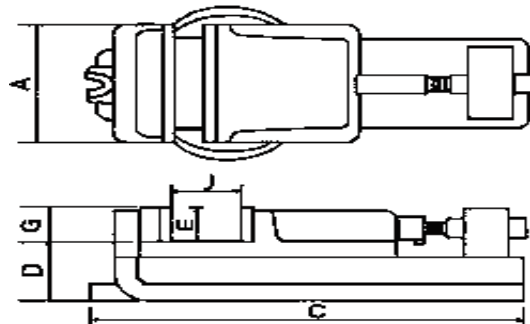
■ RICH-RAV Angle Lock Vise



unit: mm

Model	A	B	D	E	G	W	J	G.W. (kg)
RICH RAV - 4"	106	320	60	36	28	112	100	20
RICH RAV - 5"	138	358	62	36	32	132	110	29
RICH RAV - 6"	155	420	72	48	48	152	150	40
RICH RAV - 6 - 1/2"	154	448	68	50	38	152	200	50
RICH RAV - 8"	206	554	84	63	52	210	200	62

■ RICH-KV K-Type Milling Vise

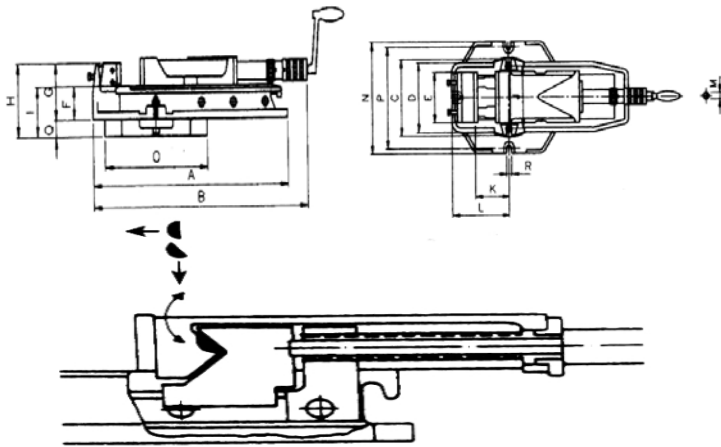


unit: mm

Model	A	B	D	E	G	J	G.W. (kg)
RICH KV - 4"	97	294	48	34	32	60	10
RICH KV - 5"	125	368	60	36	34	80	16
RICH KV - 6"	150	460	65	43	43	115	27
RICH KV - 8"	200	620	85	63	60	150	57

Precision Machine Vice

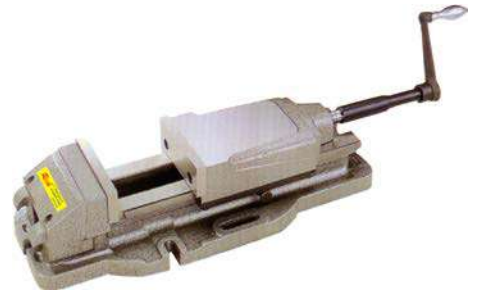
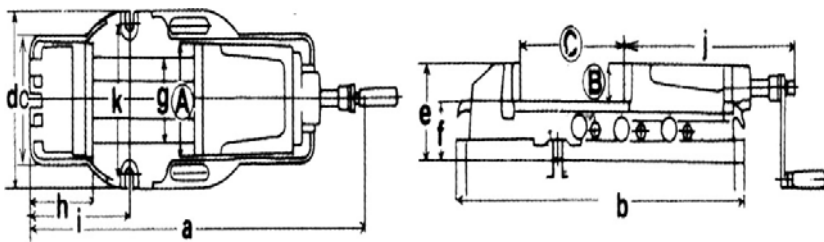
■ RICH-HW Hydraulic Machine Vice



unit: mm

Model	A	B		C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
		Min	Max																
RICH HW - 5	505	570	795	190	170	130	72	127	160	106	75	180	180	14	280	266	260	32	16
RICH HW - 6	605	625	935	240	210	160	82	140	192	117	101	195	195	14	334	320	310	35	18
RICH HW - 8	700	725	1035	280	240	200	100	163	240	146	115	265	265	14	420	420	390	50	18

■ RICH-AH Hydraulic Precision Vice



unit: mm

Model	A	B	C	a	b	c	d	e	f	g	h	i	j	k	Clamp Force	Weight	
																(Bench)	Rotary Table
RICH AH4	100	36	0-170	525	435	395	160	94	58	78	101	155	263	120	2500	18	4
RICH AH5	125	46	0-222	670	540	490	185	117	72	98	112	184	341	145	4000	32	7
RICH AH6	150	51	0-300	800	610	570	240	133	82	116	127	205	380	200	5000	60	10
RICH AH8	200	62	0-300	900	700	650	280	165	100	160	165	265	435	240	7000	90	16

Parallels

■ RICH-U Universal Angle Block Set



unit: Inch

Model	W	H	L	N.W.
RICH - UA	1 ³ / ₁₆ "	1 ³ / ₁₆ "	3"	1.8 kg
RICH - UB	1 ¹ / ₂ "	1 ¹ / ₂ "	4"	3.6 kg

■ RICH-AB Angle Block



unit: Inch

Model	Specifications	Pcs/Set	N.W.
RICH - AB1	1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	10	1 kg
RICH - AB2	1/4°, 1/2°, 1°, 2°, 3°, 4°, 5°, 10°, 15°, 20°, 25°, 30°	12	1.1 kg

■ RICH-GP100 Ground Parallels Set



unit: mm

Model	W	H	L	Pcs
RICH-GP100	5	16	100	2
	6	18	100	2
	8	24	100	2
	10	30	100	2
	12	36	150	2
	14	48	150	2
	18	60	150	2
	22	62	150	2

Parallels

■ RICH-GP85 Ground Parallels Set

unit: mm

Model	W	H	L	Pcs
RICH-GP85 (18 PCS)	8.5	14	150	2
	8.5	16	150	2
	8.5	20	150	2
	8.5	24	150	2
	8.5	30	150	2
	8.5	32	150	2
	8.5	36	150	2
	8.5	40	150	2
	8.5	44	150	2



■ RICH-GP46 Ground Parallels Set

unit: mm

Model	W	H	L	Pcs
RICH-GP46 (12 PCS)	4.6	32	150	2
	4.6	34	150	2
	4.6	36	150	2
	4.6	38	150	2
	4.6	40	150	2
	4.6	42	150	2



■ RICH-GP68 Ground Parallels Set

unit: mm

Model	W	H	L	Pcs
RICH-GP68 (14 PCS)	6.8	15	150	2
	6.8	18	150	2
	6.8	21	150	2
	6.8	25	150	2
	6.8	27	150	2
	6.8	31	150	2
	6.8	35	150	2



Parallels

■ RICH-GP128 Ground Parallels Set



unit: Inch

Model	W	H	L	N.W.
RICH - GP128 (28 PCS)	10	14	150	2
	10	16	150	2
	10	18	150	2
	10	20	150	2
	10	22	150	2
	10	24	150	2
	10	26	150	2
	10	28	150	2
	10	30	150	2
	10	32	150	2
	10	35	150	2
	10	40	150	2
	10	45	150	2
	10	50	150	2

■ RICH-GP136 Ground Parallels Sets



unit: mm

Model	W	H	L	Pcs
RICH-GP136 (36 PCS)	8	16	150	2
	8	18	150	2
	8	20	150	2
	8	22	150	2
	8	24	150	2
	8	26	150	2
	8	28	150	2
	8	30	150	2
	8	32	150	2
	8	34	150	2
	8	36	150	2
	8	38	150	2
	8	40	150	2
	8	42	150	2
8	44	150	2	
8	46	150	2	

Parallels

■ RICH-GP1/4 Ground Parallels Set

unit: Inch

Model	W	H	L	Pcs	Hole
RICH-GP1/4	1/4	1 ³ / ₄	6	2	5/16
	1/4	7/8	6	2	5/16
	1/4	1	6	2	5/16
	1/4	1 ¹ / ₈	6	2	3/8
	1/4	1 ¹ / ₄	6	2	3/8
	1/4	1 ³ / ₈	6	2	7/16
	1/4	1 ¹ / ₂	6	2	7/16
	1/4	1 ⁵ / ₈	6	2	1/2
	1/4	1 ³ / ₄	6	2	1/2



■ RICH-GP1/8 Ground Parallels Set

unit: Inch

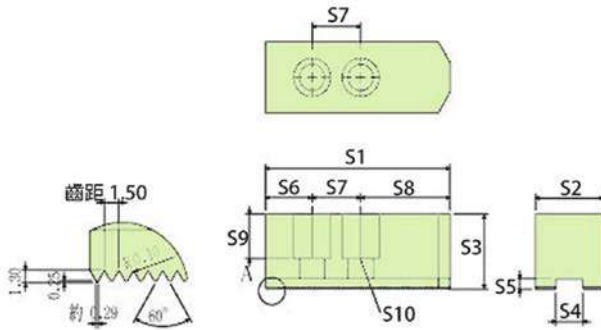
Model	W	H	L	Pcs	Hole
RICH-GP1/8	1/8	1/2	6	2	1/4
	1/8	5/8	6	2	1/4
	1/8	3/4	6	2	5/16
	1/8	7/8	6	2	5/16
	1/8	1	6	2	5/16
	1/8	1 ¹ / ₈	6	2	3/8
	1/8	1 ¹ / ₄	6	2	3/8
	1/8	1 ³ / ₈	6	2	1/2
	1/8	1 ¹ / ₂	6	2	1/2
	1/8	1 ⁵ / ₈	6	2	1/2



Lathe Machine Accessories

Soft Jaws Parts

■ RICH-SHC Soft Jaw for Hydraulic Chucks



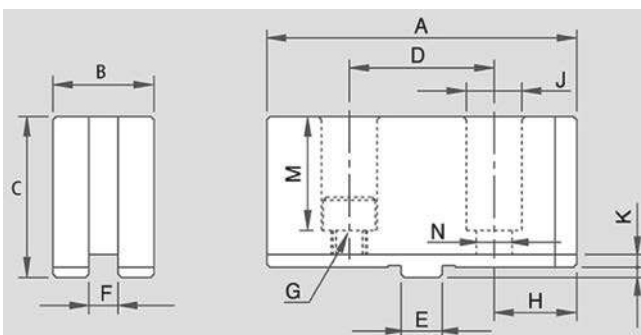
Material: Steel (S45C)



unit: mm

Model	Dimensions										Serration Pitch	Weight (kg)
	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8	S-9	S-10		
RICH-SHC04	51	23	23	$10/8$	4	10	$14/15$	27	13	M8 x 20	1.5 x 60°	0.5
RICH-SHC05	62	23	27	10	4	10	$14/18$	38	17	M8 x 20	1.5 x 60°	0.7
RICH-SHC06	73	31	30	12	5	16	20	37	18	M10 x 25	1.5 x 60°	1.5
RICH-SHC08	95	35	37	14	5	24	25	46	22	M12 x 30	1.5 x 60°	2.5
RICH-SHC10	110	40	42	16	5	30	30	50	27	M12 x 30	1.5 x 60°	3.6
RICH-SHC12	129	48	48	$18/21$	5	39	30	60	28	M14/M16	1.5 x 60°	6.2
RICH-SHC15	165	62	62	$22/25.5$	$8/5$	37	43	85	37	M20	1.5 x 60°	12.6
RICH-SHC18	165	62	62	$22/25.5$	$8/5$	37	43	85	37	M20	1.5 x 60°	12.6
RICH-SHC21	180	62	70	25	9	40	60	80	45	M20	3.0 x 60°	16.2
RICH-SHC24	180	62	70	25	9	40	60	80	45	M20	3.0 x 60°	16.2

■ RICH-SPC Soft Jaw for Powerful Chucks

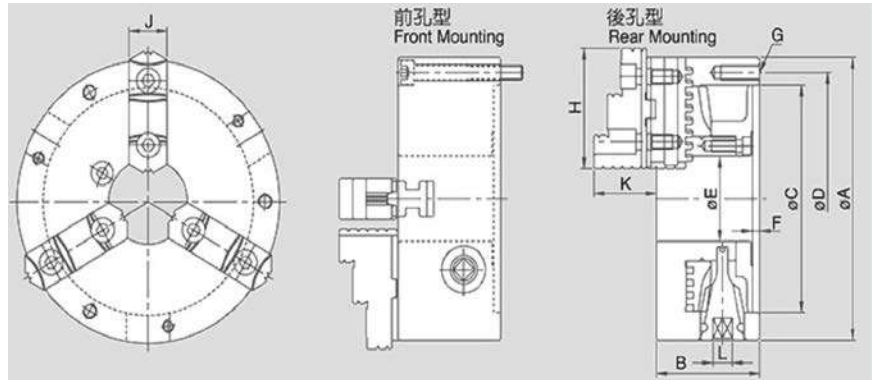


unit: mm

Model	A	B	C	D	E	F	G	H	J	K	M	N	Weight (kg)
RICH-SPC06	80	26	32	31.8	12.68	7.94	M8	21	14	3.5	20	8.5	1.5
RICH-SPC07	95	31	32	44.45	12.68	7.94	M10	24	17	3.5	18	11	1.7
RICH-SPC09	110	31	32	53.98	19.03	12.7	M12	28	19	3.5	18	13	1.9
RICH-SPC12	125	42	54	63.5	19.03	12.7	M12	34	19	3.5	40.5	13	5.3
RICH-SPC16	160	50	70	76.2	19.03	12.7	M16	42	25	3.5	48	17	11

Scroll Chuck Series

■ RICH-PTJ 3 Jaws Chuck Powerful Type

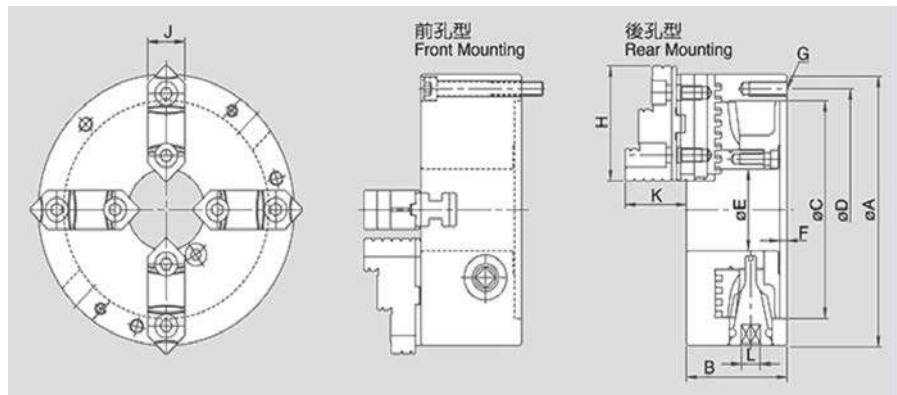


RICH-PTJ 3 Jaws Scroll Chuck Powerful Type

unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Weight (Kg)	Max.Speed (RPM)	OD Clamping	ID Clamping
RICH-PTJ6	167	65	130	147	45	5	3M10	68	26	39	10	9	2000	Ø8-160	Ø55-150
RICH-PTJ7	193	76	155	172	58	5	3M10	82	28	43	11	13.8	2000	Ø8-180	Ø62-170
RICH-PTJ8	203	76	160	176	58	5	3M10	82	28	43	11	15.5	2000	Ø8-180	Ø62-170
RICH-PTJ9	233	84	190	210	70	6	3M12	94	32	50	12	22	2000	Ø11-220	Ø70-210
RICH-PTJ10	272	86	230	250	89	6	3M12	94	32	50	12	29.7	1800	Ø12-260	Ø80-250
RICH-PTJ12	310	96	260	285	105	7	3M12	118	40	56	14	43.5	1800	Ø15-300	Ø90-290
RICH-PTJ16	405	122	345	375	145	8.5	3M14	150	45	75.5	15	98	1500	Ø30-400	Ø110-380

■ RICH-PFJ 4 Jaws Scroll Chuck Powerful Type



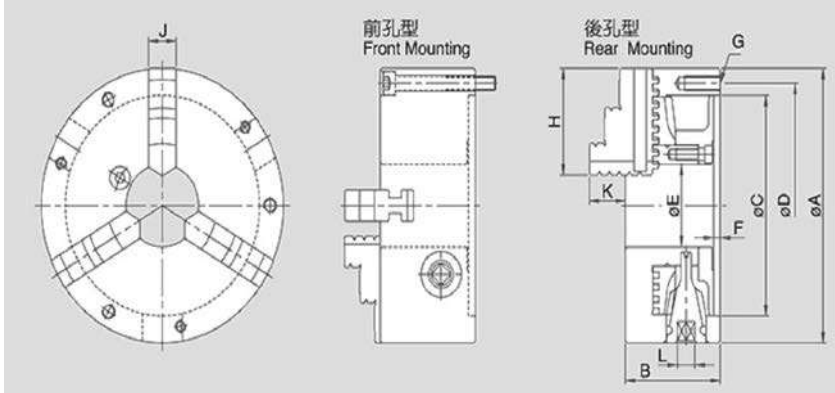
RICH-PFJ 4 Jaws Scroll Chuck Powerful Type

unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Weight (Kg)	Max.Speed (RPM)	OD Clamping	ID Clamping
RICH-PFJ7	192	76	155	172	58	5	3M10	82	28	43	11	14.1	2000	Ø8-180	Ø62-170
RICH-PFJ9	232	84	190	210	70	6	3M12	74	32	50	12	22.2	2000	Ø11-220	Ø72-210
RICH-PFJ12	310	96	260	285	105	7	3M12	118	40	56	14	43	1800	Ø15-300	Ø90-290
RICH-PFJ16	405	122	345	375	145	8.5	6M14	150	45	75.5	15	95	1500	Ø30-400	Ø110-380

Scroll Chuck Series

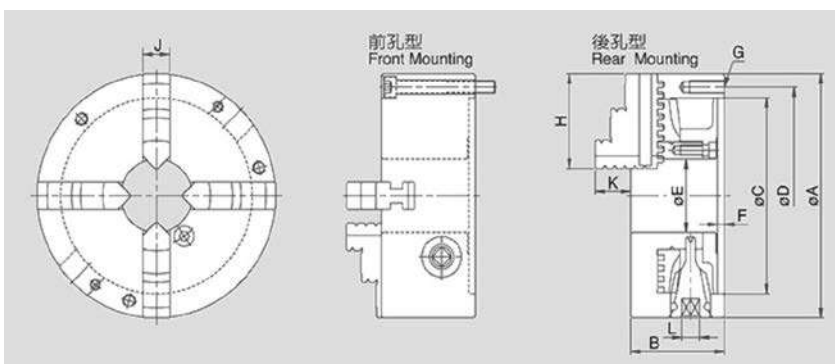
■ RICH-SCT 3-Jaw Traditional Type Chuck



unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Weight (Kg)	Max.Speed (RPM)	OD Clamping	ID Clamping
RICH SCT-3	85	45	60	73	16	3.5	3M6	35	11	15	7	1.5	2500	Ø2-70	Ø24-64
RICH SCT-4	112	58	80	95	24	4.5	3M8	42	14	18	8	3.7	2500	Ø3-90	Ø32-84
RICH SCT-5	130	60	100	115	32	4.5	3M8	50	16	20	8	5.2	2500	Ø3-110	Ø35-100
RICH SCT-6	167	65	130	147	45	5	3M10	65	19	27	10	9.3	2000	Ø4-160	Ø48-150
RICH SCT-7	192	76	155	172	58	5	3M10	75	22	28	11	14.2	2000	Ø4-180	Ø56-170
RICH SCT-8	202	76	160	176	58	5	3M10	75	22	28	11	16	2000	Ø4-180	Ø56-170
RICH SCT-9	232	84	190	210	70	6	3M12	85	24	33	12	22.7	2000	Ø5-220	Ø62-210
RICH SCT-10	273	86	230	250	89	6	3M13	98	28	37	12	31.8	1800	Ø6-260	Ø70-250
RICH SCT-12	310	96	260	285	105	7	3M12	110	30	44	14	44.8	1800	Ø10-300	Ø86-290
RICH SCT-16	405	122	345	375	145	8.5	6M14	146	40	56	15	102	1500	Ø14-400	Ø100-380

■ RICH-SCF 4 Jaws Scroll Type



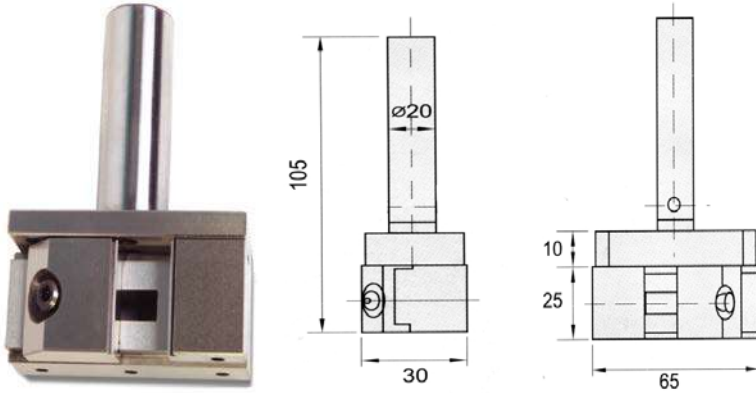
unit: mm

Model	A	B	C	D	E	F	G	H	J	K	L	Weight (Kg)	Max.Speed (RPM)	OD Clamping	ID Clamping
RICH SCF-7	192	76	155	172	58	5	3M10	75	22	28	11	14.8	2000	Ø4-180	Ø56-170
RICH SCF-9	232	84	190	210	70	6	3M12	85	24	33	12	23.2	2000	Ø5-220	Ø62-210
RICH SCF-12	310	96	260	285	105	7	3M12	110	30	44	14	47	1800	Ø10-300	Ø86-290
RICH SCF-16	405	122	345	375	145	8.5	6M14	146	40	56	15	107	1500	Ø14-400	Ø100-380

Grinding Machine Accessories

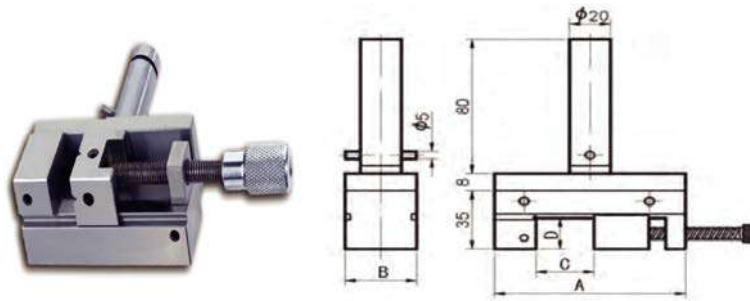
Tool Maker Vice

■ RICH-SEV-1 1" Stainless Electrode Vice



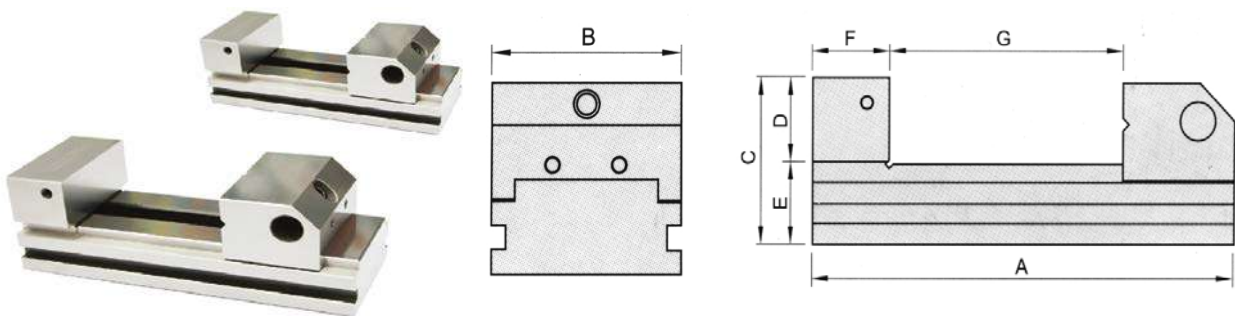
Parameters	
Material:	SUS440
Parallelism:	0.004mm/100mm
Squareness:	0.004mm/100mm
Hardness:	HRC 56° - 58°

■ RICH-SEV-1.5 1.5" Stainless Electrode Vice



Parameters	
Material:	SUS440
Parallelism:	0.004mm/100mm
Squareness:	0.004mm/100mm
Hardness:	HRC 56° - 58°

■ RICH-VSA Tool Maker Vice

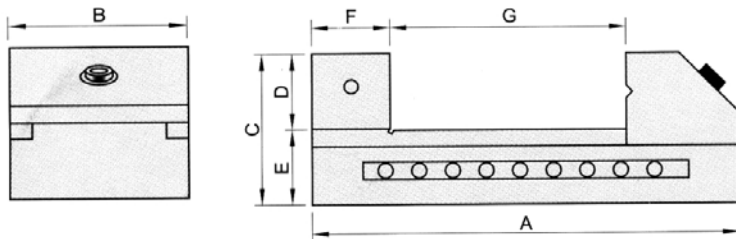


unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSA15	105	36	48	20	28	20	0-45	1.0
RICH-VSA20	150	48	53	25	28	25	0-75	2.0
RICH-VSA25	176	63	59	30	29	30	0-95	3.3
RICH-VSA30	190	73	68	35	33	35	0-105	4.6
RICH-VSA40	245	98	90	45	45	45	0-135	10.0

Tool Maker Vise

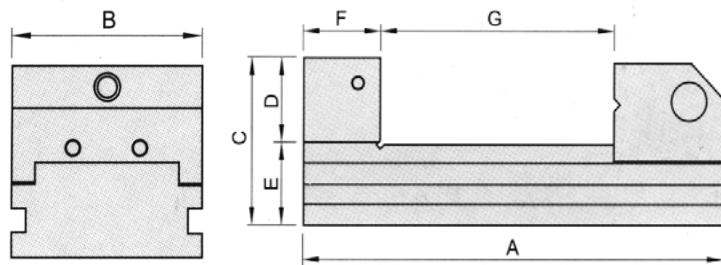
■ RICH-VSB Tool Maker Vise of Plugs Type



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSB15	100	36	45	20	25	20	40	0.6
RICH-VSB20	150	48	58	30	28	30	75	1.6
RICH-VSB25	170	63	63	35	28	30	90	2.5
RICH-VSB30	190	73	67	35	32	35	100	3.7
RICH-VSB35	225	88	85	45	40	40	120	6.5
RICH-VSB40	235	98	85	45	40	40	125	7.8
RICH-VSB50	287	125	100	50	50	50	150	13.5
RICH-VSB60	340	152	100	50	50	50	200	19.1

■ RICH-VSC Precision Tool Maker Vise (SKS)

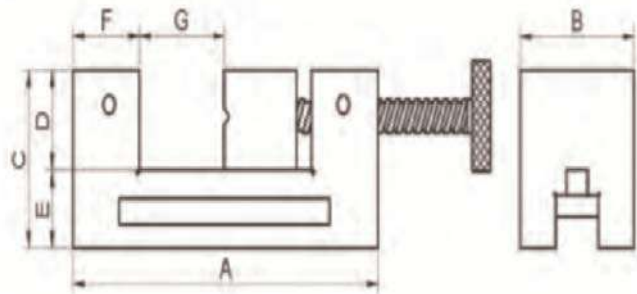


unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSC20	135	48	42	20	22	23	62	0.9
RICH-VSC25	160	70	62	30	32	33	80	2.9
RICH-VSC30	170	73	65	32	33	35	90	3.2

Tool Maker Vice

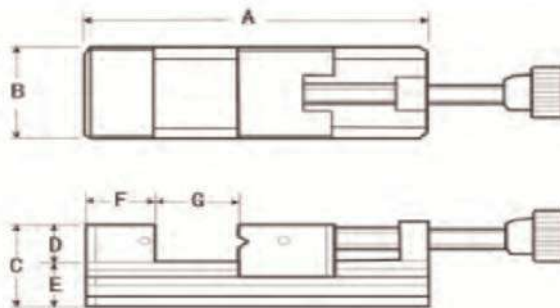
■ RICH-VSD Tool Maker Vice of Screw Type (A)



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSD20	155	48	54	25	29	25	60	1.9
RICH-VSD25	176	63	60	30	30	25	75	3.1
RICH-VSD30	181	73	70	30	40	30	75	4.7
RICH-VSD35	250	88	73	38	35	35	125	7.7
RICH-VSD40	250	98	73	38	35	35	125	8.9

■ RICH-VSE Tool Maker Vice of Screw Type (B)

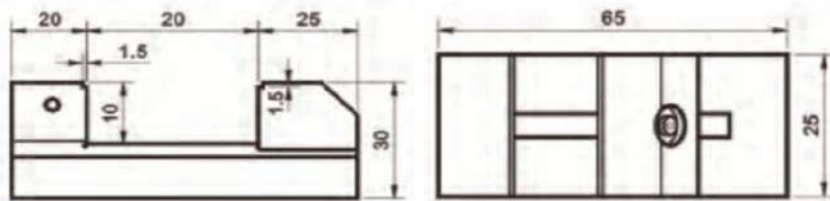


unit: mm

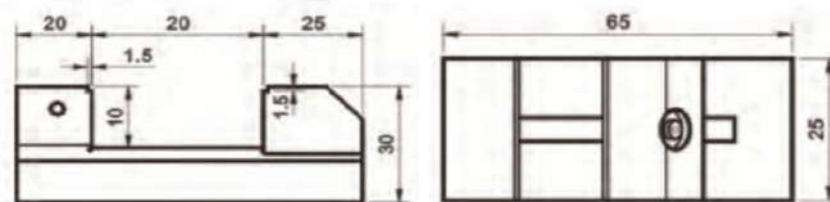
Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSE20	90	60	50	25	25	25	30	1.5
RICH-VSE25	160	70	62	30	32	33	80	3.6
RICH-VSE30	175	73	65	32	33	35	95	4.3

Tool Maker Vice

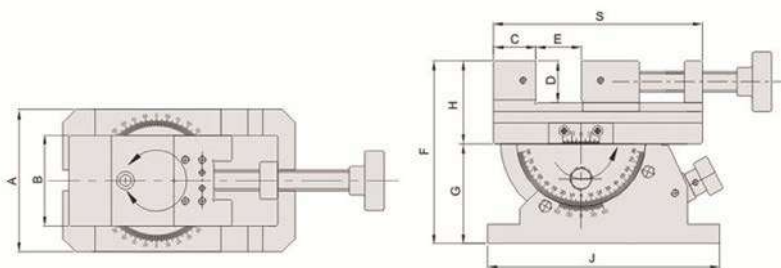
- **RICH-VSTA** Tool Maker Vice of Small Type (A)



- **RICH-VSTB** Tool Maker Vice of Small Type (B) - For Stainless Use



- **RICH-CHM** Universal Vice



unit: mm

Model	A	B	C	D	E	F	G	H	S	J	N.W. (kg)
RICH-CHM80	110	70	33	32	80	141	77	64	162	180	12.9

MILLING

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GRINDING

MAGNETIC

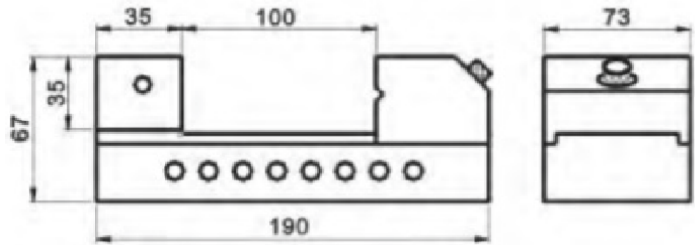
MEASURING

OTHERS

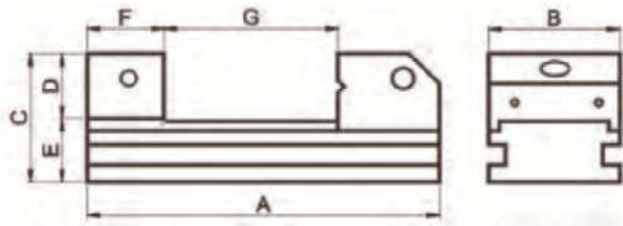
HOT SALES

Tool Maker Vise

■ RICH-VSSA Tool Maker Vise of Stainless Steel (A)



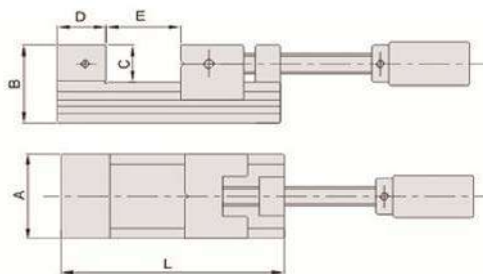
■ RICH-VSSB Tool Maker Vise of Stainless Steel (B)



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VSSB200	140	50	53	25	28	25	75	1.8
RICH-VSSB300	180	72	62	30	32	35	100	3.8

■ RICH-VSSC Tool Maker Vise of Stainless Steel (C)

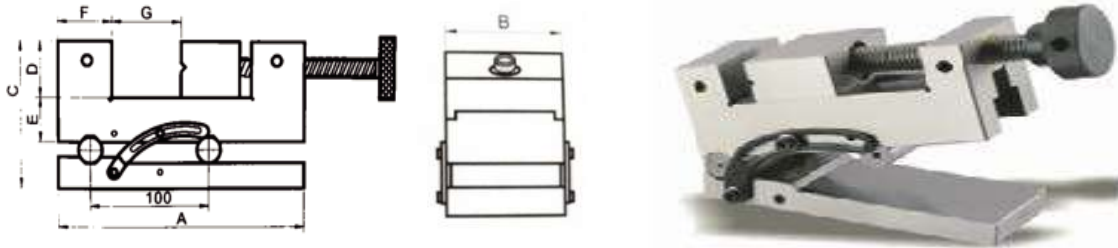


unit: mm

Model	L	A	B	C	D	E	N.W. (kg)
RICH VSSC-25	160	70	62	30	32	0-80	4
RICH VSSC-30	180	70	69	30	35	0-100	5

Tool Maker Vise

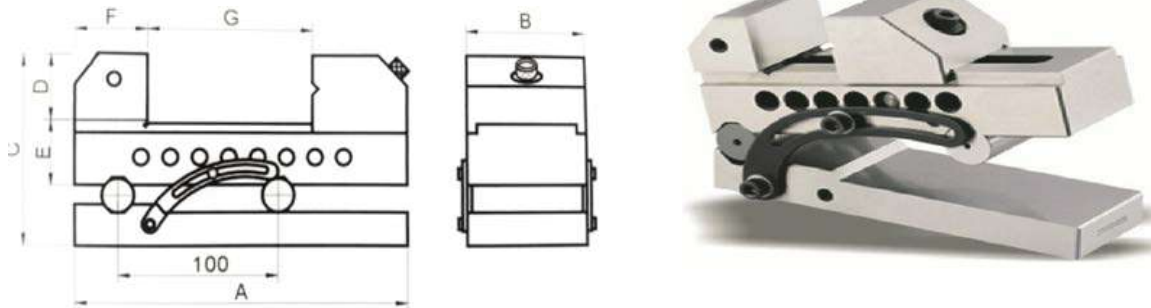
■ RICH-V Sine Vise of Screw type



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-V200	155	48	93	25	35	25	60	3.5
RICH-V250	175	63	96	30	33	25	70	5
RICH-V300	180	73	103	30	40	30	75	7
RICH-V400	250	98	107	38	45	35	125	15

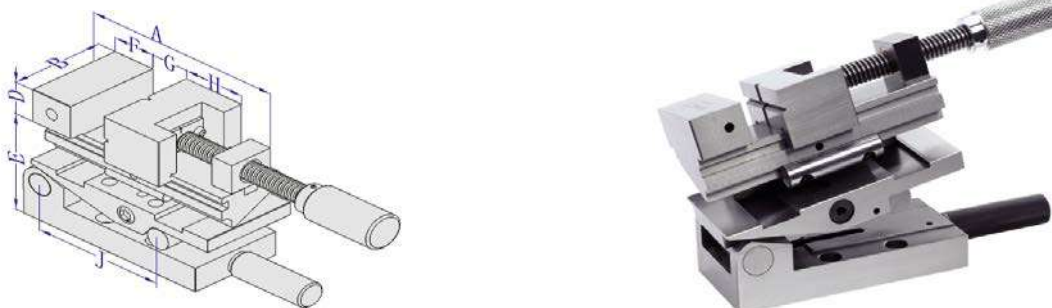
■ RICH-VS Sine Vise



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-VS20	155	48	95	30	32	30	65	3
RICH-VS25	170	63	103	35	35	30	90	5
RICH-VS30	180	73	103	35	35	35	90	6
RICH-VS40	245	98	125	45	45	45	125	15

■ RICH-VG Precision Sine Vise



unit: mm

Model	A	B	C	D	E	J	H	G	Max. Angle	N.W. (kg)
RICH-VG73	160	73	30	94	100	33	45	0-78	46°	6.5

MILLING

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GRINDING

MAGNETIC

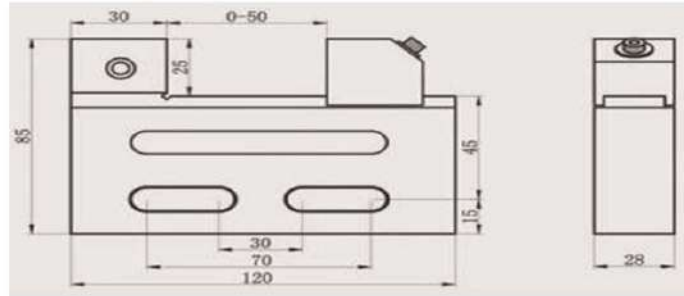
MEASURING

OTHERS

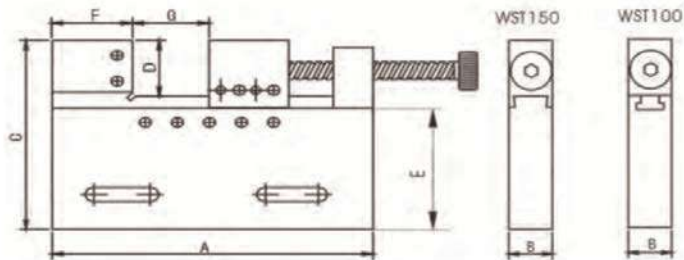
HOT SALES

Tool Maker Vice

■ RICH-VSEDM Stainless Precision Vice for EDM Type



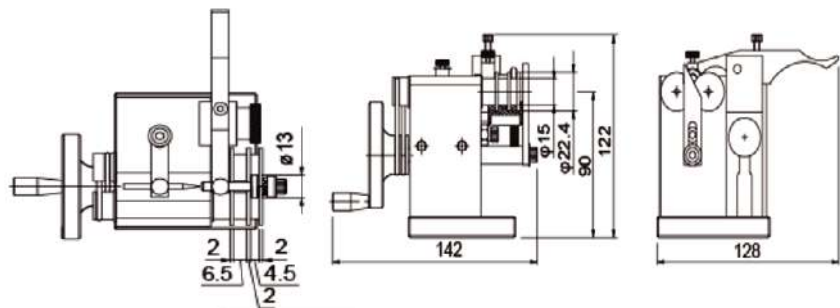
■ RICH-WHV 1.5" Stainless Electrode Vice



unit: mm

Model	A	B	C	D	E	F	G	N.W. (kg)
RICH-WHV100	235	25	135	50	85	50	100	4.7
RICH-WHV150	320	25	145	60	85	60	150	6.2

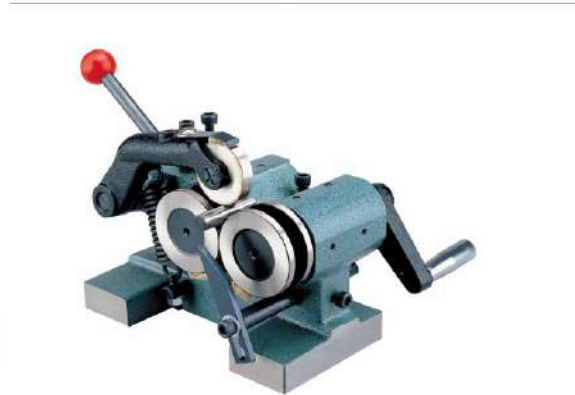
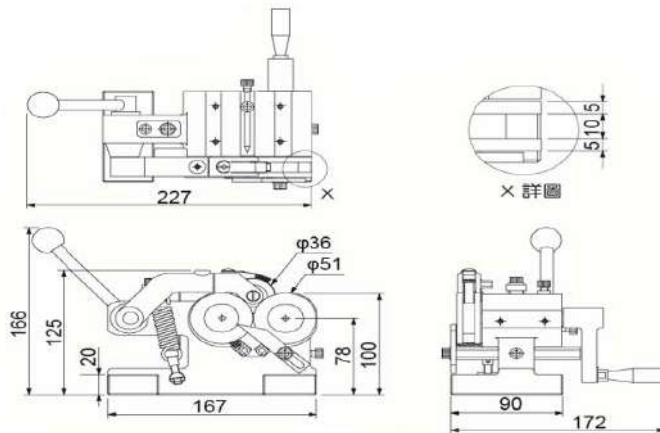
■ RICH-PGA Small Punch Grinder



Specifications	Specifications	Model	Weight (kg)
Applicable for dia \varnothing 0.5 - \varnothing 6mm ultra-small precision grinding process workpiece.	Using pressing rollers, no correction center, can be easily precision grinding.	RICH-PGA120	2.5
Roller Clamping Range: \varnothing 0.5 - \varnothing 6mm	Smaller diameter appropriate to adjust screw of pressure arm to avoid too much pressure to prevent deformation of workpiece.	RICH-PGA120A	4.2
Roller Clamping Length: 10mm		RICH-PGA120B	2.6
Roller swing precision within 3 μ		RICH-PGA120C	4.3

Punch Grinder

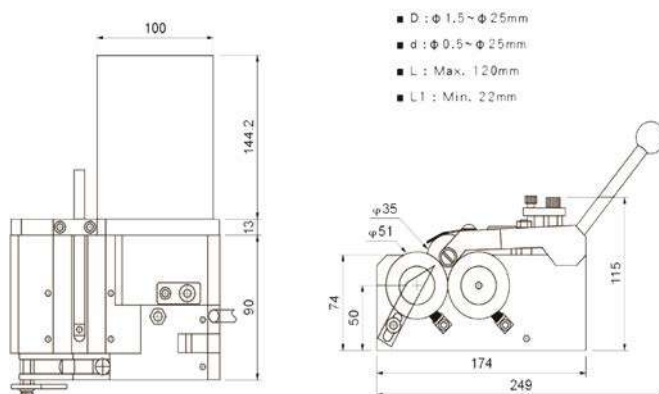
■ RICH-PGB Punch Grinder



Specifications:

- Grinding Diameter: $\varnothing 1.5 - \varnothing 25\text{mm}$
- Outside Grinding Length: 5 - 3mm
- Accuracy: 0.005mm
- Weight: 6kg
- Punch grinder is a tool which can be put on the surface off grinding machine for grinding punches. It can do cylindrical grinding automatically.
- The rollers can be used to adjust the workpiece before grinding.
- Use screw pressure for firm holding.

■ RICH-PGC Motor Punch Grinder



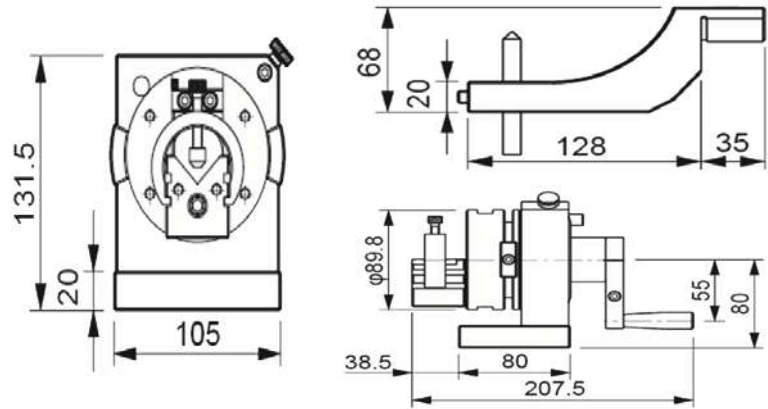
Specifications:

- Grinding Diameter: $\varnothing 1.5 - \varnothing 25\text{mm}$
- Length of Workpiece: 20-120mm
- Outside Grinding Length: 5-35mm
- Accuracy: 0.005mm
- Electric Punch grinder is driven by motor to avoid hand fatigue.
- No center alignment necessary; just put the workpiece on rollers.
- It can be used with magnetic sine plate to grind various angle profile punch.

Model	Motor	Weight (kg)
RICH-PGC110	10V/60Hz 129 R.P.M.	11
RICH-PGC220	220V/50Hz 108R.P.M.	11

Punch Former

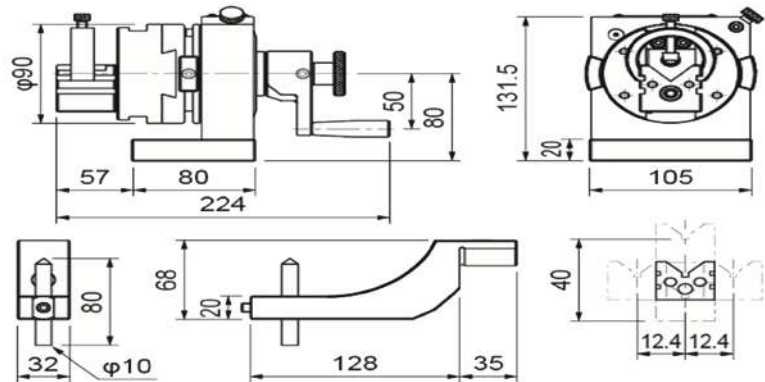
■ RICH-PFA Punch Former - Standard Type



Specifications:

- Indexing Div: 24 (every 15°) ±10 seconds
- Max Diameter can pass through: 30mm
- Dressing range of convex angle: 48mm
- Deflection with round rod: under 2μ
- Maximum swing diameter: 200mm
- Center Height: 80mm
- V-block Clamp Range: 24mm (Up); 16mm (Down)
- Dressing range of concave angle: 100mm
- Deflection with 50mm round rod: under 6μ
- Weight: 9.5kg

■ RICH-PFB Punch Former - 2 Way



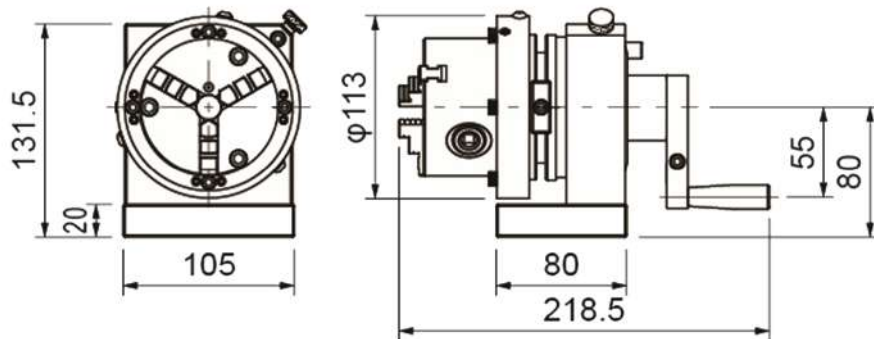
Specifications:

- Indexing Div: 24 (every 15°) ±10 seconds
- Center Height: 80mm
- V-block Clamp Range: Ø3 - Ø30mm
- Activities of V-block: 24MM (Up); 16mm (Down)
- Both sides activities of V-block: 12.4 mm each
- Dressing range of convex angle: 48mm
- Dressing range of concave angle: 100mm
- Maximum swing diameter: 200mm
- Deflection with round rod: under 2μ
- Deflection with 50mm round rod: under 6μ
- Weight: 10kg

Model	Motor	Weight (kg)
RICH-PFB*110V	110V/60Hz 129 R.P.M.	11
RICH-PFB*220V	220V/50Hz 108R.P.M.	11

Punch Former

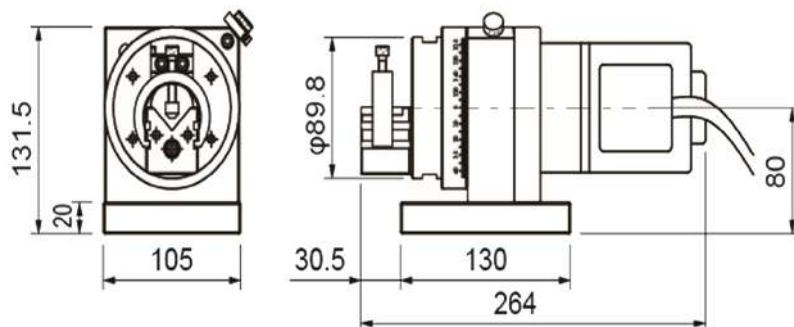
■ RICH-PFC 3-Jaw Punch Former



Specifications:

- Swivel Center High: 80 mm
- Max Diameter can pass through: 16mm
- Outer clamping gripping diameter: $\varnothing 2 - \varnothing 70$ mm
- 3-jaws ouch former is easy to clamp workpiece, easy to use, and easy to disassemble.
- Indexing Division: 24 (every 15°) ± 10 seconds
- 3-jaws outer diameter: 85mm length: 60mm
- Internal clamping gripping diameter: $\varnothing 24 - \varnothing 64$ mm

■ RICH-PFD Motor Punch Former



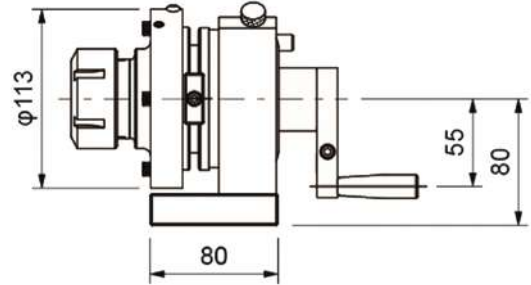
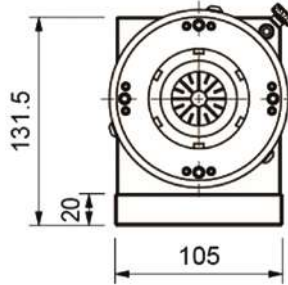
Specifications:

- V-block Clamp range: $\varnothing 3 - \varnothing 30$ mm
- Activities of V-block: 24mm (Up); 16mm (Down)
- Max swing diameter: 200mm
- Deflection with round rod: under 2μ
- Deflection with 50mm round rod: under 6μ
- Motor punch former driven by motor, without hand manual operation, thus saving processing time.

Model	Power	Speed
RICH-PFD*110V	AC 110V 50/60Hz SINGLE PHASE	16-233 R.P.M
RICH-PFD*220V	AC 220V 50/60Hz SINGLE PHASE	16-233 R.P.M

Punch Former

■ RICH-PFE ER Collet Dividing Punch Former

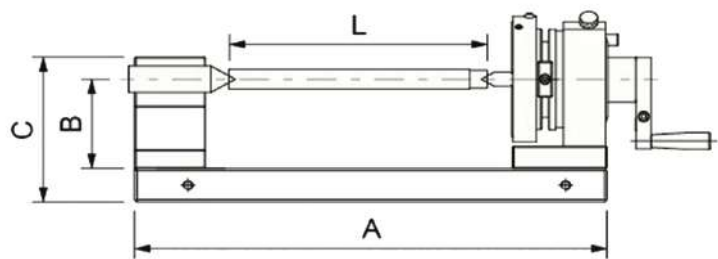


Specifications:
<ul style="list-style-type: none"> Swivel Center High: 80 mm Indexing Division: 24 (every 15°) ±10 seconds ER32 Collet Clamping Range: Ø2-20 mm ER40 Collet Clamping Range: Ø3-26 mm ER50 Collet Clamping Range: Ø10-35 mm Body max diameter pass through: 16mm Weight: 10.5 kg
<ul style="list-style-type: none"> ER collet have ER32, ER40, ER50 standards. Adjustment design function: user can adjust.

Model	ER Collet	Clamping Range
RICH-PFE ER32	ER32	φ6-φ20
RICH-PFE ER40	ER40	φ3-φ26
RICH-PFE ER50	ER50	φ10-φ34

Model	Collet Size	Weight(kg)
RICH-PFE ER32	φ6, φ8, φ10, φ12, φ16, φ20	10
RICH-PFE ER40	φ6, φ8, φ10, φ12, φ16, φ20, φ25	10.5
RICH-PFE ER50	φ12, φ14, φ16, φ20, φ26, φ32	11

■ RICH-PFF Punch Former (Centering Type)

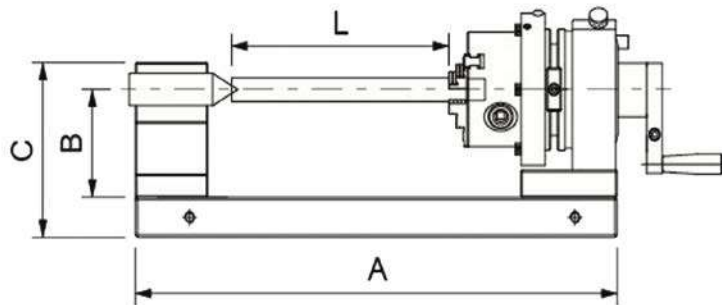


unit: mm

Specifications:	Model	A	B	C	L	Weight (kg)
<ul style="list-style-type: none"> Swivel Center High: 80 mm Indexing Division: 24 (every 15°) ±10° Parallelism: 0.002/100 mm Roundness: 0.002/100 mm 	RICH-PFF300	300	80	130	0-120	19
	RICH-PFF400	400	80	130	0-220	22
	RICH-PFF500	500	80	130	0-320	25
	RICH-PFF600	600	80	130	0-420	28.5

Punch Former

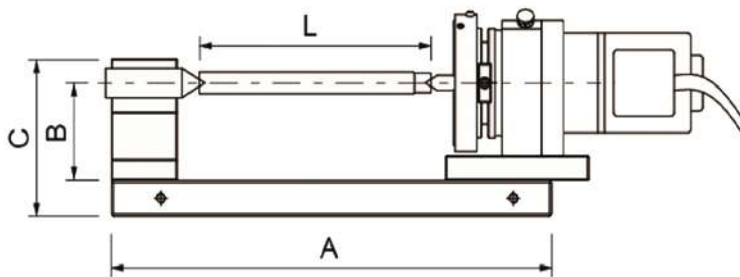
■ RICH-PFG Punch Former (Centering & 3-Jaw Type)



unit: mm

Specifications:	Model	A	B	C	L	Weight(kg)
<ul style="list-style-type: none"> Swivel Center High: 80 mm Indexing Division: 24 (every 15°) ±10° 3-Jaws outer Dia: 85mmxlength:60mm Outer Clamping gripping diameter: Ø2-Ø70 mm Internal Clamping gripping diameter: Ø24-Ø64 mm Parallelism: 0.002/100 mm Roundness: 0.002/100 mm 	RICH-PFG300	300	80	130	0-90	19
	RICH-PFG400	400	80	130	0-190	22
	RICH-PFG500	500	80	130	0-290	25
	RICH-PFG600	600	80	130	0-390	28.5

■ RICH-PFH Motor Punch Former (Centering Type)



Specifications:

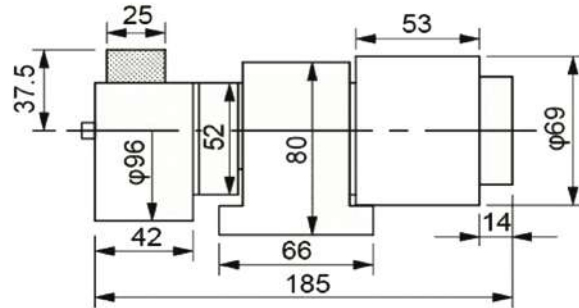
- Swivel Center High: 80mm
- Indexing Division: 24 (every 15°) ±10°
- Parallelism: 0.002/100mm
- Roundness: 0.002/100mm

unit: mm

Model	A	B	C	L	Power (Single Phase)	Speed (rpm)	Weight (kg)
RICH-PFH300*110V	300	80	130	0-120	AC110V 50/60Hz	16-233	22
RICH-PFH300*220V	300	80	130	0-120	AC220V 50/60Hz	16-233	22
RICH-PFH400*110V	400	80	130	0-220	AC110V 50/60Hz	16-233	25
RICH-PFH400*220V	400	80	130	0-220	AC220V 50/60Hz	16-233	25
RICH-PFH500*110V	500	80	130	0-320	AC110V 50/60Hz	16-233	28
RICH-PFH500*220V	500	80	130	0-320	AC220V 50/60Hz	16-233	28
RICH-PFH600*110V	600	80	130	0-420	AC110V 50/60Hz	16-233	31.5
RICH-PFH600*220V	600	80	130	0-420	AC220V 50/60Hz	16-233	31.5

Punch Former

■ RICH-FWT Diamond CBN Flat Wheel Truer



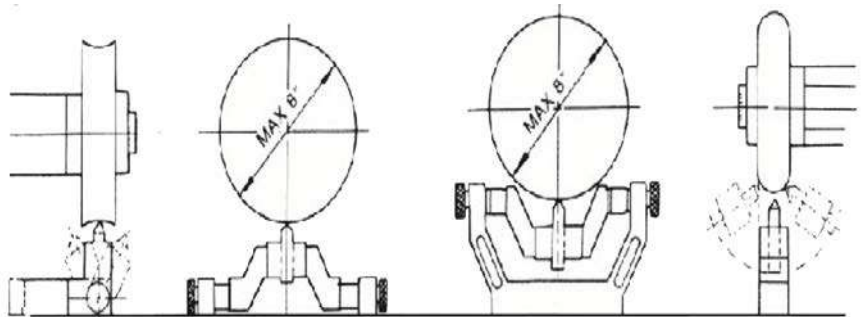
Specifications:

- The grinding wheel is made of resin, especially for diamond flat wheel.
- The spindle could be milled high-speed rotation with precision bearings to ensure accuracy and stability.

Model	Motor	Weight (kg)
RRICH-FWT100	-----	4.5
RICH-FWT110	110V/60Hz (1Phase)	6.5
RICH-FWT220	220V/60Hz (1Phase)	6.5

Angle Dresser

■ RICH-CCFD Concave Convex Forming Dresser



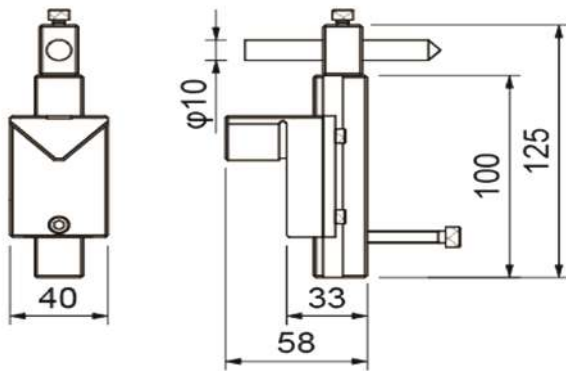
Specifications:

- Max. Dressing Diameter of Grinding Wheel: 210 mm (8")
- Dressing Range of Small Swing: Convex (R 0.5-6 mm); Concave (R0.5-20 mm)
- Dressing Range of Middle Swing: Convex (R 0.5-6 mm); Concave (R0.5-20 mm)
- Dressing Range of large swing: Convex (R 0.5-40 mm); Concave (R45-90 mm)
- Weight: 6.2kg

- Designed with principle of swing. Fixed the thimble by center, and dressed front and rear by swing.
- Easy to operate, use the height block or height caliper can add and subtract the height of center.

Angle Dresser

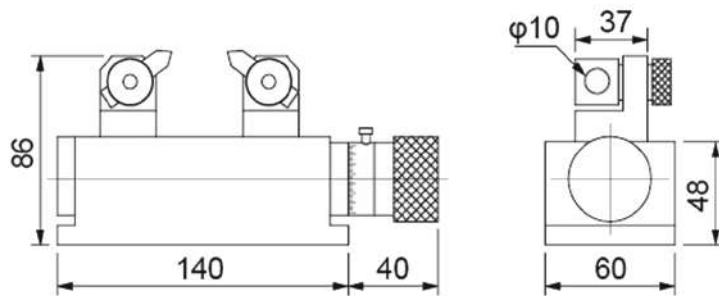
■ RICH-ADA Angle Dresser



Specifications:

- Especially designed for dressing wheel, collocation use with MCL-350/MCL450, trimmed to required shape of wheel.

■ RICH-ADB Angle Sine Dresser

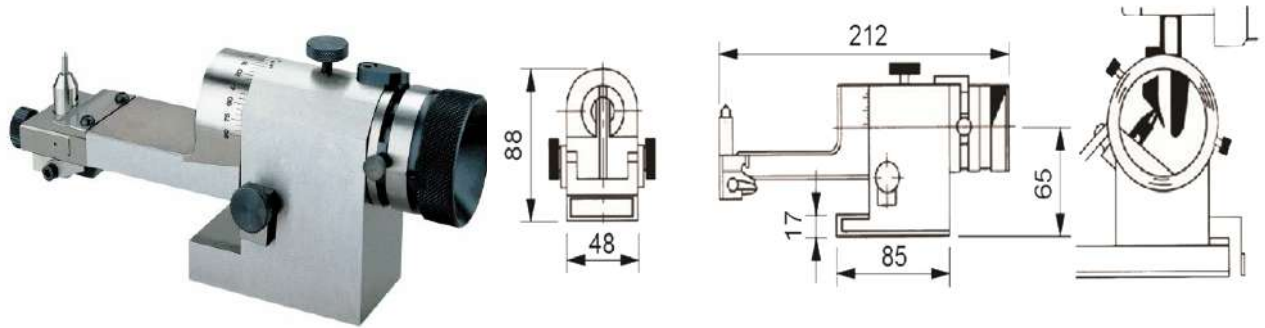


Specifications:

- Parallelism within: 0.005MM
- Dressing range of Angle: 0-60° (Horizontal); 45-90° (Vertical)
- Weight: 1.5 kg
- Center's Distance of Spacer: 50 MM
- Dressing range of Length: 60 mm
- Special for dressing the angle of the grinding wheel and can be used vertically and horizontally with large range.
- Use the screws to adjust the tightness and assort with the angle block to achieve the required angle.

Angle Dresser

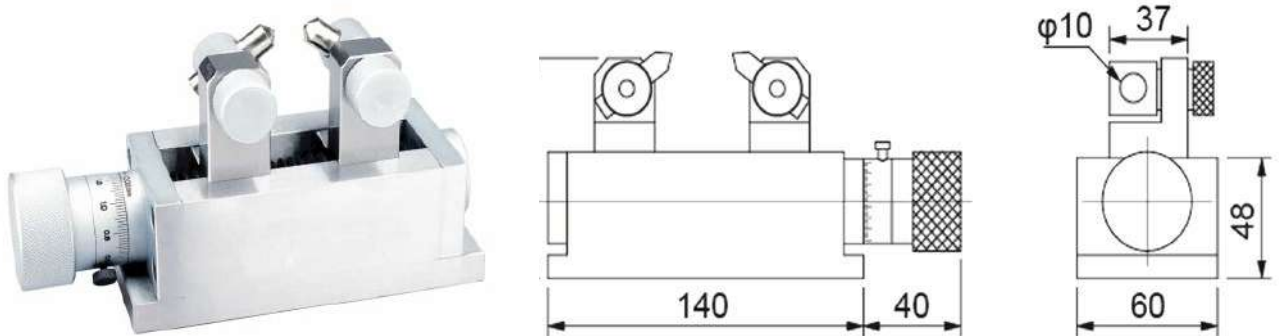
■ RICH-ADC Optical Radius Angle Dresser



Specifications:

- Center Height: 65 mm
- Max. convex radius: 10 mm
- Tangential travel: 22.5 mm
- Weight: 4.2 kg
- Max. wheel diameter: Ø200 mm
- Max. concave radius: 25.4 mm
- Dressing Angle: 90° - 0° -95°

■ RICH-PDD Precision Duplex Dresser

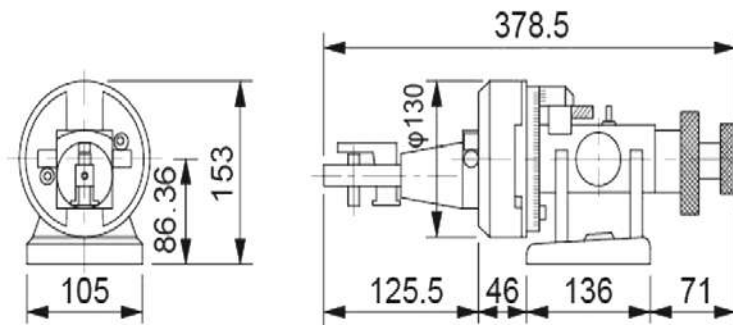


Specifications:

- Max. width of wheel: 40 mm
- Max. dressing depth: 40 mm
- Weight: 3.5kg
- Mini dressing width: 0.2 mm
- Graduation: 0.02 mm
- Suitable for surface grinder and the precision can reach the dresser with fixed thickness.
Wheel dressing can synchronized the thickness of both sides and single-side.

Angle Dresser

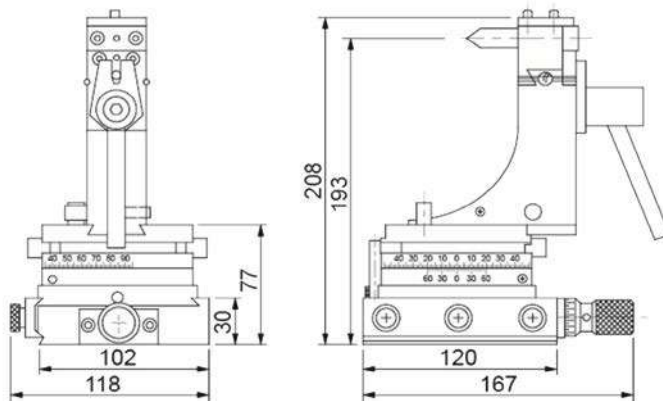
■ RICH-ADD Radius and Angle Dresser



Specifications:

- Max. Wheel Diameter: Ø210 mm(8")
 - Max. convex radius: 60 mm
 - Tangential travel: 90 mm
 - Slide of Center is retractable to 25 mm
 - Max. concave radius: 150 mm
 - Weight: 9.5 kg
- For surface grinder, can be used for R angles and variety of angles.
Auto-zero designed, the R angle of demand can be easily done with the block in fixed height of swing center.

■ RICH-UWD Universal Wheel Dresser



Specifications:

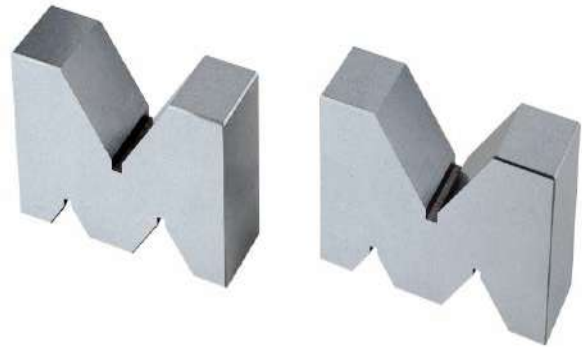
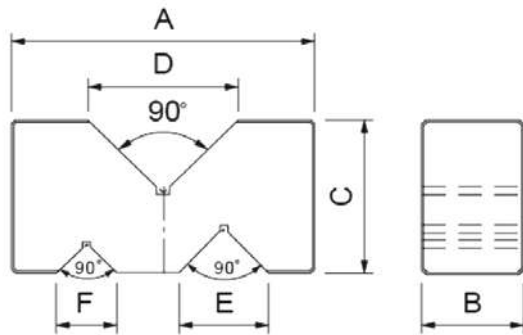
- Center Height: 193 mm
- Max. swing distance of diamond cutter: ± 14 mm
- Max. Convex Radius: 50 mm
- Reading accuracy of turret index: 5'
- Feed per division of Handle scale: 0.01 mm
- Measuring Quasi-Pin Diameter: Ø10 mm
- Max. wheel diameter: Ø200 mm
- Max. concave radius: 0-100 mm
- Max. translation of feed: 25 mm

- RICH-UWD Universal Wheel Dresser adoptable on surface grinding and universal tool grinder for dressing grinding wheels into various cross sections of flat or curved shapes.

Magnetic Tools

Magnetic Blocks

■ RICH-VBA V-Blocks



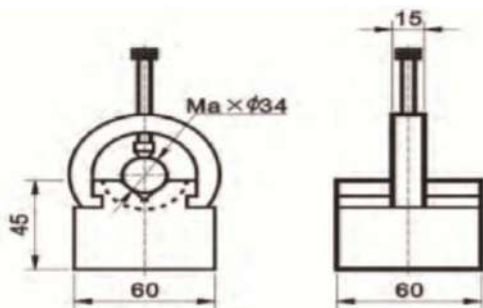
Specifications:

- **Material:** SK2
- **Harden:** HRC 56° ±2
- **V-Shape Slot Precision within:** 0.005 mm
- 2 pcs of same size in a set and the V-shape slot is in precision angle
- After precision grinding, it can be used to test the concentricity of mandrel

unit: mm

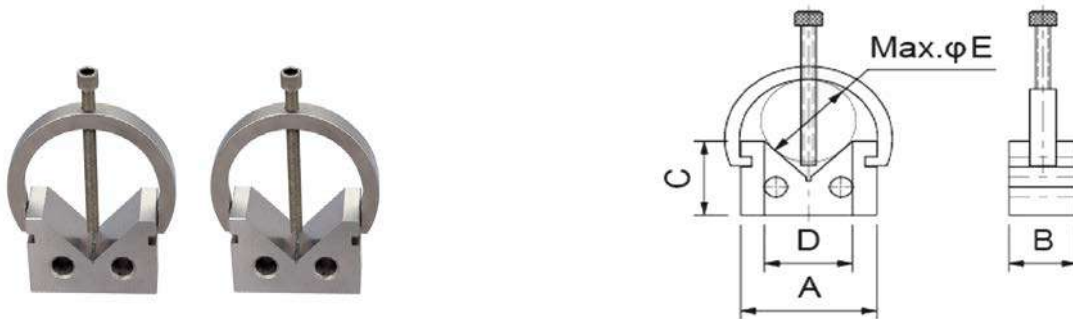
Model	A	B	C	D	E	F	Weight (kg)
RICH-VBA A2	50	19	24	24	17	13	0.3
RICH-VBA A3	75	24	35	37	24	16	0.7
RICH-VBA A4	100	33	52	50	30	20	2.0
RICH-VBA A5	125	44	69	63	37	26	4.6
RICH-VBA A6	150	50	80	70	45	30	8.0
RICH-VBA A7	175	62	90	87	50	35	13.0
RICH-VBA A8	200	70	110	100	60	40	20.2
RICH-VBA A9	250	102	122	126	75	50	25.5
RICH-VBA A10	300	120	150	150	90	60	53.0

■ RICH-VBC V-Blocks with C Clamp



Magnetic Blocks

■ RICH-VVB V-Blocks



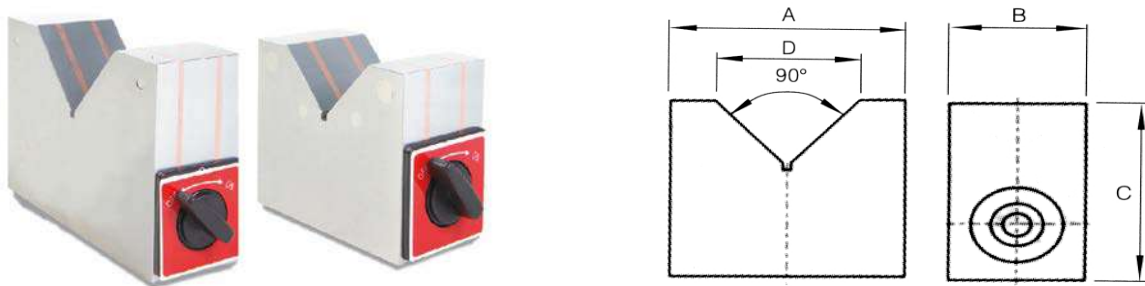
Specifications:

- Precision of V-groove: SK2
- Hardness: HRC56° ±2
- Material: SK2
- Two of V-Blocks is the same size and grinded precision.
- For grinding and correcting spindle concentricity.

unit: mm

Model	A	B	C	D	E	Weight (kg)
RICH-VVB 195	63	63	46	28	34	2.6
RICH-VVB 196	100	50	63	65	70	5.2
RICH-VVB 197	152	65	100	110	120	15

■ RICH-GVH Magnetic Square V-Block

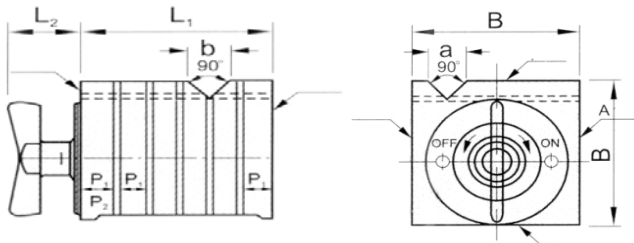


unit: mm

Model	Holding Power	Dimension				Angle	G.W. (kg)
		A	B	C	D		
RICH-GVH30	150N(15Kgf)	70	40	50	50	90°	1.1KGx2
RICH-GVH40	200N(20Kgf)	100	50	80	80		3.2KGx2

Magnetic Blocks

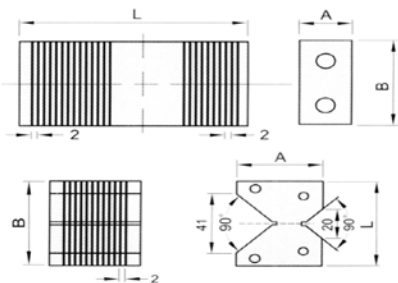
■ RICH-BA Magnetic Square V-Block



unit: mm

Model	V-Face Holding Power	Flat-face Holding Power	Dimension						G.W. (kgs)
			B	L1	L2	H	P1	P2	
RICH-BA1	30kgf	50kgf	100	100	43	100	4	17	7.8
RICH-BA2	60kgf	180kgf	150	150	56	150	5	24	22.5

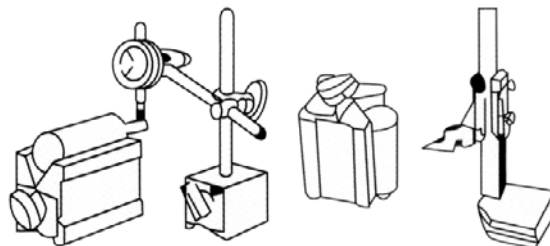
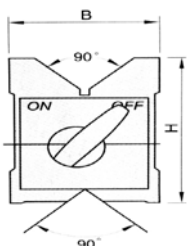
■ RICH-GT Magnetic Transfer Block



unit: mm

Model	A	B	L	PCS	G.W. (kg)
RICH-GT1	25	50	100	2	2.4
RICH-GT2	46	49	580	2	2.2

■ RICH-GVH Magnetic V-Block

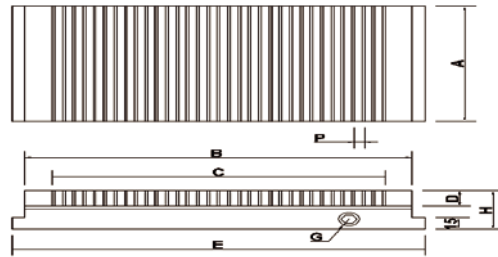


unit: mm

Model	Holding Power	Surface Holding Power	Dimension			G.W. (kg)
			B	H	Length	
RICH-GVH1	55kgf	70kgf	56	72	80	2.2
RICH-GVH2	90kgf	110kgf	76	100	115	5.8

Magnetic Chucks

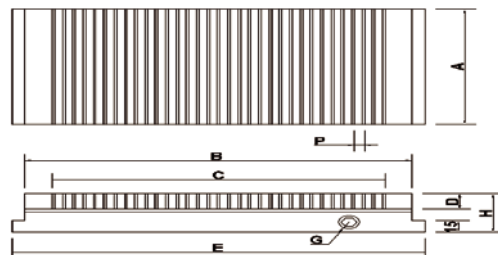
■ RICH-PMCA Permanent Magnetic Chuck - 8(2+6) Standard Pole Pitch



unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face		Height	Weight (kg)
		A	B	C	D		A	E		
RICH-PMCA-1018	100x175	100	175	145	20	8(2+6)	100	195	50	7
RICH-PMCA-1325	125x250	125	250	206	20	8(2+6)	125	270	50	13
RICH-PMCA-1515	150x150	150	150	116	20	8(2+6)	150	175	50	8
RICH-PMCA-1530	150x300	150	300	256	20	8(2+6)	150	320	50	19
RICH-PMCA-1535	150x350	150	350	306	20	8(2+6)	150	370	50	21
RICH-PMCA-1545	150x450	150	450	406	20	8(2+6)	150	470	50	26
RICH-PMCA-2040	200x400	200	400	356	20	8(2+6)	200	420	50	32
RICH-PMCA-2045	200x450	200	450	406	20	8(2+6)	200	470	50	36
RICH-PMCA-2050	200x500	200	500	456	20	8(2+6)	200	520	50	40
RICH-PMCA-2060	200x600	200	600	556	20	8(2+6)	200	620	50	48
RICH-PMCA-2550	250x500	250	500	456	20	8(2+6)	250	520	50	50
RICH-PMCA-3060	300x600	300	600	556	20	8(2+6)	300	620	50	72

■ RICH-PMCB Permanent Magnetic Chuck -5(1+4) Middle Pole Pitch

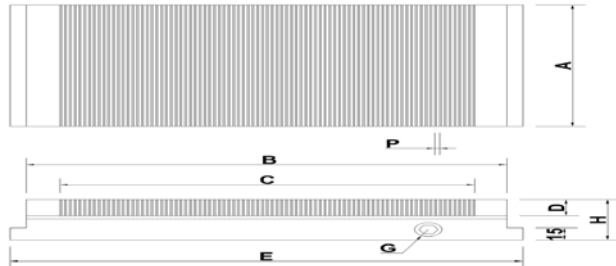


unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face		Height	Weight (kg)
		A	B	C	D		A	E		
RICH-PMCB-1018	100x175	100	175	145	20	5(1+4)	100	195	50	7
RICH-PMCB-1325	125x250	125	250	206	20	5(1+4)	125	270	50	13
RICH-PMCB-1515	150x150	150	150	116	20	5(1+4)	150	175	50	8
RICH-PMCB-1530	150x300	150	300	256	20	5(1+4)	150	320	50	19
RICH-PMCB-1535	150x350	150	350	306	20	5(1+4)	150	370	50	21
RICH-PMCB-1545	150x450	150	450	406	20	5(1+4)	150	470	50	26
RICH-PMCB-2040	200x400	200	400	356	20	5(1+4)	200	420	50	32
RICH-PMCB-2045	200x450	200	450	406	20	5(1+4)	200	470	50	36
RICH-PMCB-2050	200x500	200	500	456	20	5(1+4)	200	520	50	40
RICH-PMCB-2550	250x500	250	500	456	20	5(1+4)	250	520	50	50
RICH-PMCB-3060	300x600	300	600	556	20	5(1+4)	300	620	50	72

Magnetic Chucks

■ RICH-PMCM Permanent Magnetic Chuck - 2.5(1+1.5) Micro Pole Pitch



unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face		Height	Weight (kg)
		A	B	C	D		A	E		
RICH-PMCM-1018	100x175	100	175	145	20	2.5(1+1.5)	100	195	50	7
RICH-PMCM-1325	125x250	125	250	206	20	2.5(1+1.5)	125	270	50	13
RICH-PMCM-1515	150x150	150	150	116	20	2.5(1+1.5)	150	175	50	8
RICH-PMCM-1530	150x300	150	300	256	20	2.5(1+1.5)	150	320	50	19
RICH-PMCM-1535	150x350	150	350	306	20	2.5(1+1.5)	150	370	50	21
RICH-PMCM-1545	150x450	150	450	406	20	2.5(1+1.5)	150	470	50	26
RICH-PMCM-2040	200x400	200	400	356	20	2.5(1+1.5)	200	420	50	32
RICH-PMCM-2045	200x450	200	450	406	20	2.5(1+1.5)	200	470	50	36
RICH-PMCM-2050	200x500	200	500	456	20	2.5(1+1.5)	200	520	50	40
RICH-PMCM-2060	200x600	200	600	556	20	2.5(1+1.5)	200	620	50	48
RICH-PMCM-2550	250x500	250	500	456	20	2.5(1+1.5)	250	520	50	50
RICH-PMCM-3060	300x600	300	600	556	20	2.5(1+1.5)	300	620	50	72

MILLING

LATHE

GRINDING

MAGNETIC

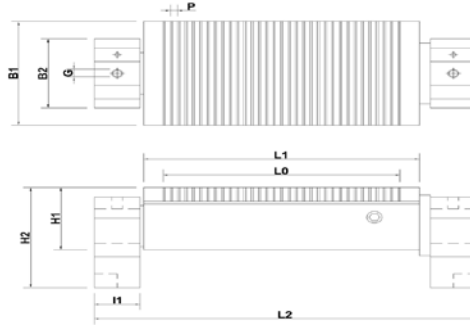
MEASURING

OTHERS

HOT SALES

Magnetic Chucks

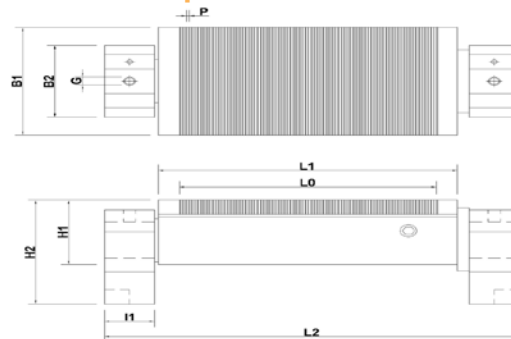
■ RICH-R-PMCA Rotary Magnetic Chuck with Standard Pitch



unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Rotary Stanx			Height (L2)	Height (H2)	Weight (kg)
		B1	L1	L0	H1		B2	I1	G			
RICH-R-PMCF-1018	100x175	100	175	134	90	8(2+6)	100	195	12	290	145	18
RICH-R-PMCF-1325	125x250	125	250	204	90	8(2+6)	100	175	12	365	145	26
RICH-R-PMCF-1530	150x300	150	300	260	90	8(2+6)	100	270	12	415	145	30
RICH-R-PMCF-1535	150x350	150	350	316	90	8(2+6)	100	320	12	465	145	36
RICH-R-PMCF-1545	150x450	150	450	414	90	8(2+6)	100	370	12	565	145	43

■ RICH-R-PMCM Rotary Magnetic Chuck with Micropitch

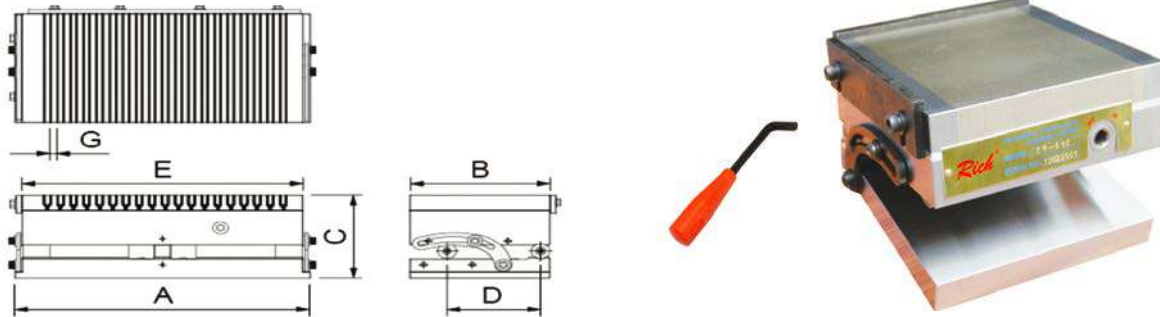


unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Rotary Stanx			Height (L2)	Height (H2)	Weight (kg)
		B1	L1	L0	H1		B2	I1	G			
RICH-R-PMCF-1018	100x175	100	175	134	90	2.5(1+1.5)	100	195	12	290	145	18
RICH-R-PMCF-1325	125x250	125	250	204	90	2.5(1+1.5)	100	175	12	365	145	26
RICH-R-PMCF-1530	150x300	150	300	260	90	2.5(1+1.5)	100	270	12	415	145	30
RICH-R-PMCF-1535	150x350	150	350	316	90	2.5(1+1.5)	100	320	12	465	145	36
RICH-R-PMCF-1545	150x450	150	450	414	90	2.5(1+1.5)	100	370	12	565	145	43

Sine Plate with Magnetic Chucks

■ RICH-MSPA Sine Plate with Standard Magnetic Chuck



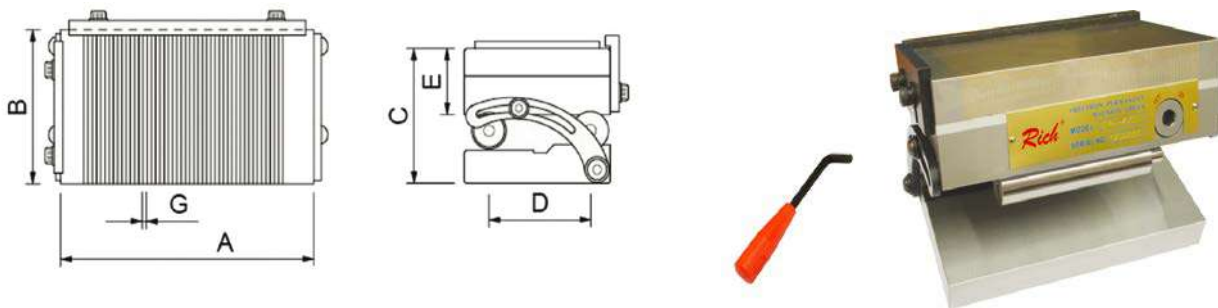
Specifications:

- **Accuracy:** Center of two-pad within 0.005 mm
- **Parallel:** within 0.003 mm/ 100mm
- Thick polemagnetic tower suitable for precision angle grinding.

unit: mm

Model	A	B	C	D	E	G	Angle	Weight (kg)
RICH-MSPA-1018	175	100	114	75	175	7.5 (1.5+6)	0°-60°	14
RICH-MSPA-1515	150	150	109	100	150	7.5 (1.5+6)	0°-60°	15
RICH-MSPA-1530	300	150	114	100	300	7.5 (1.5+6)	0°-60°	35

■ RICH-MSPM Sine Plate with Micropitch Magnetic Chuck



Specifications:

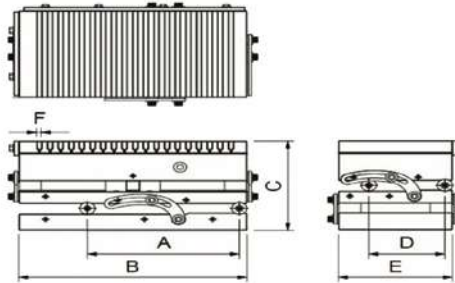
- **Accuracy:** Center of two-pad within 0.005 mm
- **Parallel:** within 0.003 mm/ 100mm
- Fine Magnetic Chuck is suitable for grinding small workpieces.

unit: mm

Model	A	B	C	D	E	F	G	Angle	Weight (kg)
RICH-MSPM-1018	175	100	87	75	47	175	2 (0.5+1.5)	0°-60°	10
RICH-MSPM-1515	150	150	87	100	47	150	2 (0.5+1.5)	0°-60°	15
RICH-MSPM-1530	300	150	87	100	47	250	2 (0.5+1.5)	0°-60°	28

Sine Plate with Magnetic Chucks

■ RICH-MSPD Double Sine Plate With Micropitch Magnetic Chuck



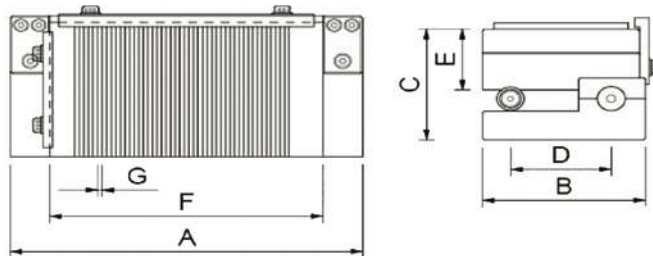
Specifications:

- Range of Angle Adjustment: 0-60°
- Accuracy of Center: within 0.005 mm
- Parallel precision: 100 mm/0.003 mm
- Two-way Sine Plate can be adjusted sin X- axis or Y-axis angle. The user can adjust to simultaneous angle for drilling, milling, grinding, and other precision angle.

unit: mm

Model	A	B	C	D	E	F	G.W. (kg)
RICH-MSPD-1515	100	150	130	100	150	2.5 (1+1.5)	18
RICH-MSPD-1530	200	300	130	100	150	2.5 (1+1.5)	48

■ RICH-MSPI Integrated Sine Plate With Micropitch Magnetic Chuck



Specifications:

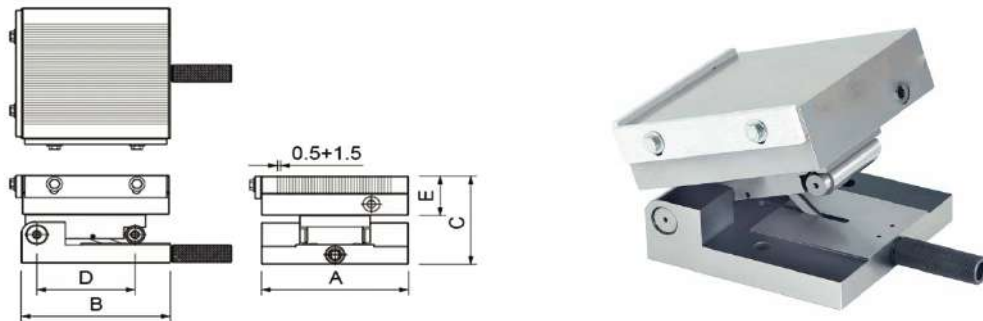
- Accuracy: Center of two-pad within 0.005 mm
- Paralle: within 0.003 mm/ 100mm
- Fine Magnetic Chuck is suitable for grinding small workpieces.

unit: mm

Model	A	B	C	D	E	F	G	Angle	Weight (kg)
RICH-MSPI-1018	225	102	84	75	47	175	2 (0.5+1.5)	0°-60°	11.5
RICH-MSPI-1515	200	152	84	100	47	150	2 (0.5+1.5)	0°-60°	14.8
RICH-MSPI-1325	300	127	84	100	47	250	2 (0.5+1.5)	0°-60°	20
RICH-MSPI-1530	350	152	84	100	47	300	2 (0.5+1.5)	0°-60°	27.5

Sine Plate with Magnetic Chucks

■ RICH-MSPIA Integrated Adjustable Sine Plate with Magnetic Chuck



Specifications:

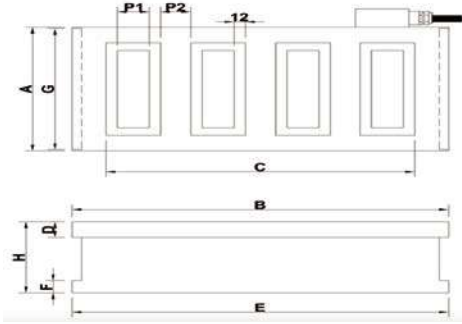
- Range of Angle Adjustment: 0-55°
- Accuracy of Center: within 0.005 mm
- Parallel precision: 100 mm/0.003 mm
- Fine adjusted designed of the handle and easy to adjust the angle. The pole of chuck is fine; suitable for small workpiece processing.

unit: mm

Model	A	B	C	D	E	Weight (kg)
RICH-MSPIA-0813	130	75	83	50	37	5.6
RICH-MSPIA-1018	175	100	90	75	41	10
RICH-MSPIA-1515	150	150	89	100	39	13.1

Electromagnetic Chucks

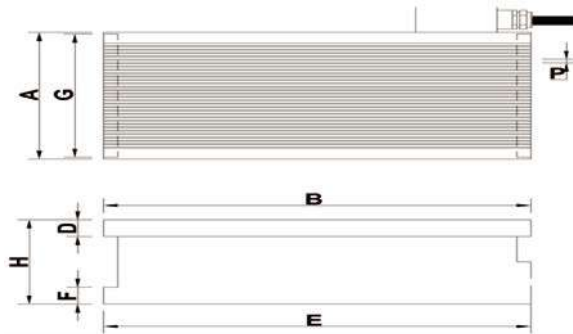
■ RICH-EMCP Electromagnetic Chucks



unit: mm

Model	Dimension	Chucking Size				Pole Pitch		Chuck Mounting Face				Voltage	Current	Weight (kg)
		A	B	C	D	P1	P2	G	E	F	F			
RICH-EMCP-2040	200x400	200	400	328	20	34	32	196	400	20	110	DC 90V	1.6A	54
RICH-EMCP-2050	200x500	200	500	437	20	37	33	196	500	20	110	DC 90V	2.8A	75
RICH-EMCP-2060	200x600	200	600	511	20	34	33	196	600	20	110	DC 90V	2.8A	80
RICH-EMCP-2550	250x500	250	500	433	20	37	33	246	500	20	120	DC 90V	2.8A	90
RICH-EMCP-3060	300x600	300	600	511	20	34	32	296	600	20	120	DC 90V	2.8A	130
RICH-EMCP-4080	400x800	400	800	718	20	36	33	396	800	20	120	DC 90V	3.4A	230
RICH-EMCP-40100	400x1000	400	1000	915	20	36	34	396	1000	20	120	DC 90V	4.4A	288
RICH-EMCP-50100	500x1000	500	1000	915	20	36	34	496	1000	20	120	DC 90V	4A	360
RICH-EMCP-60100	600x1000	600	1000	915	20	36	34	596	1000	20	120	DC 90V	5A	432

■ RICH-EMCU Electromagnetic Chucks

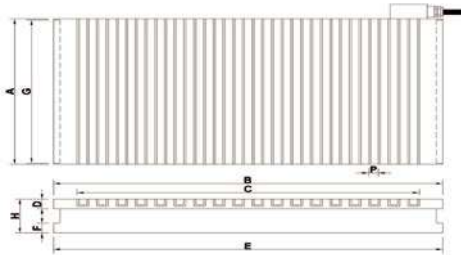


unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face				Voltage	Current	Weight (kg)
		A	B	C	D	G	E	F	F				
RICH-EMCU-1530	150x300	150	300	125	20	4(1+3)	146	300	20	110	DC 90V	0.39A	19
RICH-EMCU-1535	150x350	150	350	125	20	4(1+3)	146	350	20	110	DC 90V	0.52A	23
RICH-EMCU-1545	150x450	150	450	125	20	4(1+3)	146	450	20	110	DC 90V	0.60A	29
RICH-EMCU-2040	200x400	200	400	173	20	4(1+3)	196	400	20	110	DC 90V	0.69A	34
RICH-EMCU-2045	200x450	200	450	173	20	4(1+3)	196	450	20	110	DC 90V	0.90A	38
RICH-EMCU-2050	200x500	200	500	173	20	4(1+3)	196	500	20	110	DC 90V	1.10A	42
RICH-EMCU-2060	200x600	200	600	173	20	4(1+3)	196	600	20	110	DC 90V	1.31A	51
RICH-EMCU-2550	250x500	250	500	225	20	4(1+3)	246	500	20	110	DC 90V	1.52A	62
RICH-EMCU-3060	300x600	300	600	273	20	4(1+3)	296	600	20	110	DC 90V	1.81A	98

Electromagnetic Chucks

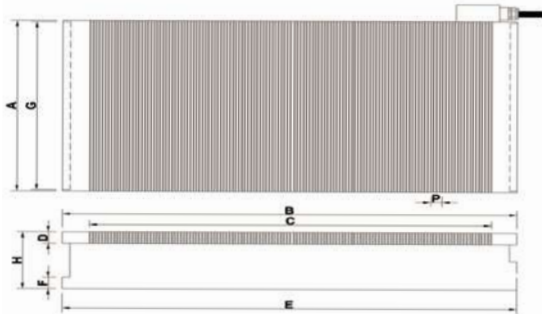
■ RICH-EMCA Electromagnetic Chucks



unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face				Voltage	Current	Weight (kg)
		A	B	C	D		G	E	F	F			
RICH-EMCA-1530	150x300	150	300	228	20	15(3+12)	146	300	20	70	DC 90V	0.15A	21
RICH-EMCA-1535	150x350	150	350	288	20	15(3+12)	146	350	20	70	DC 90V	0.18A	25
RICH-EMCA-1545	150x450	150	450	378	20	15(3+12)	146	450	20	70	DC 90V	0.24A	32
RICH-EMCA-2040	200x400	200	400	348	20	15(3+12)	196	400	20	70	DC 90V	0.47A	38
RICH-EMCA-2045	200x450	200	450	378	20	15(3+12)	196	450	20	70	DC 90V	0.52A	43
RICH-EMCA-2550	250x500	250	500	438	20	15(3+12)	246	500	20	70	DC 90V	0.73A	67
RICH-EMCA-3060	300x600	300	600	529	20	15(3+12)	296	600	20	70	DC 90V	0.97A	97
RICH-EMCA-4080	400x800	400	800	725	25	15(3+12)	396	800	20	70	DC 90V	1.56A	182
RICH-EMCA-40100	400x1000	400	1000	936	25	15(3+12)	396	1000	20	70	DC 90V	1.60A	228
RICH-EMCA-50100	500x1000	500	1000	936	25	15(3+12)	496	1000	20	70	DC 90V	1.72A	285

■ RICH-EMCM Electromagnetic Chucks

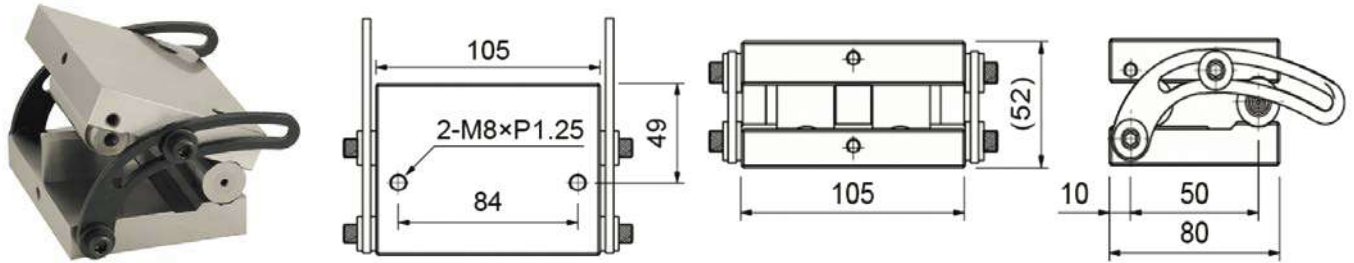


unit: mm

Model	Dimension	Chucking Size				Pole Pitch	Chuck Mounting Face				Voltage	Current	Weight (kg)
		A	B	C	D		G	E	F	F			
RICH-EMCM-1530	150x300	150	300	228	20	4(1+3)	146	300	20	110	DC 90V	0.83A	34
RICH-EMCM-1535	150x350	150	350	288	20	4(1+3)	146	350	20	110	DC 90V	0.69A	39
RICH-EMCM-1545	150x450	150	450	378	20	4(1+3)	146	450	20	110	DC 90V	0.66A	50
RICH-EMCM-2040	200x400	200	400	348	20	4(1+3)	196	400	20	110	DC 90V	0.80A	59
RICH-EMCM-2045	200x450	200	450	378	20	4(1+3)	196	450	20	110	DC 90V	0.70A	67
RICH-EMCM-2050	200x500	200	500	445	20	4(1+3)	196	500	20	110	DC 90V	0.70A	76
RICH-EMCM-2060	200x600	200	600	545	20	4(1+3)	196	600	20	110	DC 90V	0.64A	87
RICH-EMCM-2550	250x500	250	500	438	20	4(1+3)	246	500	20	110	DC 90V	0.97A	92
RICH-EMCM-3060	300x600	300	600	529	20	4(1+3)	296	600	20	110	DC 90V	1.43A	135

Sine Plate

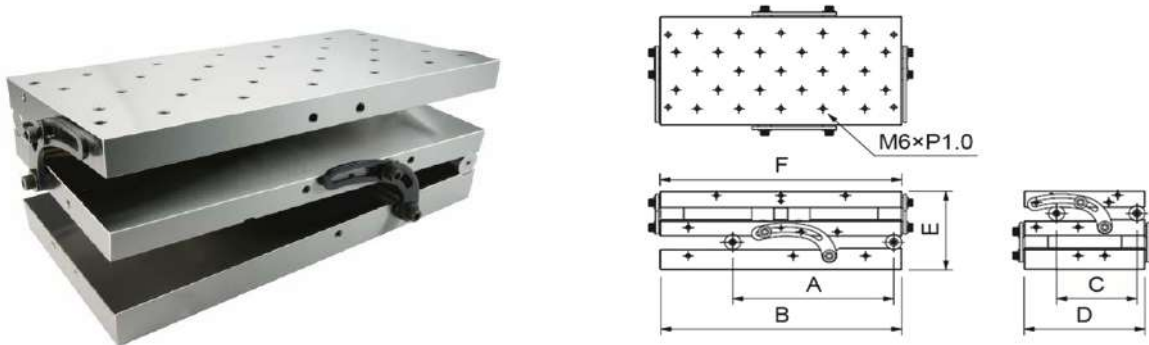
■ RICH-SPA04 Sine Plate



Specifications:

- **Material:** S50C
- **Distance of Sine center:** 50mm/4 μ
- **Parallelism** is within 4 μ
- **Hardness:** HRC55° - 57°
- **Adjusted Range:** 0° - 50°
- The sine plate can be set with punch former for swivelling mechanism. It makes work more efficient.

■ RICH-SPD Double Sine Plate



Specifications:

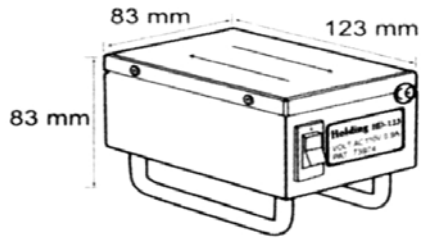
- **Range of Angle Adjustment:** 0-60°
- **Parallel precision:** 100 mm/0.003 mm
- **Accuracy of Center:** within 0.005 mm
- Two-way Sine Plate can be adjusted sin X-axis or Y-axis angle. The user can adjust to simultaneous angle for drilling, milling, grinding, and other precision angle.

unit: mm

Model	A	B	C	D	E	F	N.W. (kg)
RICH-SPD-1018	125	170	75	100	108	175	10
RICH-SPD-1515	100	150	100	150	103	150	13
RICH-SPD-1530	200	300	100	150	108	300	24

Demagnetizers

- **RICH-DHT Hand Type Demagnetizer**



- **RICH-DPT Plate Type Demagnetizer**



Indicator Stand / Magnetic Base

- **RICH-RTLTM Machine light with Magnetic Base**

Specifications:	
Model:	RTLTM-5
Holding Power:	80 kgs
Base Length:	60 mm
Base Width:	50 mm
Base Height:	55 mm
G.W. :	1.7 kgs



Indicator Stand / Magnetic Base

■ RICH-RTUM Universal Arm Magnetic Base (Mechanical)



unit: mm

Model	Holding Power	Arm Length	Base Dimensions			G.W. (kg)
			L	W	H	
RICH RTUM-05	20kgs	185	35	30	35	0.5
RICH RTUM-05A	20kgs	185	35	30	35	0.4
RICH RTUM-04	80kgs	285	60	50	55	1.4
RICH RTUM-03	80kgs	340	60	50	55	1.5
RICH RTUM-60	120kgs	340	85	50	55	2.2

■ RICH-RTUH Universal Arm Magnetic Base (Hydraulic)



unit: mm

Model	Holding Power	Arm Length	Base Dimensions			G.W. (kg)
			L	W	H	
RICH RTUH-02	100	310	75	50	55	1.9
RICH RTUH-04	100	425	75	50	55	2.0
RICH RTUH-02B	100	310	75	50	55	2.0

■ RICH-RB MB Magnetic Base



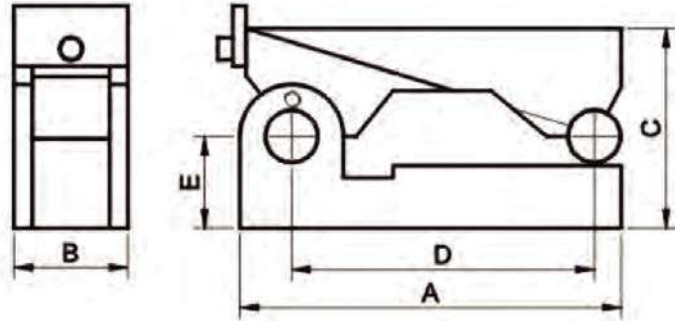
unit: mm

Model	Holding Power	Base Dimensions			G.W. (kg)
		L	W	H	
RICH-RB MB	80	60	50	55	1.0
RICH-RB MB1	80	60	50	55	1.1
RICH-RB MB2	80	60	50	55	1.1
RICH-RB-2	80	60	50	55	1.6
RICH-RB-2V	80	60	50	55	1.7

Measuring Tools

Sine Bar / Angle Plate / V-Block

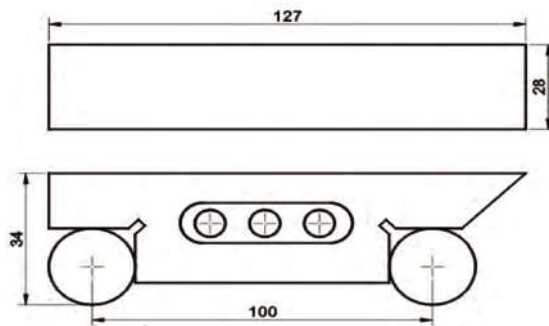
■ RICH-SB Magnetic Sine Bar



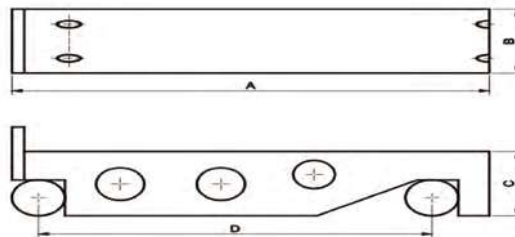
unit: mm

Model	A	B	C	D	E	Weight (kg)
RICH-SB50	75	22	34	50	17	0.3
RICH-SB100	150	34	68	100	34	1.9

■ RICH-SBM Sine Bar (Metric)



■ RICH-SBI Sine Bar (Inch)

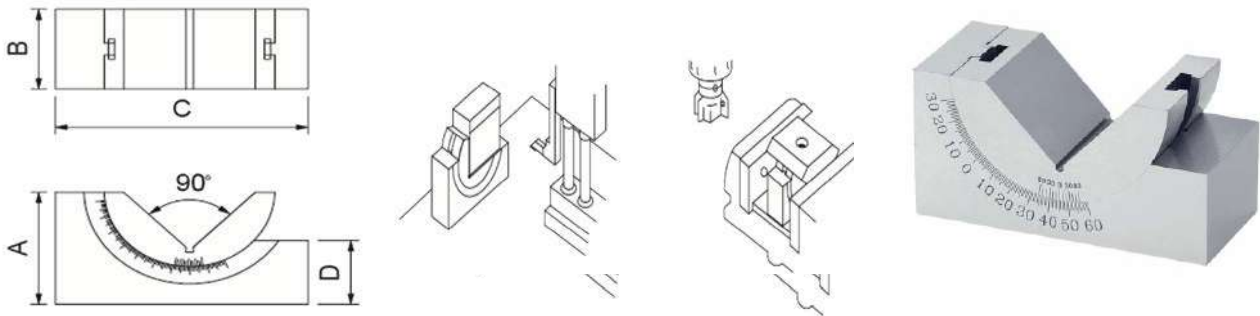


unit: Inch

Model	A	B	C	D	Weight (kg)
RICH-SBI25	6 3/8"	1"	1 1/4"	5"	1
RICH-SBI50	6 3/8"	2"	1 1/4"	5"	1.9

Angle Plates and Steel Squares

■ RICH-AP Adjustable Angle Plates



Specifications:

- V-Shape Slot Precision within: 0.01 mm
- Adjustable Angle: 0° - 60°
- Fits for larger vise and for cushion angle processing. It can be used as a Pad perspective of mode scribing.

unit: mm

Model	A	B	C	D	Weight (kg)
RICH-AP1	32	25	75	21.5	0.5
RICH-AP2	47	30	102	29	1.0
RICH-AP3	47	46	102	29	1.5

■ RICH-HSQ Hardened Steel Squares



Specifications:

- Material: SKS3
- Hardness: HRC60° ±2
- Right Angle Precision: 0.004 mm/100mm
- Applicable to measure vertical and horizontal degree.

unit: mm

Model	A	B	C	D	Weight (kg)
RICH-HSQ10	100	70	8	25	0.2
RICH-HSQ15	150	100	8	30	0.4
RICH-HSQ20	200	130	10	35	0.7
RICH-HSQ25	250	160	12	40	1.1
RICH-HSQ30	300	200	15	40	1.7

Gauge Blocks

■ RICH-S High Speed Steel Gauge Blocks



Model	Block Per Set	Grade	Sizes
RICH-S870	87	0	1.001-1.009 (with 0.001 Step*9pcs)
RICH-S871	87	1	1.01-1.49 (with 0.01 Step*49pcs)
RICH-S872	87	2	0.5-9.5 (with 0.5 Step*19pcs) 10-100 (with 10 Step*10pcs)
RICH-S1030	103	0	1.005 (1pc)
RICH-S1031	103	1	1.01-1.49 (with 0.01Step*49pcs)
RICH-S1032	103	2	0.5-24.5(with 0.5 Steps*49pcs) 25-100 (with 25 Step*4 pcs)
RICH-S1120	112	0	1.0005 (1pc)
RICH-S1121	112	1	1.001-1.009 (with 0.001 Step*9pcs)
RICH-S1122	112	2	1.01-1.49 (with 0.01 Step*49pcs) 0.5-24.5 (with 0.5 Step*49pcs)

■ RICH-W Carbide Metric Gauge Blocks



Model	Block Per Set	Grade	Sizes
RICH-W870	87	0	1.001-1.009 (with 0.001 Step*9pcs)
RICH-W871	87	1	1.01-1.49 (with 0.01 Step*49pcs)
RICH-W872	87	2	0.5-9.5 (with 0.5 Step*19pcs) 10-100 (with 10 Step*10pcs)
RICH-W1030	103	0	1.005 (1pc)
RICH-W1031	103	1	1.01-1.49 (with 0.01Step*49pcs)
RICH-W1032	103	2	0.5-24.5(with 0.5 Steps*49pcs) 25-100 (with 25 Step*4 pcs)
RICH-W1120	112	0	1.0005 (1pc)
RICH-W1121	112	1	1.001-1.009 (with 0.001 Step*9pcs)
RICH-W1122	112	2	1.01-1.49 (with 0.01 Step*49pcs) 0.5-24.5 (with 0.5 Step*49pcs) 25-100 (with 25 Steps*4pcs)

Edge Finder / Z Axial Preset Gauget

■ RICH-CZA Mechanical Edge Finder

unit: mm

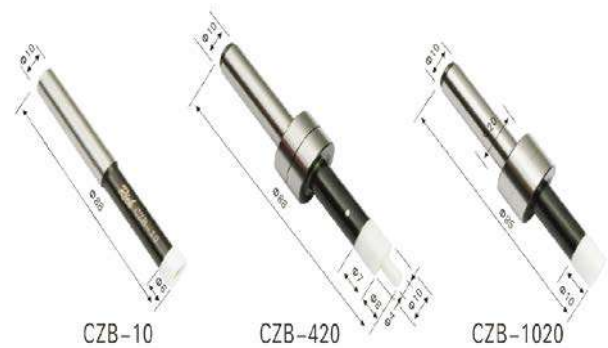
Model	O.D.	Full Length	G.W. (kgs)	LxWxH
RICH-CZA610	10	65	0.04	95*26*26
RICH-CZA420	10	88	0.04	95*26*26
RICH-CZA1020	10	83	0.07	95*26*26



■ RICH-CZB Ceramic Edge Finder

unit: mm

Model	O.D	Full Length	Probe Diameter
RICH-CZB10	10	88	Φ10x6L
RICH-CZB420	10	88	Φ4x8L
RICH-CZB1020	10	85	Φ10x10L



■ RICH-CZC Height Presetter

unit: mm

Model	Height (mm)	G.W. (kgs)	LxWxH
RICH-CZC50	50 +0.008 -0	1.08	110*100*80



MILLING

LATHE

GRINDING

MAGNETIC

MEASURING

OTHERS

HOT SALES

Surface Plates

■ RICH-SPCI Surface Plate (Cast Iron)



unit: mm

Model	L	W	H
RICH-SPCI2030	200	300	60
RICH-SPCI3030	300	300	60
RICH-SPCI3045	300	450	75
RICH-SPCI4545	450	450	85
RICH-SPCI5050	500	500	100
RICH-SPCI6045	600	450	100
RICH-SPCI6060	600	600	100
RICH-SPCI6075	600	750	110
RICH-SPCI6090	600	900	110
RICH-SPCI9090	900	900	125
RICH-SPCI90120	900	1200	150
RICH-SPCI100100	1000	1000	135
RICH-SPCI100150	1000	1500	150
RICH-SPCI100200	1000	2000	170

■ RICH-SPG Surface Plate (Granite)



unit: mm

Model	L	W	H
RICH-SPG1515	150	150	60
RICH-SPG2030	200	300	60
RICH-SPG3030	300	300	60
RICH-SPG3045	300	450	75
RICH-SPG4545	450	450	75
RICH-SPG6045	600	450	100
RICH-SPG6060	600	600	100
RICH-SPG6075	600	750	110
RICH-SPG6090	600	900	130
RICH-SPG9090	900	900	150
RICH-SPG90120	900	1200	150
RICH-SPG10075	1000	750	150
RICH-SPG100100	1000	1000	150
RICH-SPG100150	1000	1500	150
RICH-SPG100200	1000	2000	200

Other Machine Accessories

Other Machine Accessories

■ RICH-U2 U2 Universal Cutter Grinder

Specifications:	
Max. Collect Capacity:	18mm
Max. Grinding dia.:	25mm
Taper angle:	0°~ 180°
Relief angle:	0°~ 45°
Negative angle:	0°~ 26°
Grinding spindle:	3600 r.p.m
Cupe grinding wheel:	100 x 50 x 20 mm
Motor:	1/3 HP 220V 50/60Hz
Net weight:	45 kgs
Machine dimensions:	L45 x W40 x H35 cm
Packing dimensions:	L55 x W45 x H47 cm



■ RICH-CMFMC Chamfering Machine (Face milling Cutter)

Specifications:	
Model No:	CMFMC-500
Chamfering Capacity:	0~3m/m
Runnung Speed:	3600 R.P.M.
Voltage:	110 / 220 / 380V
N.W.:	29 KGS
G.W.:	32 KGS
Shipment Size:	53 x 42 x 41cm



Other Machine Accessories

■ RICH-CMGW Chamfering Machine (Grinding Wheel)



Chamfering Machine (grinding wheel type)-1

Specifications:	
Model No:	CMGW-500
Chamfering Capacity:	0~3m/m
Running Speed:	3600 R.P.M.
Voltage:	110 / 220 / 380V
N.W.:	29 KGS
G.W.:	32 KGS
Shipment Size:	53 x 42 x 41cm

■ RICH-CMSC Chamfering Machine (Side Cutter)



Chamfering Machine (side cutter type)-1

Specifications:	
Model No:	CMSC-500
Chamfering Capacity:	0~3m/m
Running Speed:	3600 R.P.M.
Voltage:	110 / 220 / 380V
N.W.:	28 KGS
G.W.:	31 KGS
Shipment Size:	53 x 42 x 41cm

■ RICH-CMSW Chamfering Machine(Sanding Wheel)



Chamfering Machine (sanding wheel type)-1

Specifications:	
Model No:	CMSW-320
Chamfering Capacity:	0~1m/m
Running Speed:	3600 R.P.M.
Voltage:	110 / 220 / 380V
N.W.:	24 KGS
G.W.:	27 KGS
Shipment Size:	53 x 42 x 41cm

HOT SALE PRODUCTS

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Compressed Air Tools

■ RICH-AG500 Air Grinder

Specifications:	
Model:	AG-500
Description:	Precision Type
Standard Collet Chuck:	Ø 3.0
Optional Collet Chuck:	Ø 2.34 / Ø 3.175
Speed:	60,000 rpm
Weight:	180g
Dimensions:	Ø 17.5 x 142L (mm)
Standard Accessories:	
	



■ RICH-AG700 Air Grinder

Specifications:	
Model:	AG - 700
Description:	Standard Type 120° angle surface grinder
Collet Chuck:	M7 Screw Shaft
Speed:	22,000 rpm / 90 psi
Weight:	200g
Dimensions:	Ø 16.5 x 136L (mm)
Standard Accessories:	
	



Drill Sharpener

■ RICH-RSD213 Drill Sharpener



Specifications:

Model:	RSD-213
Dimension:	26cm x 16cm x 16cm
Weight:	8Kg
Capacity:	Ø2 - Ø13 mm
Tool Applicable:	Twist Drill
Motor Speed:	5,000 rpm ± 300 rpm
Power Supply:	110V - 220V
Diamond Wheel:	CBN / HHS SD / Carbide
Standard Accessories:	- ER 20 Collet Ø2 - Ø13 - Extension Drill Holder X2 - Allen Key X2 - Power Cord X1

■ RICH-RSD320 Drill Sharpener



Specifications:

Model:	RSD-320
Dimension:	26cm x 16cm x 16cm
Weight:	8Kg
Capacity:	Ø3 - Ø20 mm
Tool Applicable:	Twist Drill
Motor Speed:	5,000 rpm ± 300 rpm
Power Supply:	110V - 220V
Diamond Wheel:	CBN / HHS SD / Carbide
Standard Accessories:	- ER 25 Collet Ø14 - Ø20 - ER- 0 Collet Ø2 - Ø13 - ER 25 Upper and Bottom nut - Extension Drill Holder X2 - Allen Key X2 - Power Cord X1

Endmill Sharpener

■ RICH-RSE413 Endmill Sharpener

Specifications:	
Model:	RSE-413
Dimension:	31cm x 26cm x 29cm
Weight:	17Kg
Capacity:	Ø4 - Ø13 mm
Tool Applicable:	2/3/4 Flute
Motor Speed:	6,000 rpm ± 300 rpm
Power Supply:	AC 110V - 220V 50/60HZ
Diamond Wheel:	CBN / HHS SD / Carbide
Standard Accessories:	- ER Collet Ø4 -Ø13 (10 pcs) - ER Chuck: 2/4FluteX1 3FluteX1 - Cable X1 - Fuse X2 - Key Wrench X1 - Diamond Wheel X1



■ RICH-RSE1225 Endmill Sharpener

Specifications:	
Model:	RSE-1225
Dimension:	36cm x 29cm x 34cm
Weight:	30Kg
Capacity:	Ø12 - Ø25 mm
Tool Applicable:	2/3/4 Flute
Motor Speed:	4,500 rpm ± 300 rpm
Power Supply:	AC 110V - 220V 50/60HZ
Diamond Wheel:	CBN / HHS SD / Carbide
Standard Accessories:	- ER Collet Ø12,16,18,20,22,25 (6pcs) - ER Chuck: 2/4FluteX1 3FluteX1 - Cable X1 - Fuse X2 - Key Wrench X1 - Diamond Wheel X1





TEN SOON

Users' Experience is our Priority

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