

The Next Generation Standard Chuck,
transforming conventional machining methods

Next Generation Standard Chuck **BR** S E R I E S

The jaw-reforming at setup change is eliminated. (With Tnut-Plus)



Recd. the 2021 JSME Award (Technology)



Recd. the JSPE Monozukuri Award (2019)

Recd. the JSPE Chugoku Shikoku Branch Technology Award (2019)





CHUCK

Next Generation Standard Chuck BR S E R I E S

PAT NO.6411619
PAT NO.6345321

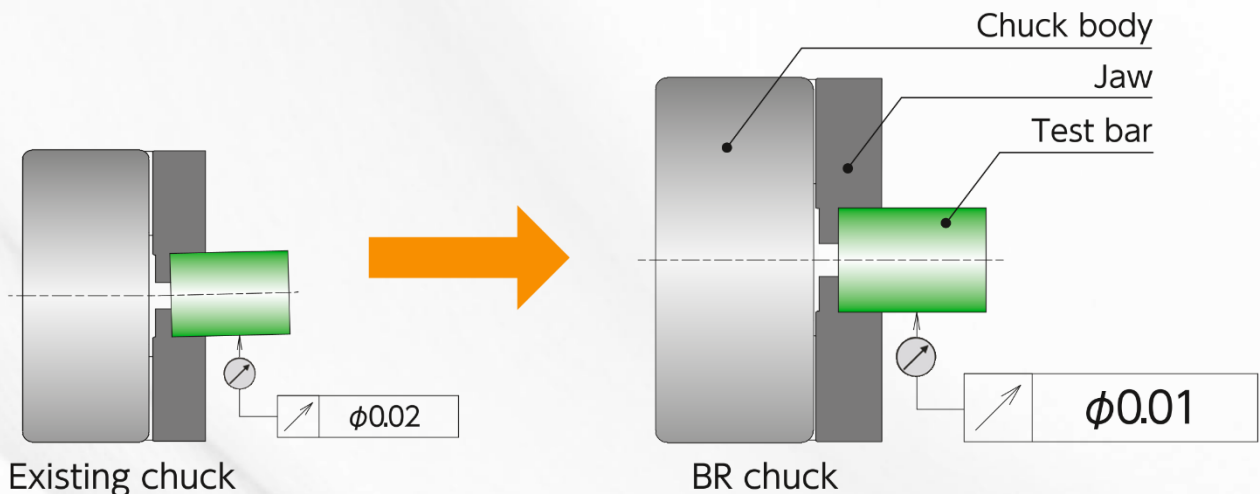
Next generation standard chuck

(0.015mm T.I.R. or less for BR12)

Note1)

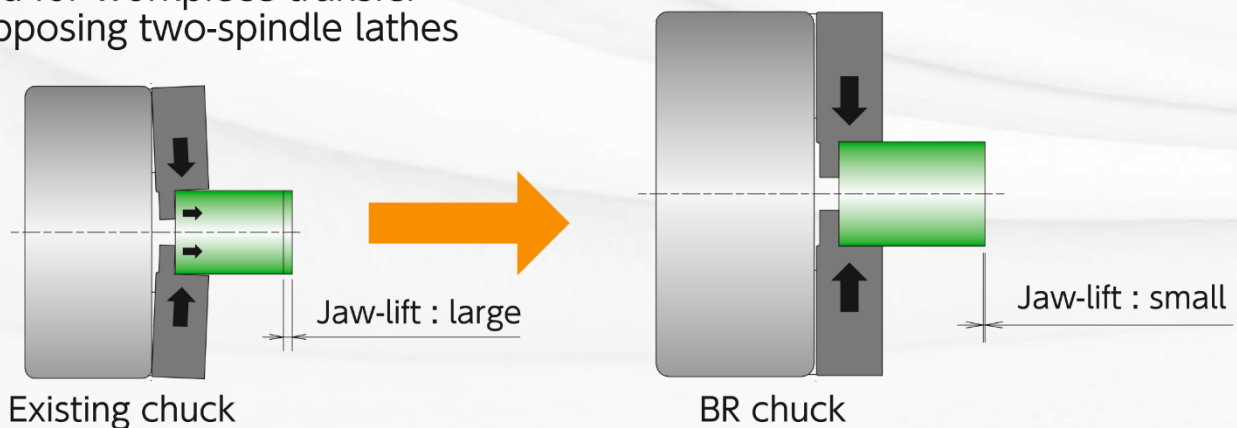
1 Gripping accuracy of 0.01 mm T.I.R. or less, transforming standard machining methods

This chuck can be also used for finishing process.



2 Reduced jaw-lift

Stable gripping accuracy
Good for workpiece transfer
in opposing two-spindle lathes



3 Interchangeable with Kitagawa B-200 & BB200 Existing cylinder can be used.

4 Modern appearance Body with rounded corner edge



Dedicated QR code to
access technical information



<https://brchuck.com>



Tnut-Plus

PAT NO.6345375



With the optional special T-nuts it will become more accurate.

Note2)

(0.015mm T.I.R. or less for BR12)

Maintaining a repeatability of 0.01 mm T.I.R. or less after changing jaws

Tnut-Plus enables unrivalled top jaw exchange accuracy.

1 Eliminating jaw-reforming at setup change

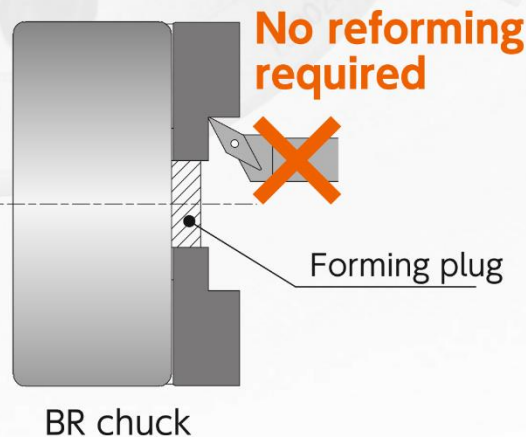
Significant reduction of setup time

3 setup changes per day, 30 minutes jaw forming per setup change

450 hours per year = 1.35 million Yen

*This estimate is based on the case of using a 3-jaw chuck.

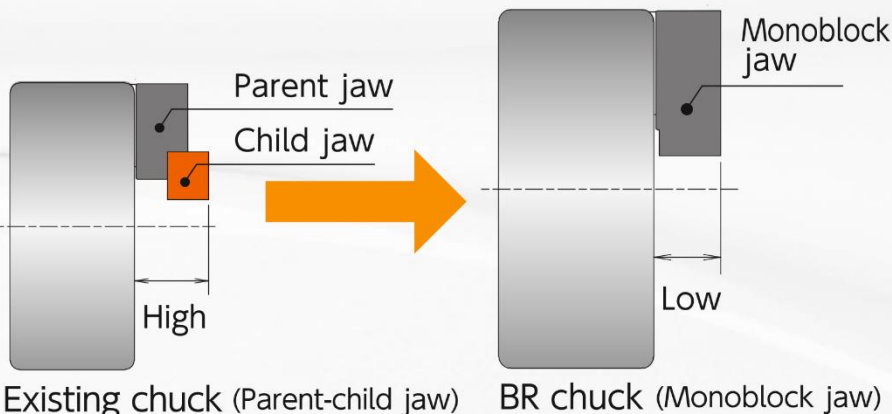
Please watch the video from the QR code on the right.



2 Parent-child jaws can be replaced with monoblock jaws.

Due to high repeatability at jaw changing, it is not necessary to use parent-child jaws.

The chuck can rotate at higher speed so that the surface roughness is improved as well as reducing cycle time.



3 Kitagawa SJ type soft jaws on your shelves can be used.

※High repeatability can be realized only with Kitagawa genuine soft jaws.

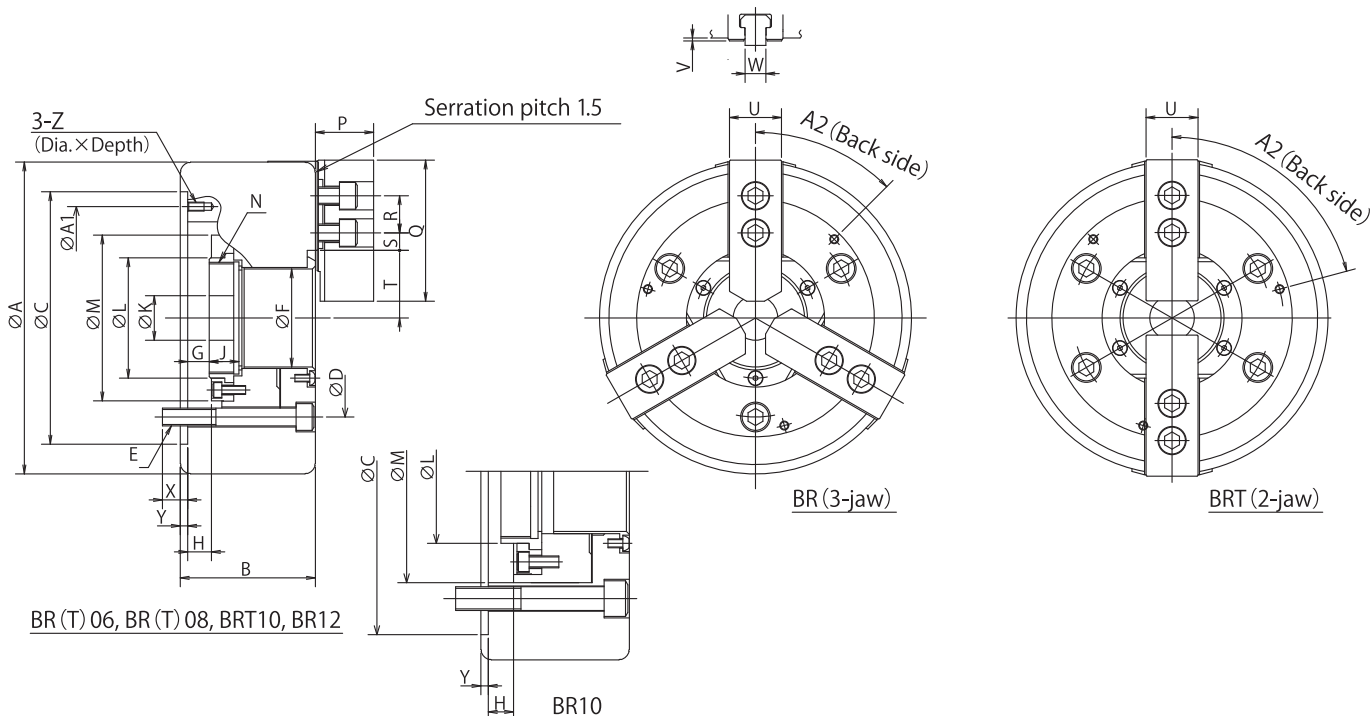
Use of jaws manufactured by a third party may cause deterioration of repeatability, sliding surface seizure or damage to parts.

Note 1) The gripping accuracy is the Total Indicator Reading of the test bar right after forming jaws.

Note 2) The repeatability is the amount of the test bar runout measured by detaching the formed jaws from the chuck and mounting them again in the same position.

Note 3) Both the gripping accuracy and repeatability are the amounts of test bar runout measured 10 mm apart from the top end of Kitagawa standard soft jaw.

The above criteria are based on our internal regulations.



BR (T) 06, BR (T) 08, BRT10, BR12

BR10

Dimensions ※Blank draw nut equipped.

Dimensions Model	A	B	C (H6)	D	E	F	G max.	G min.	H max.	H min.	J	K	L	M
BR06	170	81	140	104.8	3-M10	53	11	-1	12	0	17.5	20	66	89.7
BR08	210	91	170	133.4	3-M12	66	14.5	-1.5	16	0	20	30	81	111.6
BR10	254	100	220	171.4	3-M16	81	8.5	-10.5	19	0	25	45	97	150
BR12	315	108	300	235	3-M20	106	8	-15	23	0	28	50	124	166.7
BRT06	170	81	140	104.8	4-M10	53	11	-1	12	0	17.5	20	66	89.7
BRT08	210	91	170	133.4	4-M12	66	14.5	-1.5	16	0	20	30	81	111.6
BRT10	254	100	220	171.4	4-M16	81	8.5	-10.5	19	0	25	45	97	138.7

Dimensions Model	N max.	P	Q	R	S max.	S min.	T max.	T min.	U	V	W	X	Y	Z	A1	A2
BR06	M60×2	33.2	72	20	21.25	9.25	36.05	33.3	31	2	12	16	5	M6×11	116	90°
BR08	M75×2	39.2	95	25	23.75	11.75	45.5	41.8	35	2	14	17	5	M6×11	150	45°
BR10	M90×2	43.2	110	30	32.25	11.25	54	49.6	40	2	16	22	5	M8×15	190	75°
BR12	M115×2	52	111	30	45.75	12.75	68.8	63.5	50	2.8	21	29	6	M10×16	260	75°
BRT06	M60×2	33.2	72	20	21.25	9.25	36.05	33.3	31	2	12	16	5	M6×11	116	90°
BRT08	M75×2	39.2	95	25	24	12	45.5	41.8	35	2	14	17	5	M6×11	150	75°
BRT10	M90×2	43.2	110	30	32.5	11.5	54	49.6	40	2	16	22	5	M8×15	190	75°

Specifications ※The weight and the moment of inertia include mounting bolts and soft jaws. The calculation is assuming that the master jaws are at the centre of stroke and soft jaws are at as of the outline drawing.

Specifications Model	Thru-hole mm	Gripping range mm		Jaw stroke (diameter) mm	Plunger stroke mm	Max. speed min ⁻¹	Max. draw bar pull force kN (kgf)	Max. gripping force kN (kgf)	Dynamic gripping force at max. speed kN (kgf)	Net weight kg	Moment of inertia kg·m ²	Matching cylinder	Max. pressure MPa (kgf/cm ²)	Matching soft jaw
		Max.	Min.											
BR06	53	170	16	5.5	12	6000	23	58.5	22.5	12.8	0.052	SR1453C SS1453K	2.3 2.1	SJ06B1
BR08	66	210	22	7.4	16	5000	35	90	36	22.2	0.14	SR1566C SS1666K	3.2 2.5	SJ08B1
BR10	81	254	31	8.8	19	4500	49	123	44	35.8	0.32	SR1781C SS1881K	3.4 3.1	SJ10B1
BR12	106	315	44	10.6	23	3500	60	156	53	57.0	0.80	SR2010C SS2110K	3.4 3.0	SJ12N1
BRT06	53	170	20	5.5	12	6000	15.3	39	16	12.5	0.05	SR1453C SS1453K	1.6 1.5	SJ06A1T
BRT08	66	210	28	7.4	16	5000	23.3	60	29	21.7	0.13	SR1566C SS1666K	2.2 1.8	SJ08A1T
BRT10	81	254	38	8.8	19	4500	32.7	82	29.4	34.9	0.32	SR1781C SS1881K	2.3 2.2	SJ10A1T

For more information on BR Chuck and other technical information on Kitagawa products, visit the Kitagawa Web Showroom.
<https://prod.kiw.co.jp/exhibition/mttools/en>



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<https://www.kiw.co.jp>

<https://www.kitagawa.com>

<https://www.kitagawa.com.cn>

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- Specifications and outside appearance are subject to change without notice due to ongoing research and development.
- The color of the actual product may be different from the catalogue's due to printing matters.
- Catalogue contents as of 2022.7

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