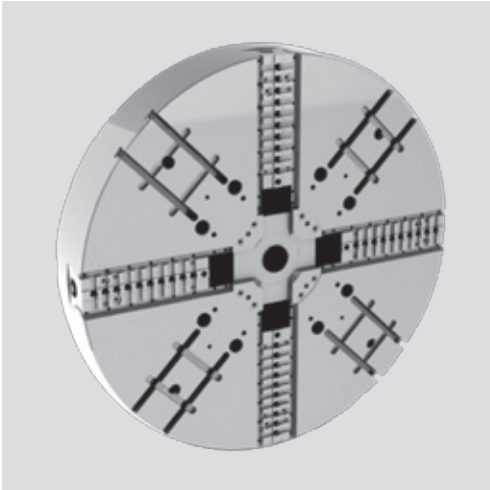


# TPT-RC

2+2 independent jaw movement  
Tongue & groove  
Radial setting of jaws

## High precision 2+2 jaw power chuck with self-centering independent jaw movement Ø 1000 - 2000 mm

- closed center
- tongue & groove



### Application/customer benefits

- High versatility on large vertical lathes to clamp round, elliptical, irregular, square and rectangular workpieces, self centering in two axis
- External or internal clamping

### Technical features

- 2+2 jaw chuck with 2 independent self-centering jaw drives (two wedge drives)
- jaw No. 1 + 3 (clamping jaws): power operated
- jaw No. 2 + 4 (clamping jaws): power operated
- internal parts case hardened for high precision and long life
- with manual radial setting of jaws for the workpiece centering
- protection from contamination with seals along the master jaw profiles
- possibility to use jaw boxes for manual clamping mounted on the T-slots between the master jaws

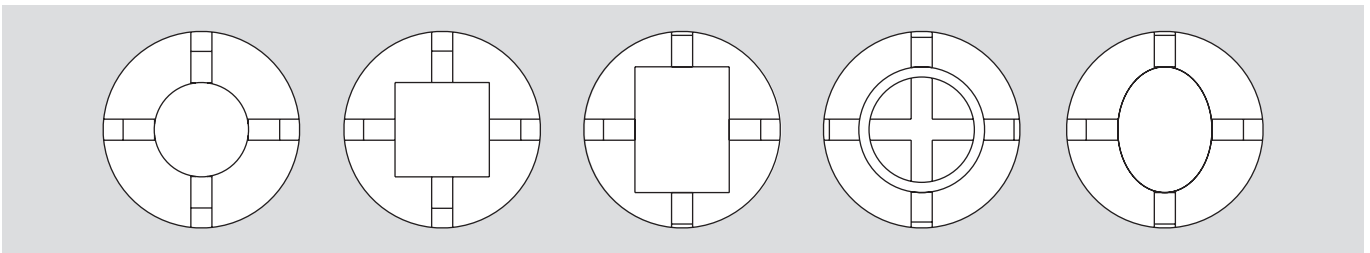
### Standard equipment

2+2 jaw chuck  
1 set of soft top jaws  
Mounting bolts

### Ordering example

Power chuck TPT-RC 2+2 1000 Z520

Using the double centering it is possible to easily clamp a wide variety of component shapes: round, square, ring, rectangular, oval and irregular



### Two independent wedge drives

- Operated by independent double piston cylinders.
- Jaws 2 and 4 are power operated to center the component in one axis and to drive the component.
- Jaws 1 and 3 are power operated to center the component on the second axis and to drive the component.
- Since both pairs of jaws are power operated the chuck can reach high speeds.

### Technical data

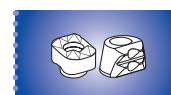
SMW-AUTOBLOK Type		TPT-RC 1000	TPT-RC 1250	TPT-RC 1400	TPT-RC 1600	TPT-RC 2000
Number of jaws		2+2	2+2	2+2	2+2	2+2
Radial jaw stroke + Radial setting stroke	mm	23 + 30	23 + 30	24 + 40	24 + 40	24 + 40
Wedge stroke	mm	57	57	60	60	60
Weight (plain back without top jaws)	kg	695	940	1460	1800	2760
Moment of inertia	kg·m <sup>2</sup>	86	180	355	565	1370

### TWO independent wedge drives

Max. draw pull* (wedge 1, jaw 1 + 3)	kN	100	100	130	130	120
Max. draw pull* (wedge 2, jaw 2 + 4)	kN	100	100	130	130	120
Max. gripping force jaw 1 + 3* (power operated)	kN	180	180	240	240	210
Max. centering force jaw 2 + 4 (power operated)	kN	180	180	240	240	210
Max. speed	r.p.m.	550	450	450	400	280
Recommended actuating cylinders**	type	DCE 240/240	DCE 240/240	DCE 240/240	DCE 240/240	DCE 240/240

\* For internal clamping reduce the draw pull by 30 %

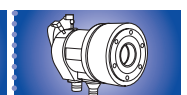
\*\* Technical details of DCE cylinders see page 238



Page 330



Page 324



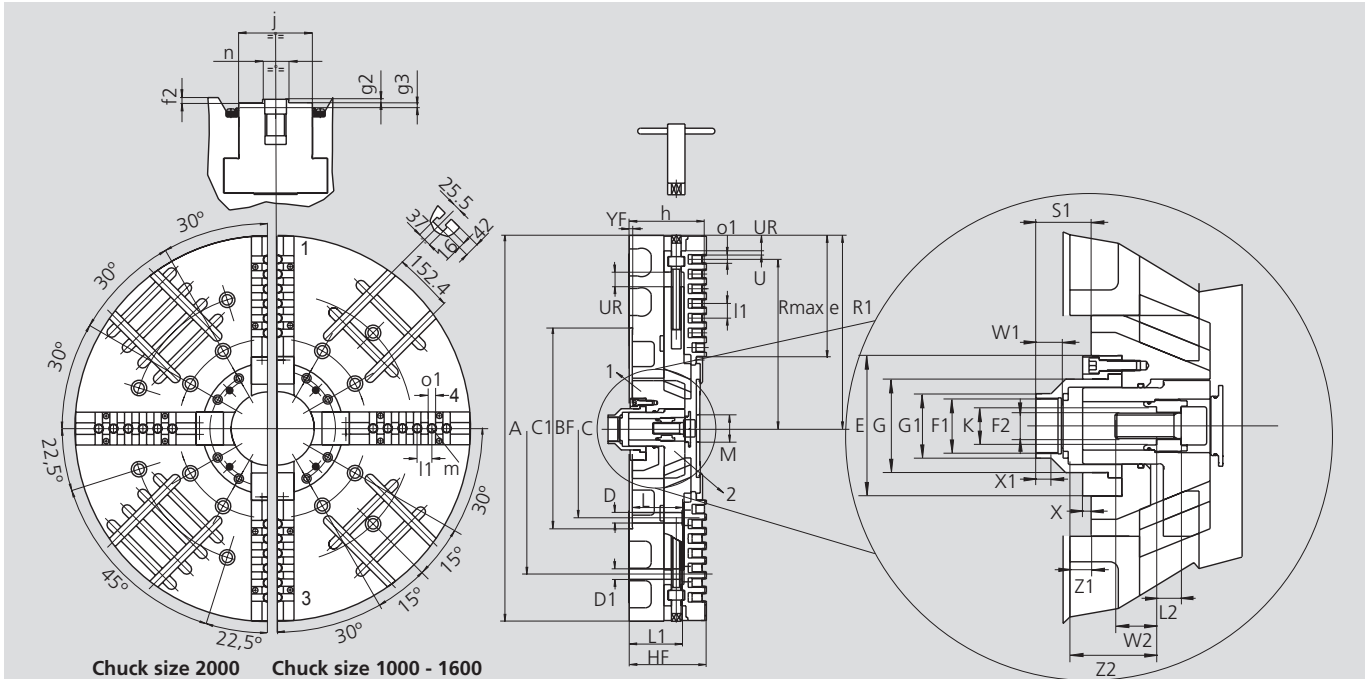
Page 225

# High precision 2+2 jaw power chuck with self-centering independent jaw movement Ø 1000 - 2000 mm

- closed center
- tongue & groove

## TPT-RC

2+2 independent jaw movement  
Tongue & groove  
Radial setting of jaws



Chuck size 2000    Chuck size 1000 - 1600

Subject to technical changes  
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type			TPT-RC 1000		TPT-RC 1250		TPT-RC 1400		TPT-RC 1600		TPT-RC 2000	
Mounting			Z520	A20	Z520	A20	Z720	Z720	Z720	Z720	Z720	Z720
	<b>A</b>	mm	1005		1250		1400		1600		2000	
	<b>Bf</b> H6	mm	520		520		720		720		720	
	<b>C</b>	mm	463.6		463.6		647.6		647.6		647.6	
	<b>C1</b>	mm	700 (*)		700 (*)		1110		1110		1110	
	<b>D</b>	mm	27		27		33		33		33	
	<b>D1</b>	mm	27(*)		27(*)		27		27		27	
	<b>E</b>	mm	165		165		165		165		165	
	<b>F1</b>	mm	M75 x 2		M75 x 2		M75 x 2		M75 x 2		M75 x 2	
	<b>F2</b>	mm	M30		M30		M30		M30		M30	
	<b>G</b>	mm	110		110		110		110		110	
	<b>G1</b>	mm	86		86		86		86		86	
	<b>Hf</b>	mm	200		200		240		240		260	
	<b>K</b>	mm	45		45		45		45		45	
	<b>L</b>	mm	146		146		179		179		199	
	<b>L1</b>	mm	148 (°)		148 (°)		192		192		212	
	<b>L2</b>	mm	29		29		29		29		29	
	<b>M</b>	mm	70		70		70		70		70	
Chuck open	<b>R1</b>	mm	502		623		696		796		996	
	<b>Rmax</b>	mm	457		563		651		738		914	
	<b>S1</b>	mm	97		97		65		65		65	
Radial jaw stroke	<b>U</b>	mm	23		23		24		24		24	
Radial setting stroke	<b>UR</b>	mm	30		30		40		40		40	
	<b>W1</b>	mm	30		30		30		30		30	
	<b>W2</b>	mm	49		49		49		49		49	
	<b>X</b>	mm	31		31		0		0		0	
	<b>X1</b>	mm	23		23		23		23		23	
	<b>Yf</b>	mm	8		8		8		8		8	
Wedge stroke 1 max./min.	<b>Z1</b>	mm	57	0	57	0	60	0	60	0	60	0
Wedge stroke 2 max./min.	<b>Z2</b>	mm	98	41	98	41	137	77	137	77	157	77
	<b>e</b>	mm	295		416		446		539		739	
	<b>f2</b>	mm	8		8		8		8		8	
	<b>g2</b>	mm	4		4		4		4		4	
	<b>g3</b>	mm	7		7		7		7		7	
	<b>h</b>	mm	192		192		232		232		252	
	<b>j</b>	mm	85		85		110		110		110	
	<b>l1</b>	mm	38.1		38.1		38.1		38.1		38.1	
Number + size	<b>m</b>	mm	7 x M24		10 x M24		11 x M24		13 x M24		17 x M24	
	<b>n</b>	mm	30		30		30		30		30	
Number + size	<b>o1</b>	mm	6 x 19.03		9 x 19.03		10 x 19.03		12 x 19.03		16 x 19.03	

\*Only on request