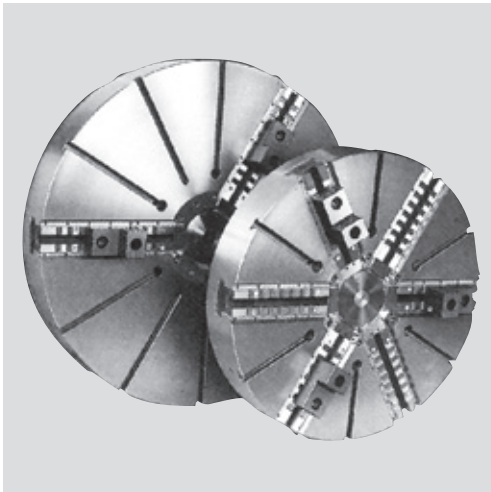


# IR-C

Tongue & groove

## High precision power chucks Ø 1000 - 2500 mm

- Radial setting of jaws
- closed center
- 3 and 6 jaws (all diameters)



### Application/customer benefits

- Chucking operations of very large components
- Suitable for vertical machines thanks to the front protection of the slide ways

**IR-C:** manual radial setting of master jaws, tongue & groove (type "American Standard") (all diameters)

### Technical features

- Gripping force transmission via wedge hook
- Front protection of the slide ways against swarf and chips penetration
- IR-C chucks with manual radial setting of master jaws for the workpiece centering

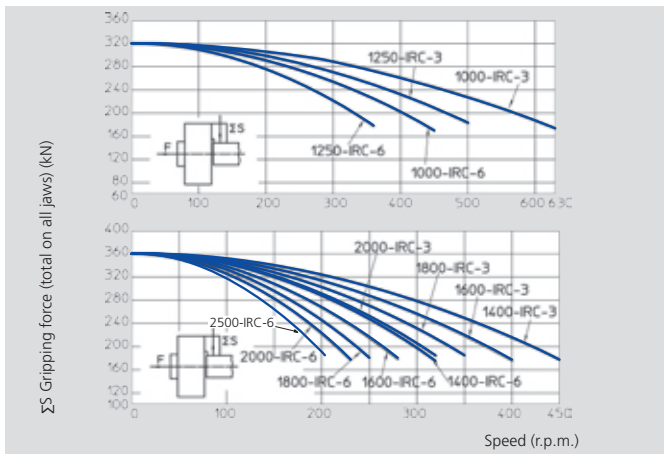
### Standard equipment

- 3 or 6 jaws chuck
- 1 set soft top jaws
- mounting bolts and grease gun

### Ordering example

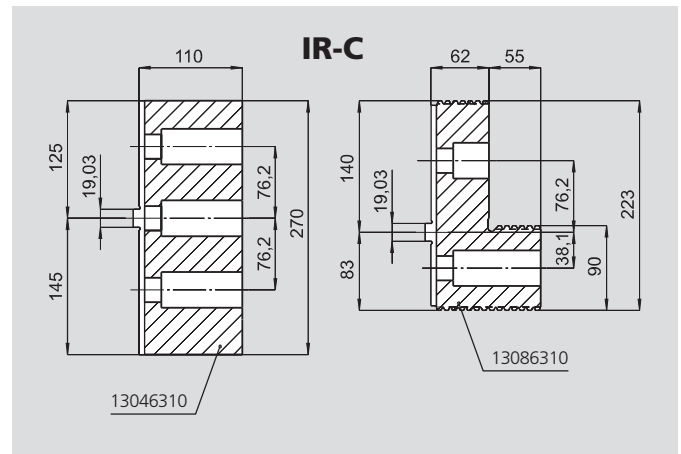
6 jaw chuck IR-C 1600/Z720

### Actual gripping force diagrams



The data in the diagram refer to 3-6 jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

### Soft and hard top jaws for IR-C

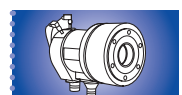


#### ⚠ Safety advice/danger of damage:

When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

SMW-AUTOBLOK Type		IR-C 1000		IR-C 1250		IR-C 1400		IR-C 1600		IR-C 1800		IR-C 2000		IR-C 2500
Number of jaws		3	6	3	6	3	6	3	6	3	6	3	6	6
Radial jaw stroke + (manual setting)	mm	23 + (30)		23 + (30)		24 + (40)		24 + (40)		24 + (40)		24 + (40)		30 + (40)
Axial piston stroke	mm	57		57		60		60		60		60		60
Max. draw pull*	kN	180		180		200		200		200		200		270
Max. gripping force*	kN	320		320		360		360		360		360		380
Max. speed	r.p.m.	630	450	500	360	450	320	400	280	350	250	320	230	200
Weight (without top jaws)	kg	600		800		1200		1600		1800		2500		5100
Moment of inertia	kg·m <sup>2</sup>	68		145		280		500		750		1250		3860
Hard top jaw (piece)	Id. No.	13086310		13086310		13086310		13086310		13086310		13086310		13086310
Soft top jaw (piece)	Id. No.	13046310		13046310		13046310		13046310		13046310		13046310		13046310
Recommended actuating cylinders		SIN-S 250		SIN-S 250		SIN-S 250		SIN-S 250		SIN-S 250		SIN-S 250		SIN-S 250

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



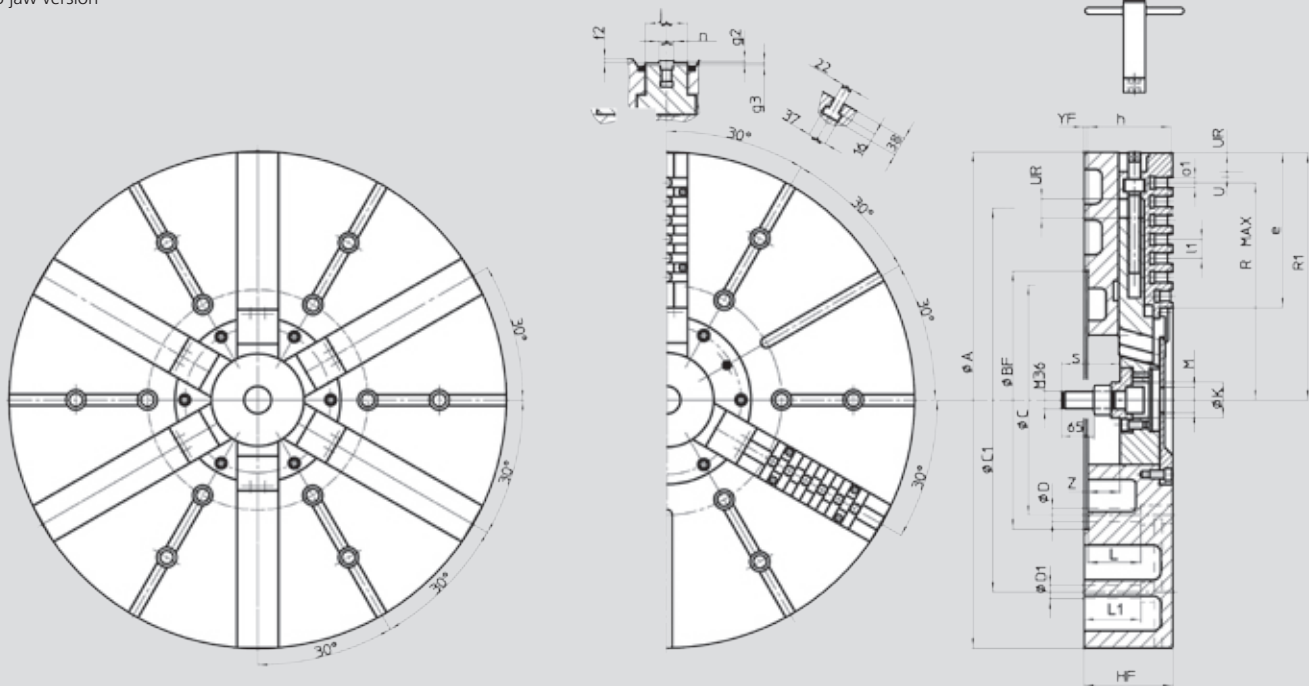
# High precision power chucks Ø 1000 - 2500 mm

# IR-C

- Radial setting of jaws
- closed center
- 3 and 6 jaws (all diameters)

Tongue & groove

6 jaw version



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

SMW-AUTOBLOK Type			IR-C 1000		IR-C 1250		IR-C 1400	IR-C 1600	IR-C 1800	IR-C 2000	IR-C 2500
Mounting			Z520	A20	Z520	A20	Z720	Z720	Z720	Z720	Z720
	<b>A</b>	mm	1005		1250		1400	1600	1800	2000	2500
	<b>Bf</b>	H6 mm	520		520		720	720	720	720	720
	<b>C</b>	mm	463.6		463.6		647.6	647.6	647.6	647.6	647.6
	<b>C1</b>	mm	700		700		1110	1110	1110	1110	1640
	<b>D</b>	mm	27		27		33	33	33	33	33
	<b>D1</b>	mm	27		27		27	27	27	27	27
	<b>Hf</b>	mm	184		184		222	222	222	240	280
	<b>K</b>	mm	72		72		72	72	72	72	72
	<b>L</b>	mm	121		121		159	159	159	177	182
	<b>L1</b>	mm	97		97		130	130	130	148	205
	<b>M</b>	mm	M52 x 1.5		M52 x 1.5		M52 x 1.5	M52 x 1.5	M52 x 1.5	M52 x 1.5	-
Chuck open	<b>R1</b>	mm	502		623		696	796	896	996	1248
Chuck open	<b>Rmax</b>	mm	457		563		657	738	838	914	1176
	<b>S</b>	mm	100		100		100	100	100	100	30
Radial stroke	<b>U</b>	mm	23		23		24	24	24	24	40
Setting stroke	<b>UR</b>	mm	30		30		40	40	40	40	15
	<b>Yf</b>	mm	8		8		8	8	8	8	8
max.	<b>Z</b>	mm	59		59		82	82	82	100	-
min.	<b>Z</b>	mm	2		2		22	22	22	40	-
	<b>e</b>	mm	295		416		446	546	639	739	959
	<b>f2</b>	mm	8		8		8	8	8	8	8
	<b>g2</b>	mm	4		4		4	4	4	4	4
	<b>g3</b>	mm	7		7		7	7	7	7	7
	<b>h</b>	mm	168		168		206	206	206	224	261
	<b>j</b>	mm	85		85		110	110	110	110	110
	<b>l1</b>	mm	38.1		38.1		38.1	38.1	38.1	38.1	38.1
	<b>m</b>	mm	M24		M24		M24	M24	M24	M24	M24
	<b>n</b>	h8 mm	30		30		30	30	30	30	30
	<b>o1</b>	H7 mm	19.03		19.03		19.03	19.03	19.03	19.03	19.03
Number of 01 cross grooves			6		9		10	12	14	16	21
Number of "m" threads			7		10		11	13	15	17	21