

# CUSTOMER BENEFITS

## SMW-AUTOBLOK is the inventor



SMW-AUTOBLOK - the inventor and pacemaker in technology for OCTG chucks. More than 40 years of experience ensure the highest productivity for all of our customers.

## Worldwide Service + Support



Our worldwide SMW-AUTOBLOK network guarantees immediate service, availability of parts and support wherever needed.

## Partner of oil industry



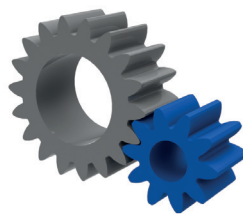
Working closely with our customers, we are able to provide new and innovative solutions as challenges arise.

## Widest range of OCTG products



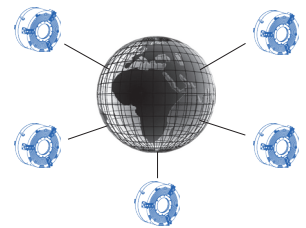
SMW-AUTOBLOK offers a complete range of OCTG chucks as standard products. The need for expensive "special product" chucks with long lead times is eliminated.

## Fast time and high accuracy



Improving production processes with rapid chuck actuation, SMW-AUTOBLOK's OCTG chucks increase productivity and decrease machine downtimes.

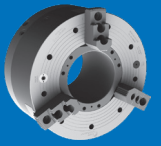


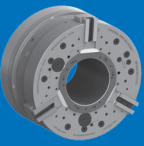

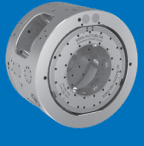
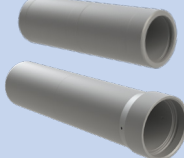




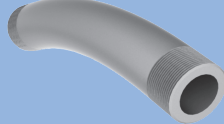




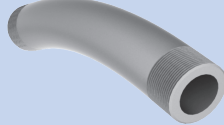

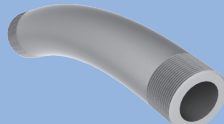

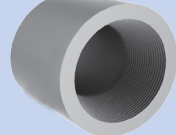

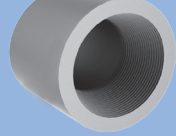




## Applications worldwide



5 continents - 1 partner: All major players in the OCTG industry on 5 continents trust in SMW-AUTOBLOK as their reliable workholding partner.

# Chuck finder for Oil Country Tubular Goods: Introduction

- Straight pipes
- Bent pipes
- Couplings

Chuck type						
Machining OCTG product	BB-N / BB-N-ES	BB-EXL2G	BB-SC	BB-AZ2G	BB-FZA2G	SF-RAZ2G
 <b>Straight pipes</b>	 Page 12 / 14	 Page 16	 Page 18	 Page 20		
 <b>Bent pipes with shimming</b>	 Page 12 / 14	 Page 16	 Page 18	 Page 20		
 <b>Bent pipes with external centering chuck</b>				 Page 20		
 <b>Bent pipes with integrated centering chuck</b>					 Page 24	
 <b>Threadings of couplings in 1 set-up</b>						 Page 30
 <b>Threadings of couplings in 2 set-ups</b>	 Page 12 / 14	 Page 16	 Page 18			 Page 30



**Ideal**



**Possible**

## Big Bore



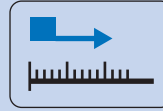
Big Bore is synonymous for **self contained air chucks with large through holes**. Big Bore chucks allow for the full spindle bore of the machine to be utilized.

## Quick clamping circle



Optimal sized air feeds and valve systems guarantee a **quick clamping cycle**.

## ES



**ES** chucks offer **extended jaw stroke** for greater clearance to ensure safe loading and unloading of pipe.

## Spring clamp



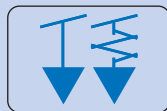
**Spring clamp technology** ensures the quickest clamping cycles and the highest degree of safety under any conditions.

## Low maintenance



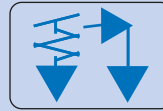
**Proofline** chucks are **fully sealed** and **low maintenance** allowing for long service intervals, minimizing machine downtime.

## AZ-2G

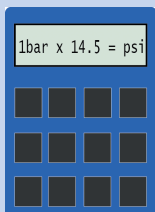


**AZ-2G** chucks offer the versatility of clamping either **compensating** or **self centering**.

## FZA-2G



**FZA-2G** chucks **sequence 3 centering jaws** along with **3 compensating jaws** integrated within the same chuck body.



### Conversion table (US)

1 mm	=	0.03937 Inch	1 cm <sup>2</sup>	=	0.155 square inches
1 bar	=	14.5 psi	1 liter	=	1.05 quarts (qt)
1 kN	=	220.46 lbf	1 kg·m <sup>2</sup>	=	3417 lb square inches
1 kg	=	2.2046 lbs	1 liter / min	=	0.264 gallon / min

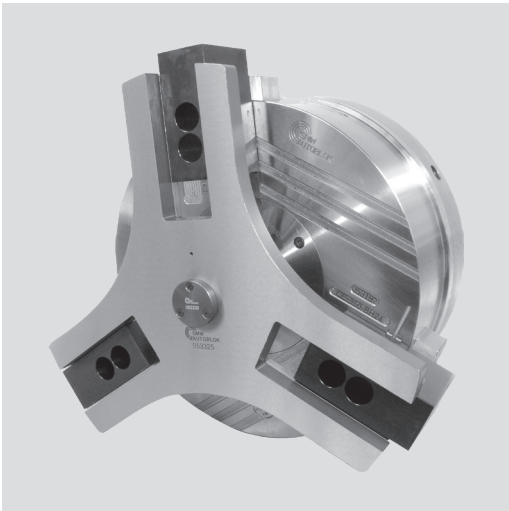
Data sheet						Performance characteristics		
OCTG chuck	Size	Outside dia. max	Work piece capacity	Time for a full clamping	Time for a full opening	Max. grip force (at max. pressure)	Height of chuck without adapter	Weight without jaws and adapter
	mm	mm	mm	max.	max.	kN	mm	kg
<b>BB-N</b> ■ Big Bore ■ Quick clamping circle	400 - 140	467	140	-	-	266	196	155
	470 - 191	470	191	4.5	3.0	191	196	160
	500 - 205	570	205	6.0	6.0	350	225	230
	500 - 230	570	230	6.0	6.0	316	225	200
	600 - 275	605	275	6.0	6.0	333	225	270
	630 - 310	685	310	6.5	6.5	366	263	420
	800 - 410	850	410	7.0	5.5	550	305	650
<b>BB-N-ES</b> ■ Big Bore ■ Quick clamping circle ■ Extended stroke	400 - 140	467	140	on request	on request	216	240	200
	470 - 191	470	191	4.5	3.0	191	240	195
	500 - 205	570	205	6.0	4.5	316	280	340
	500 - 230	570	230	6.0	4.5	283	280	325
	600 - 275	605	275	6.0	4.5	308	280	350
	630 - 325	685	325	6.0	4.5	333	307.5	630
	850 - 375	850	375	7.0	5.5	333	354	970
	1000 - 560	1000	560	7.5	6.0	283	332	960
<b>BB-SC</b> ■ Big Bore ■ Spring clamp ■ Low maintenance	600 - 275	750	275	3	3	150	320.5	516
	850 - 395	925	395	3	3	170	375.5	1025
	1020 - 565	1095	565	4.5	4.5	170	375.5	1256
<b>BB-AZ2G</b> ■ Big Bore ■ Self centering or compensating ■ Extended stroke	685 - 275	685	275	on request	on request	266	380.5	800
	740 - 330	740	330	on request	on request	266	380.5	875
	800 - 390	800	800	on request	on request	300	380.5	1000
	1000 - 560	1000	560	on request	on request	300	380.5	1420
<b>BB-FZA2G</b> ■ Big Bore ■ Sequence chuck	740 - 275	740	275	on request	on request	149	516.5	1100
	800 - 330	800	330	on request	on request	133	516.5	1080
	920 - 390	920	390	on request	on request	255	546.5	1900
<b>SF-RAZ2G</b> ■ Hydraulic indexing chuck ■ Low maintenance	750	750	185	2	2	250	456	1018
	840	840	275	2	2	250	501	1286
	950	950	368	2	2	250	560	1650

Clamping times have been measured with the corresponding original SMW-AUTOBLOK air control unit on the SMW-AUTOBLOK test stand. For more information please contact SMW-AUTOBLOK.



INCH SERRATION

■ With integrated dampener



### Application/customer benefits

- Axial positioning and centering of tubes when a BB-AZ2G chuck on the main spindle is used in compensating clamping mode
- Integrated hydraulic dampener with fixed end position for controlled deceleration and positioning of tubes
- Suitable for O.D. and I.D. centering

### Technical features

- Stationary pneumatic clamping unit with integrated dampener / end stop
- Operating pressure 2 - 10 bar (29 - 145 psi)
- Monitoring of end position of the axial stop via prox. switch (prox. switch optional)

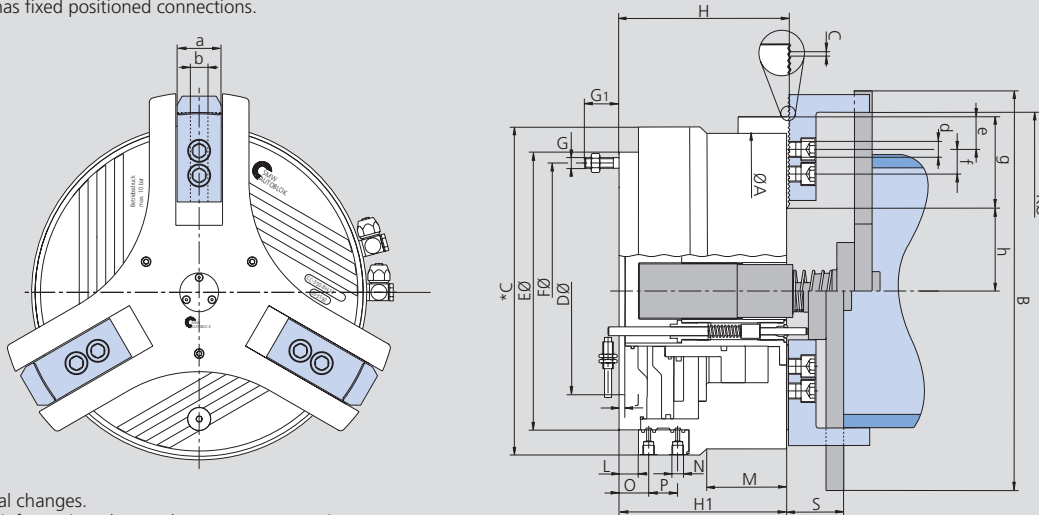
### Standard equipment

3-jaw centering chuck  
1 set of soft top jaws

### Ordering example

Stationary centering chuck CC-350

\* Chuck CC-240 has fixed positioned connections.

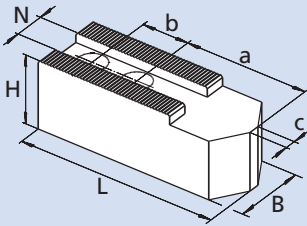


Subject to technical changes.  
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			CC 240 Z	CC 350 Z	CC 470 Z
Id. No.			053290	053192	054470
	<b>A</b>	mm	240	360	470
	<b>B</b>	mm	306	446	550
	<b>C</b>	mm	250	372	n.a.
	<b>D H6</b>	mm	195	235	310
	<b>E</b>	mm		315	400
	<b>F</b>	mm	223.8	290.5	374
	<b>G/G1</b>	mm	M12 / 39	M12 / 39	M12 / 26
	<b>H</b>	mm	135.5	191.5	239.5
	<b>H1</b>	mm	134	190	238
	<b>J</b>	mm	6.5	6.5	8
Clamping Ø max.	<b>K</b>	mm	245	365	507
	<b>L</b>	mm	-	21	20
	<b>M</b>	mm	49	92	n.a.
Pneumatic connection	<b>N</b>	inch	G 1/4"	G 1/4"	G 1/2"
Min. / max.	<b>S</b>	mm	45 / 95	47 / 97	50.5 / 152.5
	<b>a</b>	mm	40	44	60
	<b>o</b>	mm	74	33	37
	<b>p</b>	mm	-	33	26
	<b>b f7</b>	mm	17	21	25.5
Serration	<b>c</b>	inch	1/16" x 90°	1/16" x 90°	3/32" x 90°
Bolts ISO 4762 12.9	<b>d</b>	mm	M12 x 30	M16 x 35	M20 x 45
Min.	<b>e</b>	mm	9.5	12	15
T-nut distance min. / max.	<b>f</b>	mm	22 / 41.5	25 / 72	35 / 68
Length of serration	<b>g</b>	mm	59	95	99
Min. / max.	<b>h</b>	mm	53 / 66	85 / 109	128 / 153
<b>Stroke / jaw</b>		mm (inch)	12.7 (0.5")	24 (0.94")	25 (0.98")
<b>Pressure min. / max.</b>		bar (psi)	2 / 10 (29 / 145)	2 / 10 (29 / 145)	2 / 10 (29 / 145)
<b>Piston area</b>		cm <sup>2</sup>	290	486	652
<b>Max. gripping force at 6 bar (closing)</b>		kN (lbf)	20 (4496)	31 (6969)	40 (8992)
<b>Air consumption / jaw stroke at 6 bar</b>		liter	5.5	13.5	21
<b>Weight (without top jaws)</b>		kg (lbs)	53 (11915)	115 (25853)	260 (58450)

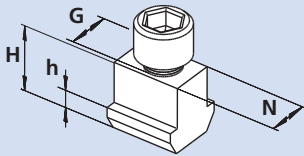
- Top jaws
- T-nuts

**MWB-D / MAB-D**  
Soft top jaws



Chuck Type	CC 240 Z	CC 350 Z	CC 470 Z
Jaw type	MWB-D 240	MWB-D 250	MAB-D 2505
Jaw Id. No. (set)	233462	013491	081603
B	40	50	60
H	80	80	120
L	90	120	155
N	17	21	25.5
Serration	1/16" x 90°	1/16" x 90°	3/32" x 90°
a	20	62	94
b	22	28	35
kg / set	4.2	10.5	21.5

**NST**  
T-nuts



Chuck Type	CC 240 Z	CC 350 Z	CC 470 Z
T-nut type	NST 17-4	NST 21-5	NST 21-5
T-nut Id. No. / piece	013864	033429	014812
N	17	21	25.5
H	26.5	30	29
h	9.5	11	11
G	M12	M16	M20
Bolt ISO 4762 12.9	M12 x 30	M16 x 35	M20 x 40

**JAWS-CATALOG**  
Request or download:  
[www.smw-autoblok.de](http://www.smw-autoblok.de)