



## Carat 720

Designed to fit your production needs

### Discover the new Carat 720

As the latest addition to the proven Carat family with over 950 installations worldwide, the Carat 720 is purpose-built for die-casting parts requiring 72,000 kN locking force. Its optimized machine design, including a new tie bar geometry, ensures a compact footprint and seamless integration into your production environment. Designed to deliver the lowest cost per part, it combines faster cycle times, superior part quality, and easier machine handling to maximize uptime and efficiency, making it the ideal solution for high-performance megacasting.

### Your benefits:



#### Superior part quality - less scrap for more profitability

With enhanced injection power of 6,300 kW and patented, topology-optimized platens, the Carat ensures dynamic, precise die filling and exceptional part accuracy. The repeatability of injection unit performance lies at <math><0.02\text{ m/s}</math> standard deviation of maximum speed and <math><0.3\text{ ms}</math> standard deviation of filling times, effectively reducing scrap and lowering cost per part.



#### Optimized handling and uptime - built for megacasting

Increased uptime is achieved through new DataView features with superior production monitoring capabilities. Furthermore, quick couplings, optimized die support, a modular and clearly labeled energy frame, and a spotting function all contribute to reducing die exchange time.



#### Faster cycle times - up to 15% improvement

Thanks to a new modular hydraulic drive unit concept and enhanced machine control movements, the Carat 720 delivers shorter production cycle times of up to 15% for increased productivity.

“Perfectly sized for megacasting, the Carat 720 combines ideal locking force with a high-performance injection unit, enabling rear and front underbody and battery tray production at the highest quality and lowest cost per part.”

– Hermann Roos  
Product Manager, Bühler Die Casting



Size comparison of the Carat 610, Carat 720 and Carat 920

## Bühler megacasting series

Carat	Units	400/440	560/610	660/720	840/920
Maximum locking force	kN	40,000/44,000	56,000/61,000	66,000/72,000	84,000/92,000
Tie bar clearance	mm	1,800 x 1,800	2,200 x 2,200	2,300 x 2,300	2,500 x 2,500
Die height	mm	1,044/2,100	1,300/2,400	1,300/2,400	1,500/2,500
Die opening stroke	mm	1,800	2,200	2,200	2,500
Maximum permissible die weight (with HFSS* and die support)	t	91	168	190	236
Injection height	mm	0 ... -600	-100 ... -700	-200 ... -800	-150 ... -1,000
Plunger stroke	mm	1,400	1,700	1,700	2,000
Casting force dyn max (at start point of stroke)	kN	1,485	2,020	2,020	2,640
Casting force dyn (at 90% of stroke)	kN	1,170	1,645	1,645	2,140
Casting force max (with intensifier)	kN	3,100	4,290	4,290	5,400

\* - Hydraulic quick die clamping system

Subject to change without notice

QRCode



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[www.buhlergroup.com/carat720](http://www.buhlergroup.com/carat720)

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