

CR-60-HC

FOR BIOPOLYMER STENTS

The CR-60-HC Stent Crimping Machine is developed for the crimping of balloon expandable bio absorbable stents.



KEY FEATURES

- Stent and balloon positioning outside of crimper head.
- Crimp head can be heated (max. 80 °C) and cooled (min. 10 °C) in the process cycle.
- Inflation and deflation system to create high stent retention values.
- PLC controlled system.
- The CR-60-HC is built according to the MPT Europe BV high quality standards, resulting in a stable and robust design with minimal cost of ownership.
- A hub-connector is available for inflation and deflation of the product during the crimping cycle to achieve better retention.
- 6.5" full color touch screen user interface for access to the machine parameters.

BIOPOLYMER STENTS

The accurate 60 mm long Medical Production Technology Europe BV designed stepper-controlled stent crimping head is very stable and can deliver forces up to 300N radial while maintaining an even diameter all over the length of the head.

The crimp head can be heated and cooled, and all parameters are controlled over a PLC interface with small (6.4") touch panel.

Stent crimping forces are registered as they are measured by a loadcell system and the maximum force can be registered.

The innovative stent positioning system allows operators to load the stents and balloon catheter products and align the products outside of the crimper head.

The stent crimping head has stainless tool steel blades that have a special high wear resistant very low friction coating. The transfer forces measured inside the head and in the delivery system are typically at the same magnitude.

The MPT Europe BV design stent crimp head is unique in its design and during the crimping action the blades have very little relative motion to the products.

That specific feature prevents damaging of the struts. Especially with the bio-resorb materials this is a risk due to the heating required in the crimping step of the stents.

An inflation / deflation port is integrated in the machine and parameters (including inflation pressure) can be set in the PLC controller.

The system is delivered with a closed-circuit cooling unit.

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TECHNICAL SPECIFICATION	CR-60-HC
Stent crimping length	60 mm crimp head. Maximum 45 mm length stents
Stent type	Biopolymer stents
Maximum diameter loading	15 mm (optionally larger sizes possible)
Minimum closing diameter	0.2 mm (software limit)
Temperature range	10 °C – 80 °C
Crimp head control	Stepper controlled position & force measurement
Diameter accuracy	+/- 0.02 mm @ 100 N
Maximum crimp force	300 N radial
Crimping speeds	0.1 mm/s – 10 mm/s
Inflation / Deflation	6 bar max. inflation / -0.8 bar deflation
Stent positioning	Outside the crimp head (manually / optically)
GUI	6.5" colour touch panel
Control software	Recipe based Password levels (operator, engineer, calibrator) Remote support option Data logging with ethernet possible
Ethernet	1x
USB	NA
Required air pressure	7 bar minimum
Power supply	240 VAC / 1.2 kW



Medical Production Technology is proud to be an MMT company – Leading provider of catheter balloon forming, folding and pleating, thermal bonding, and stent crimping solutions.

Medical Manufacturing Technologies (MMT) brings together applications expertise, technical solutions, and aftermarket support to revolutionize medical device manufacturing. [Learn more at mmt-inc.com](http://mmt-inc.com).