

Selection Guide for Blockwise Crimping Mechanisms

Mechanism Type	J-Crimp™	2-Crimp™	Zero-G™	Twin-Cam™	Large Twin-Cam™	High Force Twin-Cam™	M1	M2
								
Die Material	Hardened Stainless Steel	Hardened Stainless Steel	Ertalyte TX (PET with fluoro lubricant)	Hardened Stainless Steel	Hardened Stainless Steel Or Ertalyte TX	Hardened Stainless Steel	Acetal Copolymer	Acetal Copolymer
Diameter Range	0 – 16 mm	0 – 16 mm	0 – 31 mm	0 – 30 mm	0 – 60 mm	0 – 60 mm	0 – 25 mm	0 – 41 mm
Lengths Available	62, 124 mm	180 mm	62 - 300 mm	124, 310 mm	124, 310 mm	124 – 230 mm	38 mm	25, 50 mm
Gap Between Dies	Very Small (~0.05 mm)	Very Small (~0.05 mm)	Zero	Very Small (~0.07 mm)	Very Small (~0.1 mm)	Very Small (~0.1 mm)	Zero	Zero
Max Radial Force	1350 N	8000 N	1200 N	1900 N	1450 N	20000 N	230 N	600 N
Available As Part of a General-Purpose Stent Crimping Machine?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Balloon pressure & vacuum available on crimping machine?	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Heating available?	Yes	Yes	No	Yes	Yes	Yes	No	No
Bearing Type*	Ball Bearings	Ball Bearings	Ball Bearings	Ball Bearings	Ball Bearings	Ball Bearings	Plain Bearing	Plain Bearing
Available As Part of a Self-Expanding Stent Loading Machine?	Yes	No	Yes	Yes	Yes	Yes	No	No

* “Bearing Type” refers to the bearings that are used to constrain and drive the dies.

Other selection advice:

- For PTCA-sized balloon-expandable crimping (bare-metal, DES, or polymer scaffold), choose J-Crimp. For higher force and longer length, choose 2-Crimp.
- M1 and M2 are far less expensive than Zero-G (all have plastic dies). Advantages of Zero-G are: higher crimping force capability, longer length, better precision, better control of taper (diameter difference end-to-end). M1 cannot provide enough crimping force for attaching balloon-expandable stent to balloon catheters.
- For balloon-expandable stent attachment, J-Crimp or 2-Crimp are highly recommended for: superior process control, durability, heating capability.
- For typical prosthetic heart valves, choose M2.