

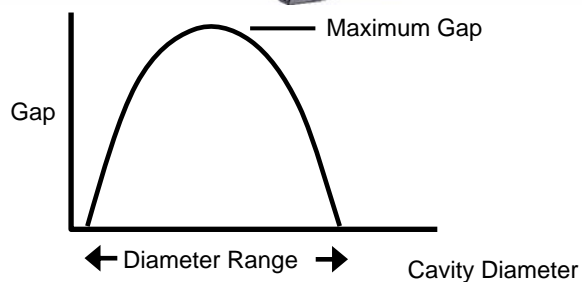
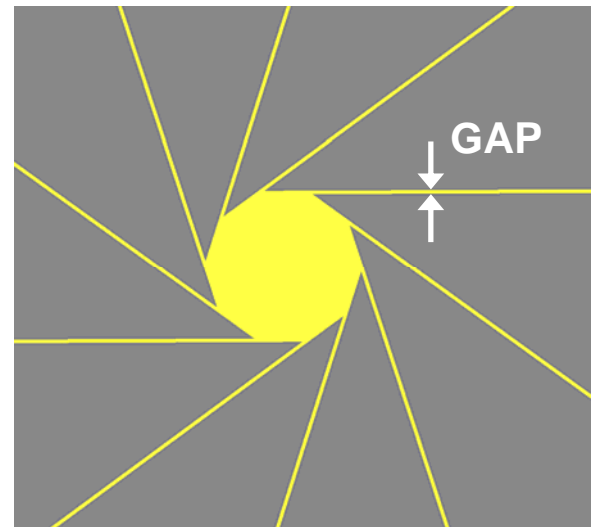
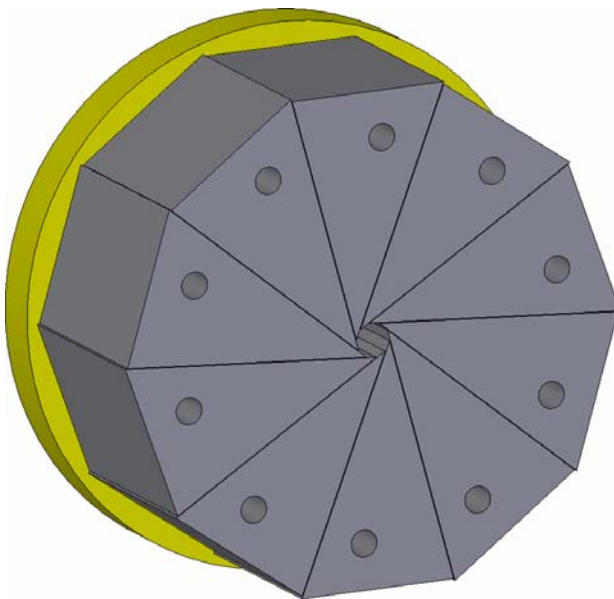
Zero-G™ Radial Compression Station



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Blockwise Engineering's Zero-G™ radial compression stations (patent pending) solve a significant problem that burdens traditional radial compression mechanisms. Zero-G™ stations are available as part of Blockwise's stent-crimping machines, and are also sold as separate components for use in customer's equipment.

Traditional radial compression mechanisms of the "hinged-wedge" variety, commonly used for stent crimping and other manufacturing and testing applications, are constrained by a strict design tradeoff between diameter range and maximum wedge-to-wedge gap. Further, for a given design, the gap is a function of the opening diameter as follows: At the closed and opened extremes of the motion range, the dies are wedged against each other (zero gap), and the gap varies with diameter, reaching a maximum value near the middle of the diameter range. The range of diameter is actually limited by the points at which the gap becomes zero. To avoid excess gapping, the mechanism must be designed specifically for the diameter range of the application.



Blockwise's Zero-G™ compression station eliminates that tradeoff, and provides essentially zero die-to-die gap at any opening diameter. The wedge-shaped plastic dies are always in contact with each other, so there are no gaps for the product to get caught in. Because each die backs up its neighbor, tip flexing is controlled. There is no need to design the mechanism specifically for the diameter range of the application because there is no disadvantage in oversizing the mechanism. Further, the design allows very large diameter range in a reasonably-sized station. Because the dies always rub on each other, Zero-G™ stations are available only with plastic dies.

