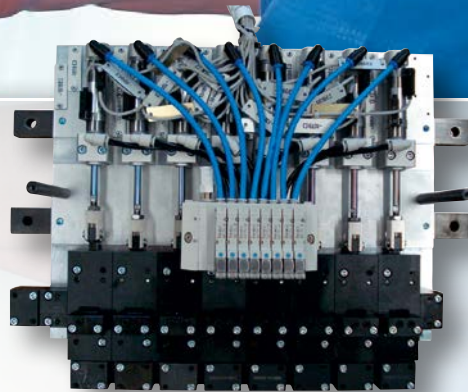


Tooltec

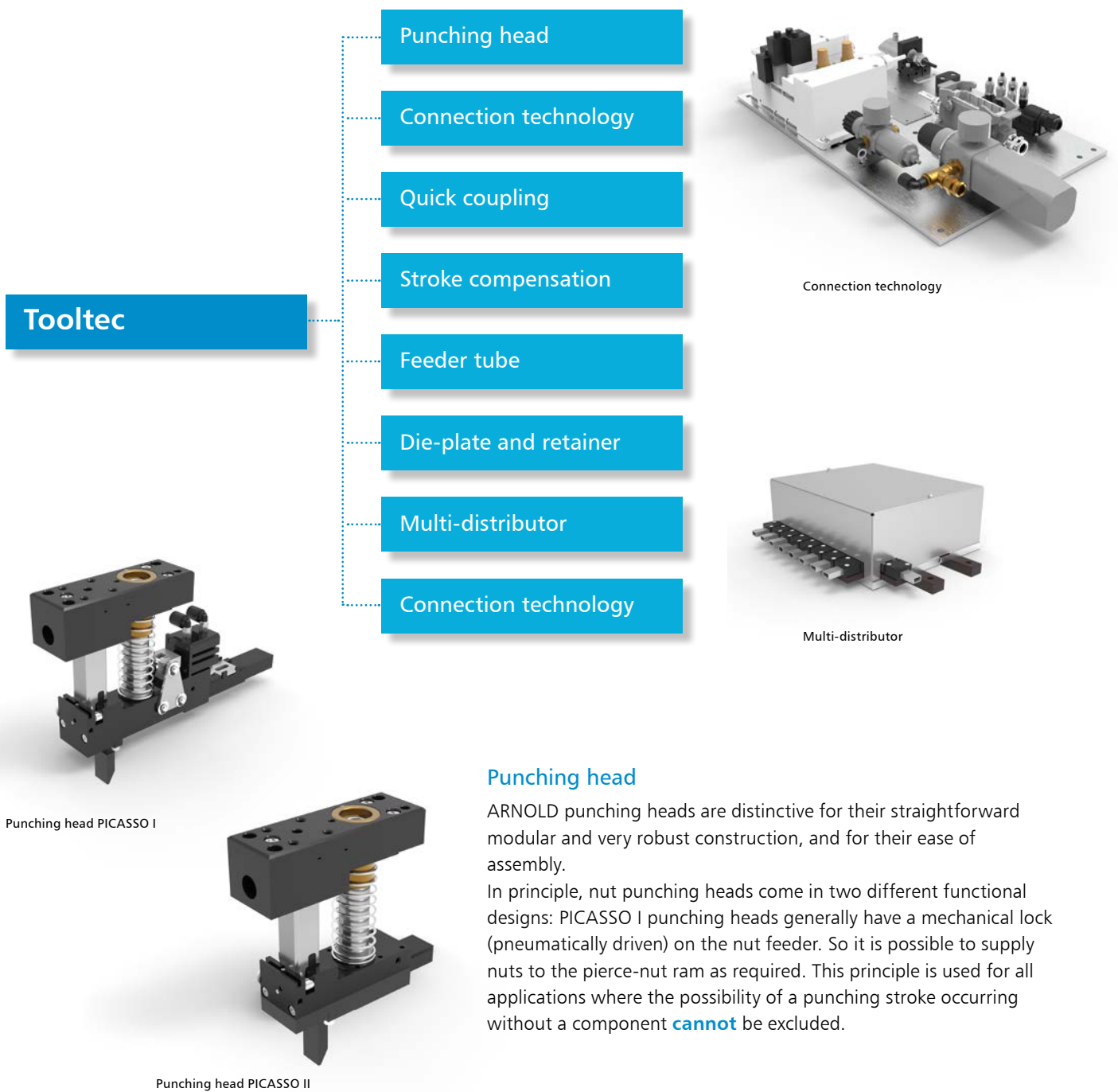
Tool technology

- + absolutely reliable
 - + modular
 - + multi-distributor design available
 - + very low space requirement
 - + robust
 - + low maintenance
- www.arnold-fastening.com



General Information about Tooltec

The term Tooltec covers the tool technology that ARNOLD currently supplies to its customers. It is very complex and requires specific technical knowledge. The illustration below clarifies the complexity of machine tool technology. It deals solely with the processing of square pierce-clinch nuts. A different tool configuration would be needed for other items.



Punching head

ARNOLD punching heads are distinctive for their straightforward modular and very robust construction, and for their ease of assembly.

In principle, nut punching heads come in two different functional designs: PICASSO I punching heads generally have a mechanical lock (pneumatically driven) on the nut feeder. So it is possible to supply nuts to the pierce-nut ram as required. This principle is used for all applications where the possibility of a punching stroke occurring without a component **cannot** be excluded.

This can be the case, for example:

- ⊕ on a line of progressive compound machine tools.
- ⊕ on a line of transfer tools.
- ⊕ with manual insertion tools without component monitoring.

PICASSO II punching heads have no lock on the nut feed.

After each punching stroke nuts can slide, or move forward, to the nut ram. This principle is used for all applications where there is no possibility of a punching stroke taking place without a component.

This is the case with:

- ⊕ C-frame applications.
- ⊕ manual insertion tools with component monitoring.

Connection technology

The connection technology for punching heads comprises the following components:

- ⊕ electrical interfaces (HAN plug) with electric cables,
- ⊕ flat distributor boards,
- ⊕ valve manifolds with valves,
- ⊕ pneumatic lines and air supply,
- ⊕ aluminium plate for components.

Quick coupling

The quick coupling system easily and smoothly connects the flexible plastic hoses together.

A locking barb prevents the nuts from falling out when the coupling is released. Markings and mechanical guides ensure that they lock together correctly.

It is impossible to connect hoses of different sizes.

Feeder tube

A minimum bending radius must be maintained when laying the feeder tubes. You will need to discuss any deviation from the minimum with ARNOLD.

Stroke compensation quick couplings

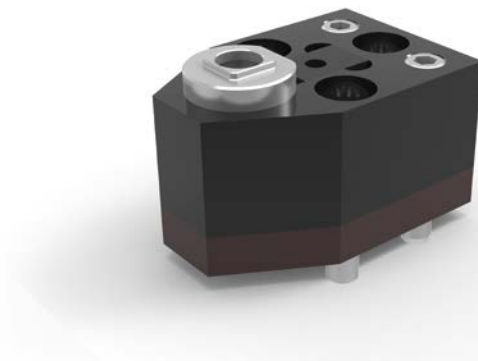
If the quick couplings are positioned too close to the punching head, the punching heads will not be able to open fully after a pressing stroke.

This is because the feed tubes can no longer compensate for the stroke movement of the punching heads. Stroke compensations can be used for such situations.

Die-plate and retainer

Die plates and die holders are manufactured from high-quality tool steel. Service life for the DX 54 is approximately 200,000–300,000 strokes.

The PIAS[®] die-plate holders are supplied as ready-to-fit complete units. The clamping piece for the die-plates is ready fitted. The die-plate holders are supplied for die-plates in diameters of 25 mm and 31 mm.



Die-plate and retainer

The ARNOLD GROUP

Wherever customers need us.

The ARNOLD GROUP

ARNOLD – this name is internationally renowned for efficient and sustainable fastening systems on the highest level. With a foundation of many years of expertise in the production of intelligent fastening systems and very complex extruded parts, the ARNOLD GROUP has developed over a number of years into a comprehensive supplier and development partner for complex fastening systems. With our positioning of “BlueFastening Systems” this development process will continue under a united and harmonized structure. Engineering, fasteners, and functional parts, together with feeding and processing systems, all from a single source – efficient, sustainable and international.



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