Standard Parts

Agathon – Leader in punch tooling standards



The new definition of precision



Guide elements



Engineered and manufactured within ISO/DIN standards. Standardized tight tolerance machining of all dimensions as well as centering aid on pillars and bushes, allow easy installation and interchangeability. Consistent, reproducible quality and taper on quick-change pillars/retaining bushes – of highest precision – guarantee high level of efficiency. A fixed or movable cage retaining system allows the proper exit of rolling guides out of the preload.

Slide guide bushes

For long strokes, high forces on pillar diameters from 15 to 63 mm. Limited stroke speed.

Bronze plated and self-lubricated bushes are available

Anti-friction guides

For smooth, absolute backlash-free operation (preloaded).

- Ball cages: pillar diameters of 3 63 mm, axial and rotational movements. In aluminum, brass and plastic. High speeds
- Roller cages: pillar diameter 15 63 mm, axial movements. Rigidity, stroke frequency, load capacity depending on type of roller. In aluminum and brass

Agathon centerings



A new standard for precise guiding and centering in punch and form tooling applications.

The Agathon centering (Round Fine Centering) guarantees precise guidance under maximum load capacity at centering start utilizing an integrated cage retaining system when exiting the preload.

Features

- Compact, ready to install
- Unlimited opening stroke
- For low-speed applications
- Free rolling, no stick-slip
- Centering repeatability within a micrometer range
- High initial load capacity and rigidity

Applications

- Deep draw and fine blanking applications
- Hybrid, custom, rotary and shuttle style tools
- Plate centering
- Production equipment

Die-sets



Agathon precision die-sets are characterized by high accuracy and material quality. Die-sets are constructed according to customer specified requirements. Depending on the application, die-sets are equipped with slide, ball or roller guide elements.

Standard die-sets

- High shock and load capacity due to high quality perlite cast iron
- Designed according to ISO/DIN/Agathon standards
- High precision die-sets for fine blanking applications

Customer specific

- Machined for the highest quality requirements
- From stress relieved steel and aluminum, in special alloy with 460-550 N/mm² tensile strength and other materials (e.g. carbon fiber, etc.)
- Standard die-sets made of cast iron with reworking, according to customer drawings
- Dimensions for small up to medium sized tools

Our end users come from all industries



We provide solutions

- Longer tool life
- Extended maintenance cycles (regrinds)
- Increased efficiency and productivity

Convincing performances

- Best quality materials, highest surface quality and tightest tolerances
- Special lead in geometries on both the pillar and bush, increasing lifespan
- Patented staking method of the rolling elements ensures optimal play and best support in the cage

We supply the matching parts

- Precision guide elements for stamp/punch tooling
- Precision guide elements for machine construction, automation and mold industries
- Standard and/or special designs according to customer specifications as well as special materials

