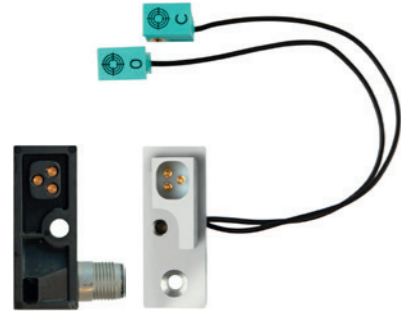


FURTHER FEATURES AND OPTIONS OF THE UP SERIES

Patented compressed air saving principle of the U-series

Up to 30% reduced compressed air consumption due to force-optimised knee-lever mechanism and use of smaller drive cylinders.

Dual query concept for simple change with robust pin contacts



Both air connections located in optimal positions in the cylinder floor



Stepless setting of the opening angle from 0° - 135°



Servolectric parallel clamp IP 63

- 24V servo drive
- Play-free and self-limiting trapezoidal spindle
- Freely adjustable opening angle with the option of intermediate positions
- Conditioning monitoring
 - Plate thickness detection
 - Detection of faults
 - Detection of faulty parts
 - Wear control

NEW
Now also electric!



W

The version with weld-resistant surface coating



H / HO / HD

The version with additional locking in opened and/or closed position through integrated stop valves in the cylinder floor



RB

The version with a mechanical catch in the cylinder floor



THE PARALLEL-PLANE CLAMP

NEW

The new clamp generation for parallel-plane clamping with constant clamping force



CORRECT CLAMPING WITH THE UP-SERIES – THE PARALLEL-PLANE CLAMP WITH CONSTANT CLAMPING FORCE

UP – The new product variant of the U-series

Special mechanical systems integrated in the housing with two movement steps

Step 1: Pivoting

The clamping arm is pivoted/turned a maximum of 135° from open position to the clamping position

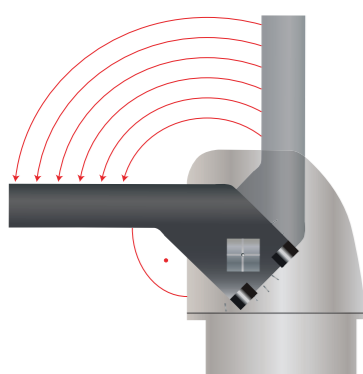
Step 2: Clamping

Parallel-plane clamping process in which the arm is move vertically up to 5 mm to the workpiece. In the parallel-plane clamping process, constant clamping force is available regardless of the arm length.

Parallel-plane clamping

Traditional clamp

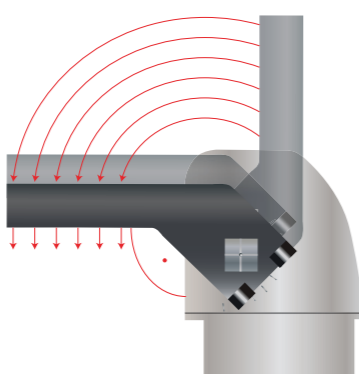
Pivoting clamping arm



Clamping arm pivots onto the component

UP clamp

Parallel-plane increment clamping arm

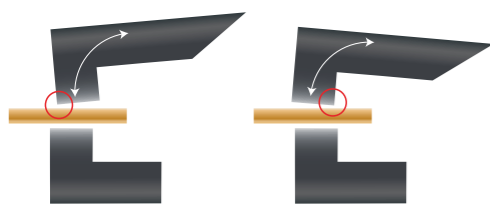


Clamping arm always places parallel pressure on the component

Automatic mechanical balance

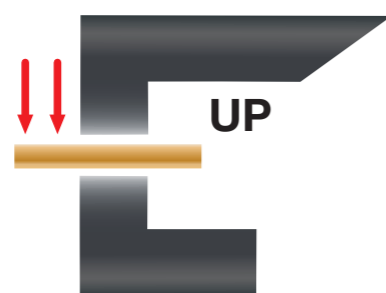
In the clamping/work range of 0-5 mm, plate thickness deviations can be balanced out to a certain extent by model variants, quality deviations, or contour piece wear. No danger of component deformation due to twisting, as the contour piece is placed in parallel.

Traditional clamp

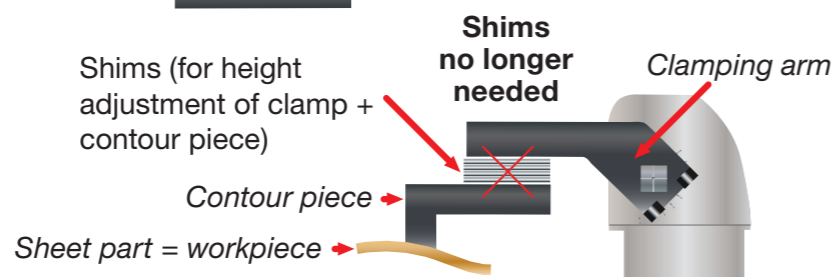


As the contour piece/clamping arm is always placed in parallel in the 0-5 mm range, no special shims are required for the clamping point.

UP Clamp



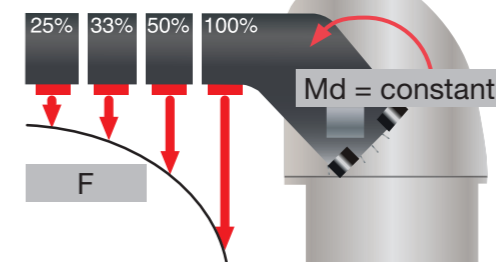
Shims (for height adjustment of clamp + contour piece)



Constant clamping force

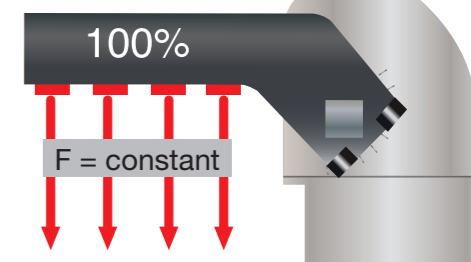
Thanks to special mechanical translation systems, the clamping force of the UP-series is always constant and **independent** clamping arm length. The pressure regulator integrated in the cylinder can also steplessly set the clamping force for the application.

Traditional clamp



With traditional clamps the clamping force reduces as the distance from the fulcrum increases.

UP clamp

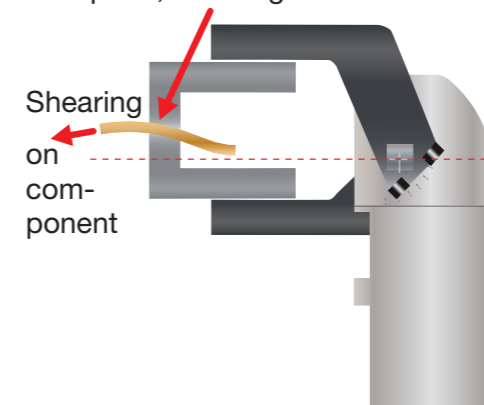


Clamping independently of the fulcrum

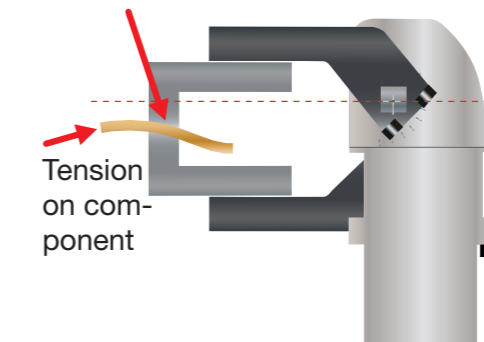
To avoid tensile or shearing forces on the turning section, with traditional clamps the clamping point must be placed in the fulcrum -> less flexibility when installing equipment.

Traditional clamps

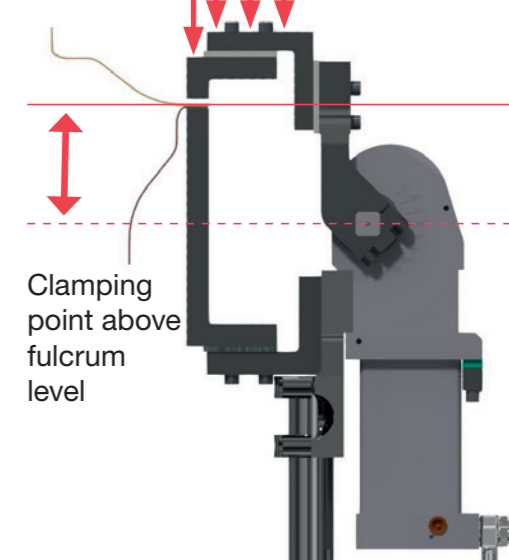
Clamping via turning point, shearing effect



Clamping under fulcrum, traction effect



UP clamp



- Flexible fulcrum positioning, as the pressure piece is always placed vertically
- No danger of shearing/tensile forces on the component. Clamp can therefore also be placed under the component level, saving space. Optimal access, e.g. with welding tongs