

MATRIX Automations GmbH info@matrix-automations.com www.matrix-automations.com phone: +49 711 229 328 0



FLEX-CLAMP

Automated gripping and fixing with unlimited flexibility

The pinscreen with its contour-accurate molding. It was the inspiration for the MATRIX clamping systems.

THIS INNOVATION CONQUERS THE MARKET

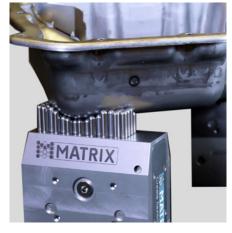
MATRIX clamping fixtures with flexible pins that adapt precisely to any shape. In a matter of seconds, you can safely and absolutely form-fittingly fix, grip and clamp the most different workpieces.

The set-up of the machining and assembly system for parts with changed workpiece geometry, as well as a pallet and tool handling with robots that is prone to failures is no longer necessary. Even small batch sizes or individual customer wishes can be met on short term and economically.

It always fits!

Get a grip on problems with clamping solutions with an enormous potential for savings!

- Automated adaptation to any workpiece
- Costly resetting is no longer necessary
- No downtimes and no more storing of different grippers



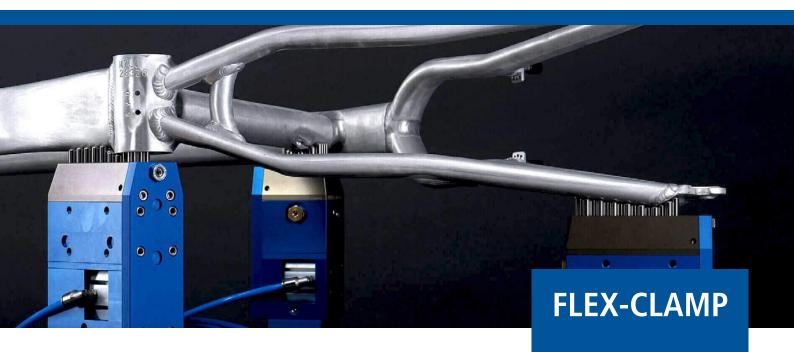




Three unique types: FLEX-CLAMP – FLEX-CLAMP Mini – FLEX-CLAMP Mini Double







GRIP AND SUPPLY. RELIABLY STRONG AND FLEXIBLE.

Form-fitting FLEX-CLAMP clamping jaws. Ideal as a support system, flexible molding nest and for the connection with robotic grippers. Automated with compressed air. They adapt perfectly to any contour. With passive gripping force retention. And extra-strong boosting mode.



Integrable sensor technology enables the complete monitoring and documentation during production. That's how unplanned machine downtime and production losses can be avoided through timely maintenance.

FLEX-CLAMP	Order No. 0042.6720
External dimensions W x L x H (mm)	50 x 110 x 134,5
Clamping surface broadside x long side (mm) 30 x 79
Number of pins	67
Diameter of the individual pins (mm)	6
Stroke (mm)	21
Max. holding forces the axial pinfield passive	e 1kN
Max. holding forces the axial pinfield active	4kN



Recommendations for applications

- Ideal for automated assembly processes
- Robot handling
- Support or workpiece carriers in production lines
- Workpiece weight up to a maximum of 10 kg





PART-SPECIFIC MOLD SUPPORT. STRONG. FAST. PRECISE.

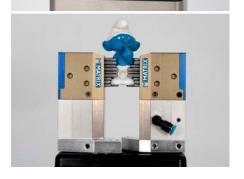
Form-fit FLEX-CLAMP Mini clamping jaws. Ideal as a support system, flexible molding nest and for the connection with robotic grippers. Automated with compressed air. Adapts perfectly to any contour. With passive gripping force retention. And extra-strong boosting mode.

MAKES GRIPPER CHANGES AND SET-UP TIMES UNNECESSARY.

Individual adaptation of the pins to any workpiece contour! That's how many workpieces can be fixed and moved with the same gripper. This unique flexibility reduces time effort and costs for individual supports. It's not necessary to change the gripper!

FLEX-CLAMP Mini	Order No. 0042.5801
External dimensions W x L x H (mm)	32 x 70 x 37
Clamping surface broadside x long side (mm	n) 21 x 24
Number of pins	58
Diameter of the individual pins (mm)	3
Stroke (mm)	11
Max. holding forces the axial pinfield passiv	re 40 N
Max. holding forces the axial pinfield active	90 N

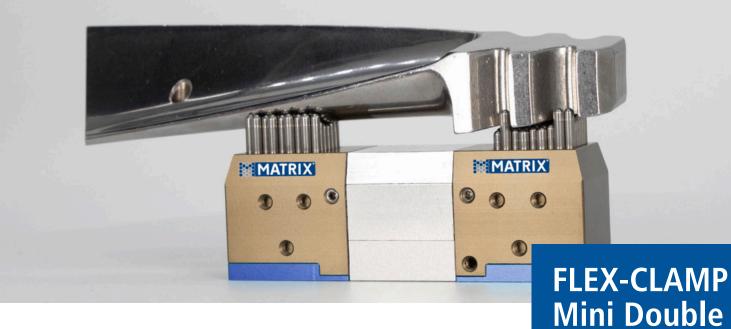




Recommendations for applications

- Robot handling for medical technology
- Handling tasks with cobots in connection with HRC
- Automated assembly processes for small parts
- Workpiece weight up to a maximum of 1 kg





DOUBLE GOOD. FOR THE PERFECT SUPPORT OF THE MOST DIFFERENT WORKPIECES.

Form-fitting FLEX-CLAMP Mini Double clamping jaws. Ideal as a support system, flexible molding nest and for the connection with robotic grippers. Automated with compressed air. They perfectly adapt to any contour. With passive gripping force retention. And an extra-strong boosting mode.

IT ALWAYS FITS. ONLY ONE MODULAR KIT SYSTEM INSTEAD OF MANY MOLD SUPPORTS.

Individual adaptation of the pins to any workpiece contour! That's how many workpieces can be fixed and moved using the same gripper. This unique flexibility reduces time effort and costs for individual supports. It's not necessary to change the gripper!

FLEX-CLAMP Mini Double	Order No. 0042.1160
External dimensions W x L x H (mm)	32 x 108 x 37
Clamping surface broadside x long side (mm)	2 x 21 x 24
Number of pins	116
Diameter of the individual pins (mm)	3
Stroke (mm)	11
Max. holding forces the axial pinfield passive	e 80 N
Max. holding forces the axial pinfield active	180 N



Recommendations for applications

- Double pin field area
- Handling tasks with cobots in connection with HRC
- Automated assembly processes for small parts
- Workpiece weight up to a maximum of 2 kg