

**HOME OF
CLAMPING**



FROM THE SPINDLE TO
THE MACHINE TABLE

LEAN- AUTOMATION

MAKES YOUR MACHINE
A SURE-FIRE SUCCESS!



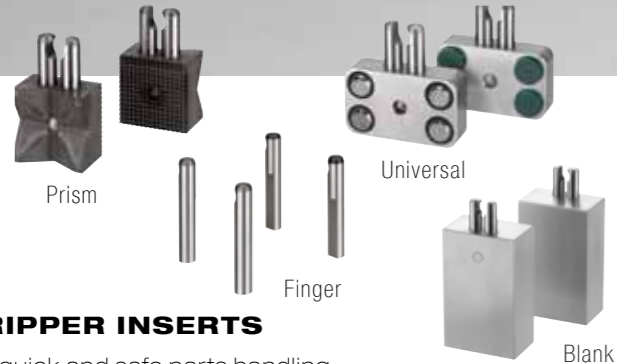
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AMF GRIPPER

The gripper achieves a fully automatic workpiece change during the machining process on a machine tool. Has easily changeable gripper inserts for handling different workpiece geometries.

- HYDRAULIC OR PNEUMATIC
- WITH AND WITHOUT COMPENSATION UNIT
- GRIPPER EXPANSION 80 MM OR 100 MM



GRIPPER INSERTS

For quick and safe parts handling in the machine tool using the AMF gripper.



AMF-MARKER LARGE

Perfect for the labelling of different materials, such as plastic, steel and stainless steel. Instant change of needle by pulling out the marking needle.

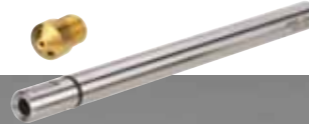


AMF-CLEANER BALL VERTICAL

Repeatable, systematic and thorough cleaning of the machine interior.

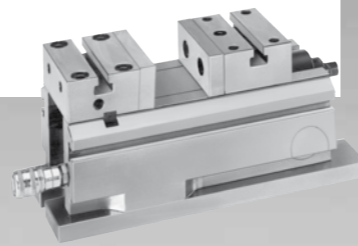
AMF-CLEANER STICK

Repeatable, systematic and thorough cleaning of the workpiece, storage and clamping fixture.



PNEUMATIC VICE

Fast and precise clamping - ideal for use in automated applications. The clamping force and the span are adjustable to different work-piece requirements.



HYDRAULIC COLLET

For clamping complex workpiece contours. The mounting for the AMF zero-point system is located on the bottom. The collet attachment can be individually adapted to your workpiece geometry.



CENTRING CLAMP

NEW!

Ideal for use in automated applications. Compact design for maximum flexibility on your machining centres. Precise, repeatable clamping.

- PNEUMATIC OR HYDRAULIC
- CENTRIC OR WITH FIXED CLAMPING JAW
- 2.5 OR 6 MM STROKE



CLAMPING JAW SET BLANK FOR CENTRING CLAMP

Individually adaptable to the required workpiece sizes. Suitable for pneumatic and hydraulic version.

PNEUMATIC CLAMPING STATIONS

Zero-point clamping station for setup-time-optimised clamping on machine tables with groove spacing of 63, 100 and 125 mm. pitch spacing 200 mm.

- **2-POINT** - Size K10.3, holding force 6 x 25 kN
- **4-POINT** - Size K10.3, holding force 6 x 25 kN
- **6-POINT** - Size K10.3, holding force 6 x 25 kN



INTERCHANGEABLE PALLET

The ideal workpiece storage for your machine table. FOR 2-, 4- OR 6-POINT CLAMPING STATIONS



INTERCHANGEABLE PALLET

Suitable for centring clamps hydraulic/pneumatic. Including clamping rim, guide groove and mounting hole pattern for 4/3 hand lever valve.



PUMP UNIT INCL. CONNECTION SET

Hydraulic pump unit for the automated operation of hydraulic clamping systems. Incl. pressure switch for a reliable process. Preset to 40 bar. Connection set consisting of: coupling connectors, screw-in fittings, screw-in flange, bulkhead fitting, quick-release couplings, hydraulic hoses and seals.



AIR HYDRAULIC PUMP INCL. CONNECTION SET

Air hydraulic pump for the automated operation of hydraulic clamping systems. With 4/3 way valve and pressure switch for a reliable process. Connection set consisting of: pressure gauge, screw-in fittings, screw-in flange, bulkhead fitting, quick-release couplings, hydraulic hoses and seals.



CONNECTION SET, PNEUMATIC SET 1 CONSISTING OF:

Electro-pneumatic solenoid valve, coupling plugs, Y-manifold, pneumatic hoses, quick-release coupling

SET 2 CONSISTING OF:

Hand valve, coupling plugs, Y-manifold, pneumatic hoses, quick-release coupling

SET 3 CONSISTING OF:

Quick-release coupling, coupling plugs, pneumatic hose

Extract from the catalogue programme. Specifications subject to change.



GATEWAY

The AMF wireless sensing system enables wireless and flexible sensor querying within the production environment. Sender-units transmit the states detected by sensors wirelessly and in an energy-efficient manner using Bluetooth Low Energy 4.0. As the receiver, the gateway handles the communication between the sensor and the machine control.



SENDER-UNIT

The Sender-Unit transmits a sensor signal to the gateway wirelessly. The sensor is connected to the Sender-Unit by cable.



GRIPPER INSERTS FOR GRIPPERS

The gripper inserts are fitted with a microswitch that detects the presence of a gripped workpiece.



MICROSWITCH M02

Compact microswitch for querying different states of a clamping device or component, such as support control, position monitoring or clamping control, with high accuracy.



SENDER-UNIT GRIPPER

The Sender-Unit gripper is the transmitter for wireless communication between the AMF gripper and the gateway. Depending on the version, the piston position of the gripper or a gripped workpiece can be queried.



Extract from the catalogue programme.
Specifications subject to change.

SAMPLE CALCULATION BEFORE AND AFTER USE OF THE AMF LEAN AUTOMATION

	WITHOUT LEAN AUTOMATION	WITH AMF LEAN AUTOMATION
MACHINE HOURLY RATE	€ 100,- / h	€ 80,- / h
EFFECTIVE MACHINE RUN-TIME	8 h / day	12 h / day
CYCLE TIME PER WORKPIECE	7 min.	7 min.
COSTS PER WORKPIECE	€ 11,80	€ 9,30
BATCH SIZE PER SET-UP PROCEDURE	1 pcs.	30 pcs.
OUTPUT PER DAY	68 components	103 components
SAVINGS PER DAY		€ 257,-
INVESTMENT IN AMF LEAN AUTOMATION		env. € 10.000
PAYBACK PERIOD		only 8 weeks / 39 days

YOUR BENEFITS AT A GLANCE!

- + Higher productivity by increasing the machine running time by up to 60%
- + Improvement of delivery performance through additional unmanned shifts
- + Reduction in unit costs
- + Skilled workers have more time for other activities + 30% (programming, quality assurance, operating other machines)



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