

OK-VISE®

FIXTURING CONCEPT

All Platforms, All Workpieces



HYDRAULIC CLAMPING

NEW!

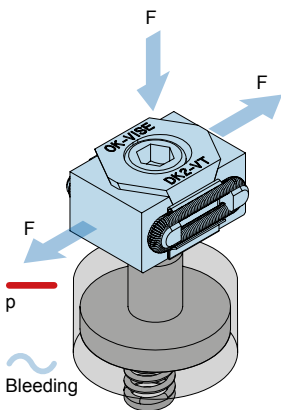
ALL BASED ON
ORIGINAL
OK-VISE®
Clamping Method



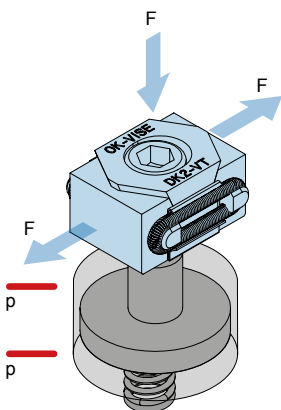
OK-VISE HYDRAULIC ACTUATOR

Hydraulic pressure (p) is first converted to downwards force and using the wedge clamp clamping force (F) is created in two directions. Just like in manual clamping, a stopper is needed on both sides of the clamp.

The simplest way of creating a hydraulic fixture is to use a hydraulic actuator in single acting installation. In some applications double acting installation may be needed. Then, the push force is higher than the pull force.



SINGLE ACTING



DOUBLE ACTING

OK-VISE METHOD OF HYDRAULIC CLAMPING

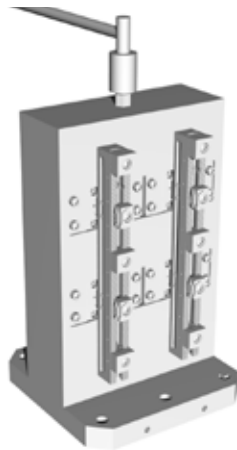
As the original inventor of the wedge-operated low-profile clamp, OK-VISE has now introduced new hydraulic actuators that are optimised to utilize the well-known properties of the OK-VISE clamp: extreme clamping force in a small space combined with the accuracy of the clamping force.

As integral part of the OK-VISE Fixturing Concept, hydraulic actuators can be used to build truly modular fixtures.

Hydraulic clamping can be used in combination with

- Automated or manual workpiece loading
- Vertical or horizontal machining centers and 5-axis machines
- A continuous pressure source or a hydraulic connection that is uncoupled after loading

APPLICATIONS



Multi-Rail RM units + hydraulics. Continuous hydraulic connection with horizontal machining center.

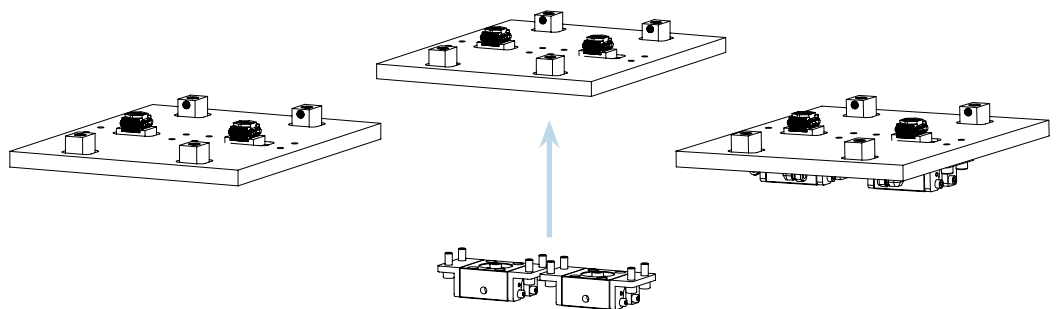


Grid System + hydraulics. Continuous hydraulic connection with vertical machining center.



Blank system + hydraulics. Hydraulic connection is uncoupled after loading. Used in FMS systems.

RETRO-FIT OPTION



When a manually operated fixture is designed in the proper way, OK-VISE hydraulic modules can also be installed afterwards in a simple manner. This is the easiest way to enter the world of automated clamping!

BENEFITS OF HYDRAULIC CLAMPING

Compared to manual clamping, a system using hydraulic clamping has a consistent clamping force on the workpiece, clamping is faster and enables automated (“robotic”) loading of workpieces.

Compared to other hydraulic systems on the market, the OK-VISE module

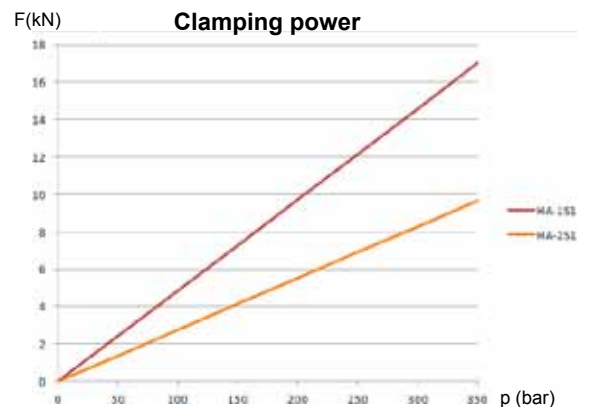
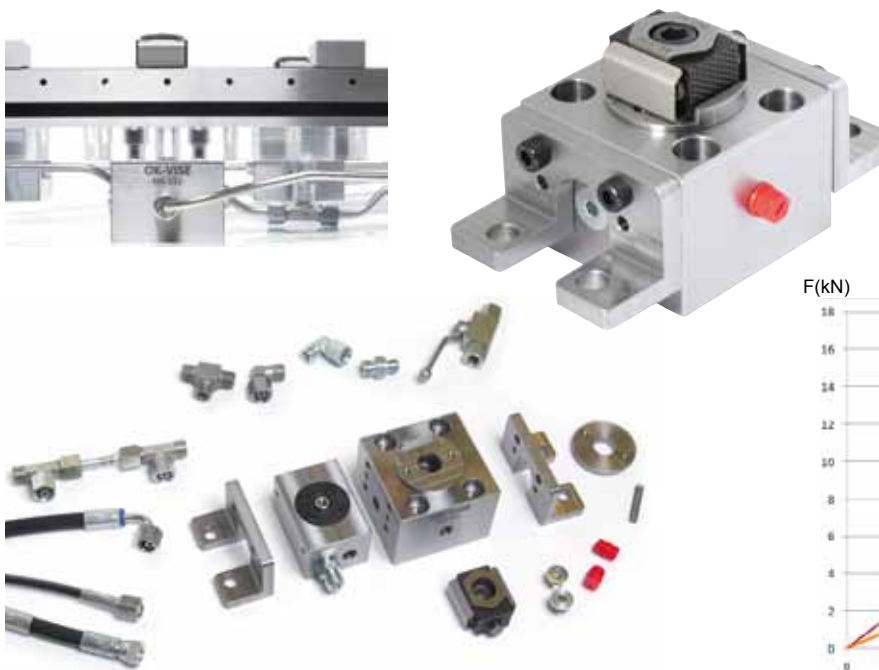
- Based on the world renowned wedge clamp
- Wedge design prevents compression of hydraulic oil preventing vibration
- Creates clamping force with a pull stroke
- Return stroke is performed by spring or hydraulics
- Uses HA-Series actuator designed for 350 bar pressure, which results in compact size



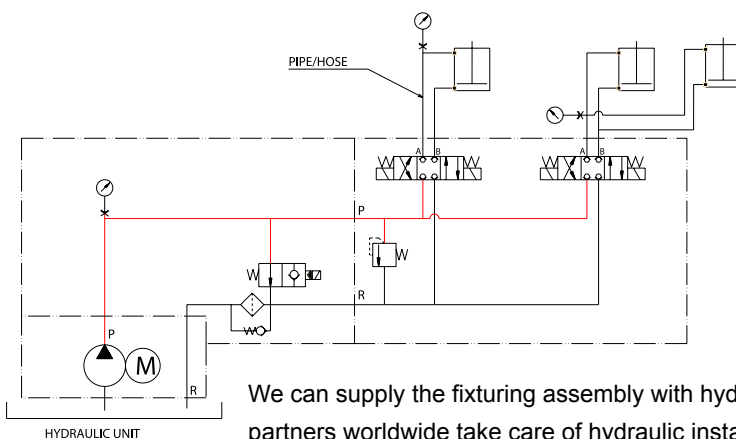
HA-2S1
56x80 mm
H=46 mm

HA-1S1
90x90 mm
H=50–69 mm

SOME BASIC COMPONENTS



INSTALLATION



We can supply the fixturing assembly with hydraulic actuators. Our partners worldwide take care of hydraulic installations. Some sample connection diagrams are available from support@ok-vise.com

OK-VISE CLAMPS

OK-VISE low-profile clamps are known world wide for their quality and accuracy. Especially D-series and B-series clamps are suitable for using with OK-VISE hydraulic actuators.



OK-VISE FIXTURING CONCEPT

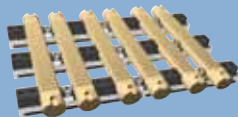
All platforms, All workpieces

GENERIC FIXTURING CONCEPTS

Multi-Rail RM System



Multi-Rail RH System



Grid Fixturing System



Combo-Rail



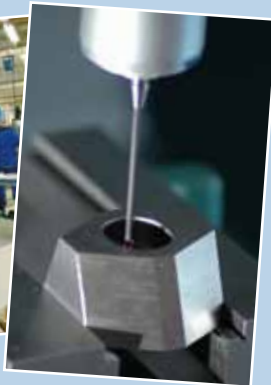
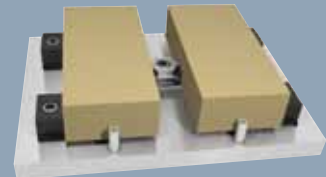
LOW-PROFILE CLAMPS



OK-VISE®
Clamping Method

COMPONENTS FOR DEDICATED FIXTURING

Blank Fixturing System



The original OK-VISE low-profile clamps are known worldwide as a core component of any modern workholding system. In the machining industry, the OK-VISE name means quality.

The mother company of OK-VISE OY is Kytola Instruments. The company is known for manufacturing precision instruments.

www.kytola.com

MANUFACTURER

OK-VISE®

OK-Vise Oy, P.O.Box 5
40951 Muurame, Finland
Tel. +358 20 7790 699, Fax +358 14 631 419
Technical questions: support@ok-vise.com
www.ok-vise.com

DISTRIBUTOR