

Pole Raisers fixed and flexible

SAV 248.70

To accommodate workpiece geometry and allow 5-side machining

Use:

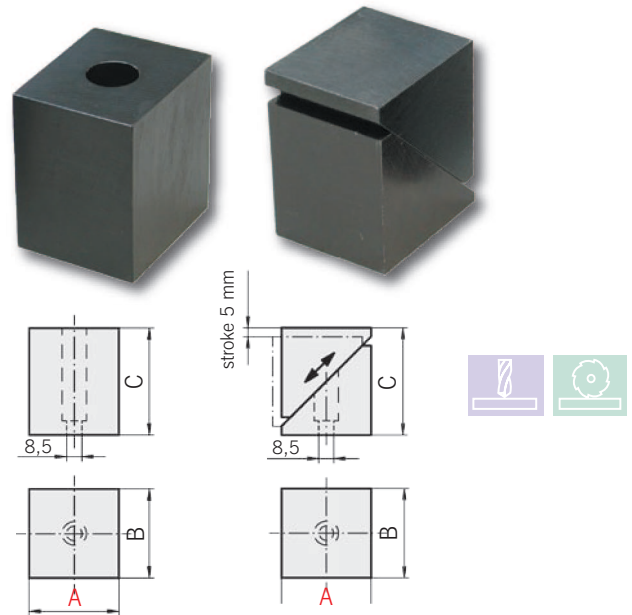
As a raised support for workpieces on a magnetic chuck. Only useable on magnetic chucks SAV 243.77-55 and SAV 243.77-85.

Features:

Made of cold-drawn steel, the pole raisers can be machined to any shape. The table shows an extract from our standard range.

Can be supplied with specific machined dimensions, prepared for customer's workpiece dimension.

Restoring force per pole raiser about 10 N. Custom designs available on request.



Type	Dimensions in mm			Weight in kg
	A	B	C	
PVS 3	48	40	53.5	0.8
PVS 4	70	70	86.5	3.3
PVF 3	48	40	56.0	0.8
PVF 4	70	70	89.0	3.5

Type PVS 3 and PVS 4:
Rigid, for fixed support.

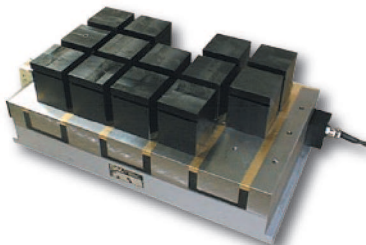
Type PVF 3 and PVF 4:
Mechanically flexible,
for light components.

Ordering example: Pole Raisers SAV 248.70 - 70 - PVS 3
Ordering key: Name SAV - No. - A - Type

Application of Pole Raisers

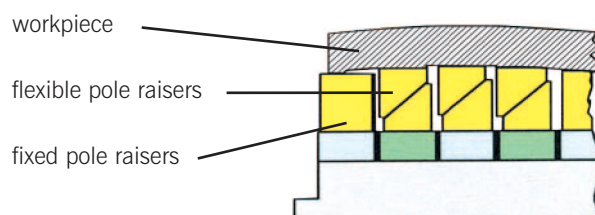
Advantages for use:

- 5-side-access possible
- free space for tools and through holes
- reduction of air-gaps
- even manufacturing of bended blanks
- mechanical stopper or negative pattern of workpiece for increased shearing forces and easy set up



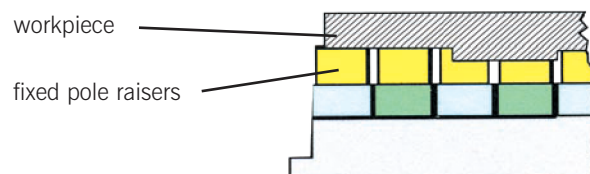
Directions for use:

- magnetic short cuts between N- and S-pole are to be avoided
- pole raisers shall not cross the pole gaps (brass)
- holding force increases with the number of pole raisers (contact surface)
- to select the number of pole raisers, the restoring force of flexible pole raisers shall be less than the weight of workpiece



Flexible Pole Raisers

Spring loaded in axial direction. For clamping of rugged workpieces with bended shapes. Suitable for reaching evenness in a first set up.



Fixed Pole Raisers

Profiled shapes possible. Workpiece is pulled down by magnetic forces. Suitable for reaching high parallelity.

Product Application for Pole raisers

For turning and milling operations

■ Pole raisers for face milling:

- Tool steel
- Dimensions 400 x 400 x 80 mm

Tool:

- Tipped face mill
- Diameter D = 150 mm

Cutting parameters

- Number of cuts 6 x 150 mm
- Speed n = 450 1/min
- Feed f = 540 mm/min

Machine- and cutting power

- Machine power P = 23 kW
- Cutting rate Q = 486 cm³/min



■ Pole raisers for contour milling

Objective is to reduce the air-gap at uneven workpieces and to prevent deformation of workpiece.

Workpiece

- Tool steel
- Dimensions 1000 x 1000 x 200 mm

Tool

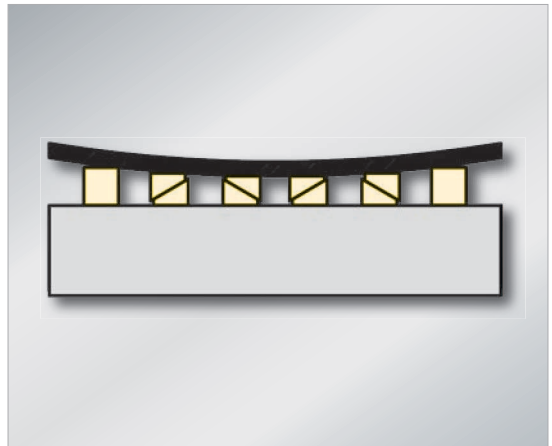
- Tipped face mill
- Diameter D = 315 mm

Cutting parameters

- Number of cuts 6 x 300 mm
- Speed n = 130 1/min
- Feed f = 390 mm/min

Machine- and cutting power

- Machine power P = 22,6 kW
- Cutting rate Q = 702 cm³/min



■ Pole raisers for the welding chamfer preparation

Workpiece

- Low carbon steel
- Dimensions 2000 x 800 x 15 mm

Tool

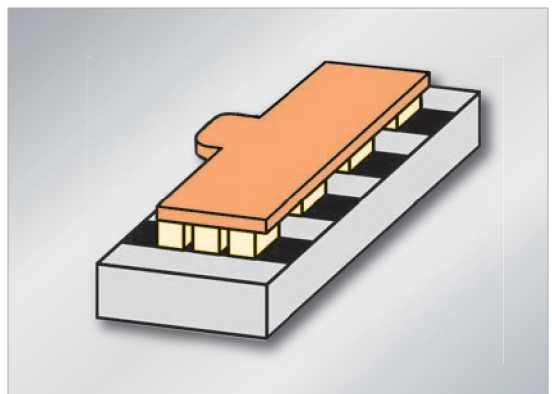
- End mill
- Diameter D = 30 mm

Cutting parameters

- Number of cuts 12 x 15 mm cutting depth
- Speed n = 2000 min⁻¹
- Feed f = 1200 mm/min

Machine- and cutting power

- Machine power P = 8.7 kW
- Cutting rate Q = 216 cm³/min



■ Pole raisers for turning applications

Hard turning of thin roller bearings on 3 sides with fixed and flexibel pole raisers. The pole raisers for circular magnets must the adjusted individually.

We design and produce pole raisers for special applications on request.

Please inform us of your application in order to give a good solution for your clamping needs.

