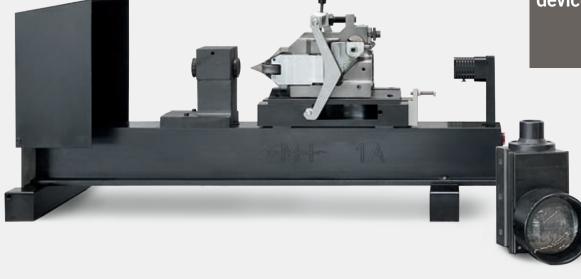


The opticals setting devices are the reliable and user-friendly solutions for guide setup in the workshop and guide base centring on the mill.







## Adjustment projector

Adjustment projectors are necessary to set roller guides in the guide shop. The Morgårdshammar adjusting projectors consist of a strong bench which is precisely machined for fitting the main components, i.e. the lens system, the screen, the condenser lamp as well as the interchangeable base.

The control templates are precisely positioned into the screen thanks to one centering and one positioning pin. To obtain the necessary precision, the control templates are CNC machined. The condenser light unit gives a parallel beam of light ensuring a sufficient brightness on the screen.



Model	AP1C	AP2C	AP2D
Magnification	6X	3X	5X
Max. object	Ø 36 mm	Ø 80 mm	Ø 65 mm
Projection surface	Ø 216 mm	Ø 240 mm	Ø 325 mm
Focus distance	520 mm	890 mm	890 mm
Power	220 V, 50 Hz	220 V, 50 Hz	220 V, 50 Hz
Typical use	Guides for wire rod blocks	Guide for intermediate and finishing mill	Slitting application



## The opticals setting devices are the reliable and user-friendly solutions for guide setup in the workshop and guide base centring on the mill.



## **Centering projector**

The centering projectors allow the exact positioning of the base plate of the roller guide, granting the alignment between the guide and the rolling rolls.

The centering projector has to be mounted on the guide base; by means of a condenser light unit, positioned opposite to the rolls (on the exit guide clamping holder), the groove shape is projected on a transparent screen marked with crosswires and with concentric circles.

A magnifying lens is positioned in front of the screen to improve the picture as well as the adjusting accuracy.

The optical centering device has three functions:

- 1. The rest bar can be accurately set to the pass line.
- 2. The roll grooves can be set exactly in-line.
- 3. The correct centre to the roll pass (groove shape) can be verified.

The zero adjustment of the centering projector can be checked from time to time on the adjustment projector in the guide shop.

Model	CP 490-90°	CP 585-90°	CP 40-75°	CP 60-75°
Magnification	2,5X (5X)	2,5X (5X)	1,75X	1,75X
Max. object	Ø 30 mm (Ø 15 mm)	Ø 30 mm (Ø 15 mm)	Ø 40 mm	Ø 60 mm
Power	220 V, 50 Hz	220 V, 50 Hz	220 V, 50 Hz	220 V, 50 Hz



