

# Loh Universal Centering Machine WG

Accurate centering and the diameter tolerance are decisive criteria for the quality of a lens. Increasing quality demands on optical systems require even higher standards of centering.

Loh Automatic Centering Machines – the mature design:

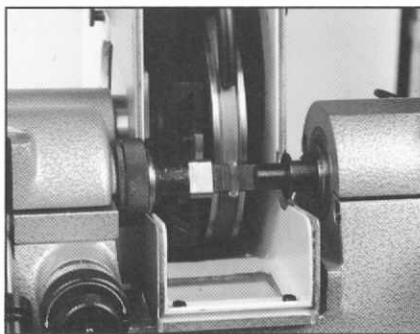
- 40 years' experience in building centering machines are behind our expertise
- Centering spindles of the highest precision are the prerequisite for centering quality
- Precise axis alignment in accordance with rigorous checking standards is the provision for centering accuracy.

The conception of the WG Universal Centering Machine provides a particularly economic alternative to the centering machines of the LZ 25 and LZ 80 series.

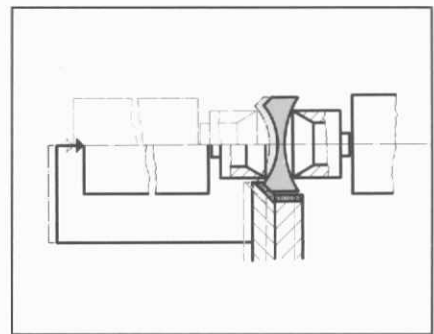
One of the main advantages of the WG machine is its universal application for centering small batches by the bell clamping as well as the cementing method.



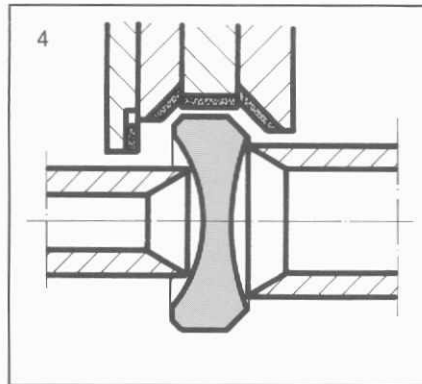
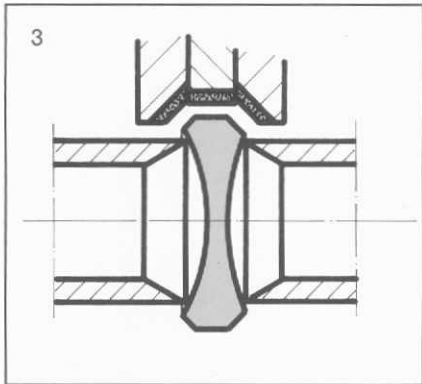
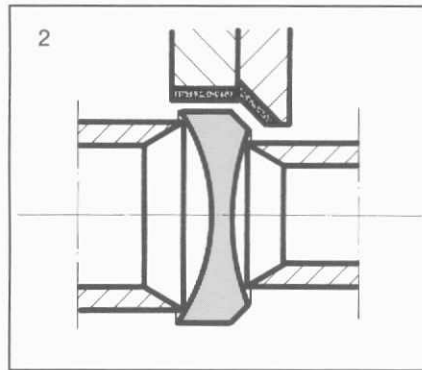
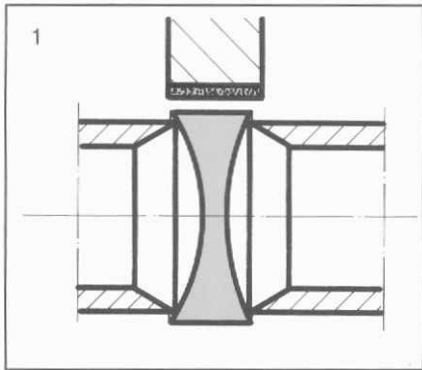
V-blocks for the centering spindle as an option, recommendable for alternating between the cementing and bell clamping method



Copy-grinding device as an option for producing widely differing workpiece shapes



The centre thickness equalizer compensates for differing lens thicknesses to obtain the same bevel sizes.



1  
Processing the cylinder

2  
Processing the cylinder  
and one bevel

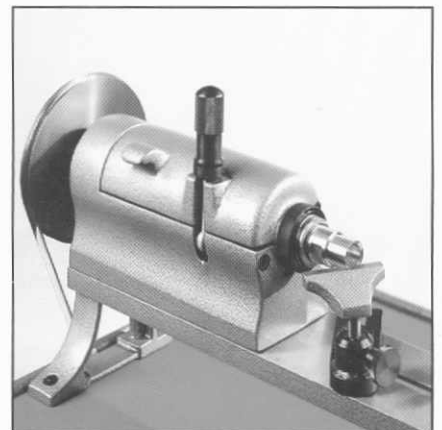
3  
Processing the cylinder  
with 2 bevels

4  
Processing the cylinder  
with two 45° bevels and  
one plano bevel

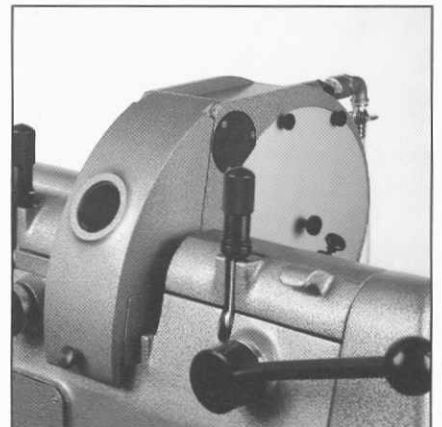
Cementing and aligning with the 1060 G  
Adjusting Bench, or reworking brass  
centering chucks



WG with special spray cover



Hermetically sealed grinding area  
in the WG Laser – as an option for the  
standard WG

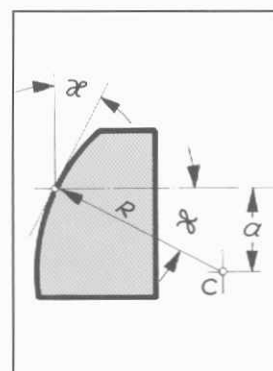
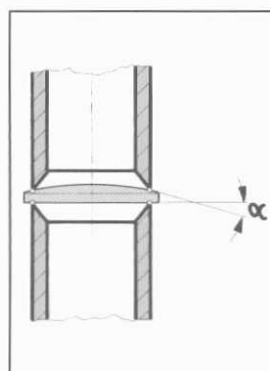
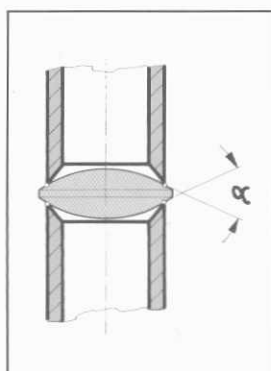
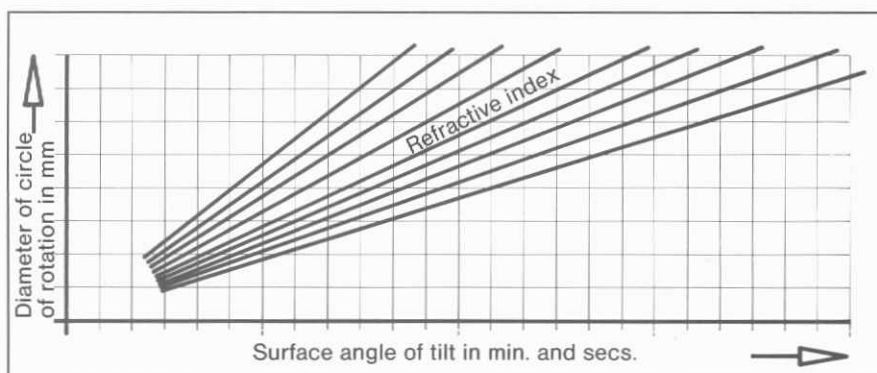


# Loh Universal Centering Machine WG Laser

For lenses which cannot be centered with the bell clamping method, the Loh Laser Centering Unit is used. In this case, the Loh Laser Centering Unit provides for centering without cementing – an economic solution for these lenses. The surface angle of tilt may be measured in accordance with DIN 3140 within an accuracy of 10 seconds.

The Laser Centering Unit can work both with transmitted light and with the reflection method.

The focusing optics are sealed for protection against oil mist and dirt.



Lenses with centering angle  $\alpha > 17^\circ$  are centered automatically, lenses with  $\alpha < 17^\circ$  are aligned to their optical axis with the Laser Centering Unit.

Surface angle of tilt as per DIN 3140

## Technical Data

Working range	6–150 mm $\varnothing$	Power required	
Tool diameter	160 mm	WG	1.3 kW
Tool speed	3500 rpm	WG Laser	1.5 kW
Time cycle	0.5–9 mins., infinitely variable	Pneumatics	4 bar
Tool spindle fitting	30 mm $\varnothing$ g 5 x 20 on request steep taper 3.5 : 12 according to DIN 58 740	Space required	
Centering spindle dia.	42 mm	WG	1000 x 750 mm
Centering spindle fitting		WG Laser	1100 x 750 mm
WG exchange spindle	M 12 right	Net weight	
clamping spindle	M 12 left	WG	approx. 430 kp
WG Laser		WG Laser	approx. 480 kp
exchange spindle	M 20 x 1 right		
clamping spindle	M 20 x 1 left		

Design alterations reserved



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