

Fully automatic groove grinder

LGG

LOG-O-MATIC®



Features

The LGG is designed to grind and regroove the wire guides from slurry wafering saws or diamond wire saws to any pitch size.

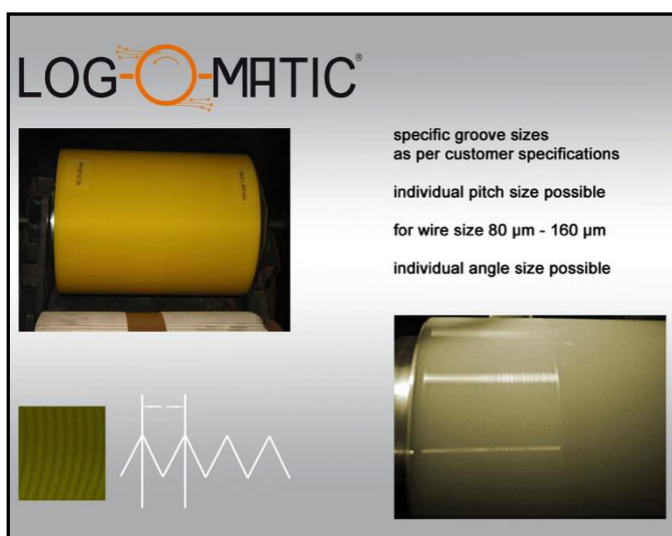
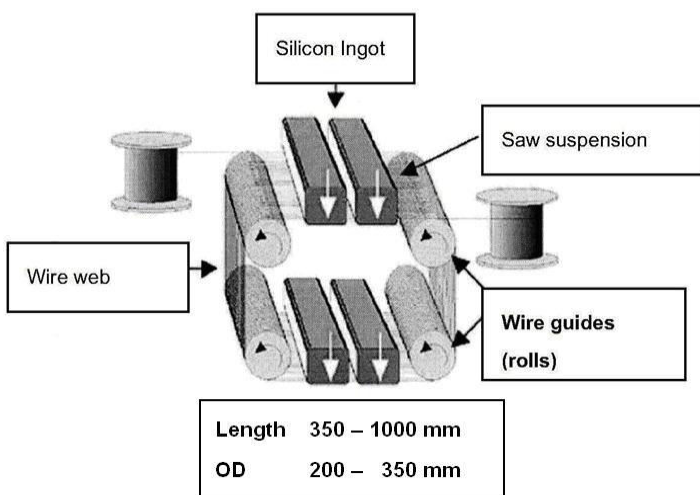
- Grind OD sizes from 2 – 13 inches
 - High precision results
 - Grind and regroove guides of:
 - Logomatic (Diamond Multi Wire Saw)
 - AMAT / HCT
 - Meyer+Burger
 - Themis
 - NTC
 - Toyo and Takatori
- and all other slurry saws which need refurbishing of wire guide rolls

Machine data

- Max. length: 1,000/600 mm
- Max. OD: 350 mm
- Clamping space: 1,200/350 mm
- Clamping length: 650/1,200 mm
- Wheel & in-feed:
 - In feed with ball screw and servo motor
 - Smallest step ± 0.001 mm (1 µm)

Technical data

Dimension	3.0 m x 4.0 m x 2.2 m
Weight	4,800 kg
Control	Siemens touchpanel
Software	Siemens Sinumeric
CNC Unit	Siemens 820/840
El. Connection	18 kW
	400 V, 3 ph + earth
	50/60 Hz
Color	white



Accuracy over 1,000 mm
 $\pm 1 \mu$ (2μ guaranteed)



Incoming wire guide rolls for Diamond wire or slurry using machines



4 HCT rollers (Front)
4 MB rollers (back)

Specifications

Table longitudinal stroke:

Step-less adjustable	0 – 1,000 mm/min
By AC Motor	
Table taper range adjustable by hand	$\pm 3^\circ$
To reach diameter tolerances	at $\varnothing 300 \pm 0.002$ mm
Table movement	± 0.002 mm on 600/1,000 mm

Grinding wheel & in-feed:

In-feed with ball screw and servo motor	
Smallest in-feed step	± 0.001 mm (1μ)

Special grinding spindle

Run out	$\pm 1 \mu$
Drive by DC motor	6 KW
Step less adjustable over frequency changer	300 – 3,500 rpm

Automatically grinding wheel in-feed CNC controlled

Drive of all 3 axis by AC motor	
With option of:	
Total in-feed	200 mm
Single in-feed per step	0.001 – 0.99 mm
Sparking out	1 – 99 sec
Separated electrical cabinet with integrated touch panel	

Separately fast in-feed motion and automatically tip-fine in-feed

smallest step	$\pm 1 \mu$
or for adjustment by hand	
repeatability of in-feed position	$\pm 1 \mu$
repeatability of table side position	$\pm 2 \mu$
Hand held (control panel) for all movement incl. setting parameters, emergency-stop for set-up and adjustment	

Grinding Wheel:

$\varnothing 400 \times 40$ mm grinding wheel is incl. in the first delivery

- For OD grinding we recommend 2pc. of grinding wheels with 2 flanges
- For groove grinding we recommend 6pc. of grinding wheels with 6 flanges

The dressing of the grinding wheels for grooving the wire guide rolls is necessary, because it very high precision of the pitch on the WGR itself. This is important to produce high precision wafers in the wafering saw.

Cooling unit

A cooling unit with a volume of 600 l is placed behind of the machine. A filter catches the swarf material (take off material of the wire guide roller, Polyurethane). A cleaning process is possible during the current grinding process, which does not influence the grinding process.