



The G&P Technology POLI-400L was designed to provide flexible CMP process capability for applications where ease of use, reliability, and a compact design are essential. Capable of working with substrates with up to 150mm diameter, the POLI-400L offers configuration choices in carrier type, conditioner technology, pad profiling, process measurement and monitoring systems. The POLI-400L utilizes an intuitive touch-screen user interface and a robust PLC control system that includes the multiple process steps and detailed process controls that users expect. Reliability and flexibility is further enhanced by relying on manual single substrate loading. The G&P Technology POLI-400L delivers high-value performance and research capability in a package that is compact and economical.

FEATURES

Programmable control of:

- Polishing pressure
- Rotational speed of the polishing platen & wafer carrier
- Carrier membrane pressure
- Downforce of the pad conditioning disk
- Sweep speed of the conditioning arm
- Oscillation of the wafer carrier on the polishing pad
- Polishing process time
- Slurry wetting time on pad
- Flow rate of the polishing slurry
- Buffing/rinsing time
- Flow rate of D.I. water during buffing/rinsing cycle



The POLI-400L Swing Arm Conditioning System for optimized CMP processing

POLI-400L CMP Tool

STANDARD CONFIGURATION - Model POLI-400L		
Wafer size capacity	100mm or 150mm	4î to 6î
1 polishing platen	Hard Anodized Aluminum with Teflon™	
Diameter	406mm	16î
Speed range	30 - 200 rpm	
Number of wafer carriers	1	
Speed range	30 - 200 rpm	
Standard type	Membrane style with floating ring	
Oscillation range	±12mm	±0.5î
Pad conditioner	Ring style with pressure rinse	
Slurry pumps	2	
Operator interface	Intuitive touch screen	
Loading system	Manual load/unload	

OPTIONS AVAILABLE	
Second wafer carrier	N/A with pad conditioning
Pad conditioner system	N/A in 2-spindle/carrier model
Type	Swing arm
Feature	8-zone conditioning control
Low pressure polishing system	For copper & low K applications
End point systems	Frictional force
	Temperature
Table rinse spray	High pressure spray arm
Platen temperature control	Customer provides chiller
Teflon™ coated polishing table	Optional

DIMENSIONS		
Metric	1050mmW x 1000mmD x 1950mmH	
Inches	41.3"W x 39.4"D x 77"H	
Weight	~900 kg	1984 lbs

FACILITIES	
Power	220VAC, 3PH, 30A
DI Water	2 l/min avg, 10 l/min peak
CDA	5 SCFM
Exhaust	100 CFM

CONDITIONING ARM OPTIONS

Swing Arm Conditioning
(radial sweep - optional)

- 100mm end effector (standard), 0-200 rpm range
- Downforce range, .45 - 9.1kgf (1 - 20 lbf)
- Sweep zone control, 8 segments
- Sweep rate, 0 - 20 sweep/minute
- Conditioning disk clean station



Nylon Brush with High Pressure Spray Nozzle for pad cleaning

Oscillating Arm Conditioning
(linear sweep - standard)

- 195mm end effector, segmented or pellet
- Downforce range, 5-20 kgf (11-44 lbf)
- Sweep rate, 0 - 12 sweep/minute

