

## **CNC Spherical Polishing Machines**



### Innovative Machines for Precision Optics and Technical Ceramics



## High speed spherical lens and dome polishing

Improve your precision, capability and predictability along with your bottom line. With OptiPro's CNC spherical optics polishing machines, you can reduce cycle times, increase quality, and take on high volume production jobs with confidence. Experience repeatability for plano and spherical optics production and the power to polish hemispherical domes. The PRO 80P, PRO 160P, PRO 160P+ and ePX 200 can handle a variety of materials including optical glasses, optical ceramics, and metals. Larger workpieces up to 200mm in diameter? No problem. We have the right polishing solution for you.



## **High Performance Machines**

Engineered for precision and repeatability

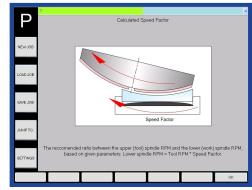


## **Intelligent Software Technology**

P Series Software: User-friendly yet highly capable



- Clear and simple interface uses graphics and simple input handles to guide the user through all aspects of lens polishing
- Process tree progression allows multiple processes within the same lens to be chained together and run in series to maximize polishing efficiency
- Correction screens have easy to follow images for applying corrections that are tailored to opticians.



## **Capabilities**



#### PRO 80P: CNC Spherical Polisher



#### Standard Features:

- Tool and Work Spindles with Hydro-Expansion Chucks
- On-board tool truing Self-Contained Slurry System
  - Modular platform
     Optional Features:
- Tool Height Measurement Station Slury through the Tool • Tooling Design Software

#### PRO 160P: CNC Spherical Polisher



#### **Standard Features:**

- Tool and Work Spindles with Hydro-Expansion Chucks
- On-board tool truing Self-Contained Slurry System
  - Modular platform
- Optional Features:
   Tool Height Measurement Station Slurry through the Tool
  - Tooling Design Software

# Planos Convex Concave Hemi-Domes Aspheres Spherical part size limit PRO 160P

<160mm ø

≤160mm ø

Spherical part size limit

PRO 80P

Convex Concave Hemi-Domes Aspheres

200mm ø

Planos

#### PRO 160P+: CNC Spherical Polisher



#### **Standard Features:**

- Tool and Work Spindles with Hydro-Expansion Chucks
   In-Process Tool Truing with Dual Lower Spindles
- Self-Contained Slurry System Modular platform

#### Optional Features:

• Tool Height Measurement Station • Slurry through the Tool • Tooling Design Software

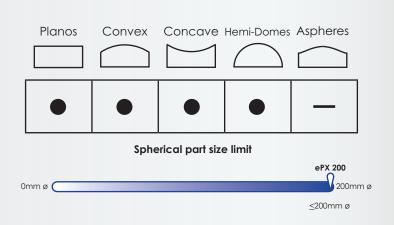
## Planos Convex Concave Hemi-Domes Aspheres Spherical part size limit PRO 160P+ 200mm ø

#### ePX 200: CNC Spherical Polisher



#### Standard Features:

- Tool and Work Spindles with Hydro-Expansion Chucks
   More Spindle Torque for Large Optics
   On-board tool truing
   Slurry System
  - **Optional Features:**
- Tool Height Measurement Station Slurry through the Tool • Tooling Design Software



## Specifications\*

	PRO 80P	PRO 160P/160P+	ePX 200
Workpiece Optimal Diameter Range Maximum Weight	Up to 80 mm (3.15") 15 kg (33 lbs.)	Up to 160 mm (6.3") 30 kg (66 lbs.)	Up to 200 mm (7.87") 100 kg (220 lbs.)
Work Spindle** Spindle Speed, Power Hydro-Expansion Chuck Work Chuck	1 - 1,500 rpm, 1.3kW	0 - 1,500 rpm, 1.8kW	25 - 2,000 rpm, 5kW
	Standard	Standard	Standard
	Pneumatic Bladder	Pneumatic Bladder	Pneumatic Bladder
Tool Spindle  Maximum Tool Diameter  Spindle Power (Peak)  Hydro-Expansion Chuck  Polishing Tool	160 mm (6.3")	300 mm (11.8")	400 mm (15.7")
	50 - 1.500 rpm, 1.3kW	0 - 1,500 rpm, 1.8kW	25 - 2.000 rpm, 5kW
	Standard	Standard	Standard
	Aluminum or Steel Body w/ Polyurethane Foil	Aluminum or Steel Body w/ Polyurethane Foil	Aluminum or Steel Body w/ Polyurethane Foil
Travels X - Axis Travel Y - Axis Travel Z - Axis Travel B - Axis Travel	170 mm (6.7")	420 mm (16.5")	468 mm (18.4")
	3 mm (.12")	6 mm (.24")	210 mm (8.3")
	140 mm (5.5")	220 mm (8.7")	200 mm (7.87")
	-5° to 65°	-5° to 65°	-90° to 90°
Communication Interface Ethernet USB	Standard	Standard	Standard
	Standard	Standard	Standard
Machine Dimensions Width Depth Height Weight	1,000 mm (39")	1.400 mm (55")	2,110 mm (83")
	1,500 mm (59")	1.730 mm (68")	2,515 mm (99")
	2,440 mm (96")	2.440 mm (96")	2,700 mm (106")
	1,600 kg (3,500 lbs.)	1.950 kg (4.300 lbs.)	3,400 kg (7,500 lbs.)
Facility Requirements Electrical Air Supply	480V +/- 5%, 24A	480V +/- 10%, 24A	480V +/- 5%, 49A
	100PSI, 5 CFM clean dry air	100PSI, 5 CFM clean dry air	100PSI, 5 CFM clean air

<sup>\*</sup> Specifications subject to change. Contact OptiPro for the latest specifications.
\*\* PRO 160P+ has dual lower spindles (Work Spindle and Truing Spindle), both of which have the same specifications.





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