io POLISHING PADS

io-4000 Series

06/2009

io-4000, io-4000P, io-4000E Buffed polyurethane with microscopic voids, laminated to a non woven substrate. Good chemically resistance and excellent flatness. Intended for final polishing of wafers, crystals and acrylics with abrasive slurries. Thickness: 1.15mm – Hardness: 69° Shore A. Applications: For final polishing of wafers, quartz, crystals, stainless steel, glass, acrylics and ceramics.	
io-4010 Buffed polyurethane with microscopic voids, laminated to a woven cotton substrate. Extra soft, flocked polishing cloth made with absorbent fibers. Intended for final polishing of crystals. Recommended for use with diamond compounds 3u and finer. Thickness: 0.80mm – Hardness: 56° Shore A. Fiber length: 0.50mm Applications: For final polishing of quartz, crystals, stainless steel, glass.	
io-4100 High density, laminated polishing material with a plain surface for use either as a disposable lapping plate or – once conditioned – as a polishing material with an extremely long service life. 100% polyester. A lamination of three materials. May be used with abrasive slurries from 1µ to 100µ. Thickness: 0.88mm Hardness: 92° Shore A. Density: 0.95 g/cm^3 - (approximate values). Applications: For final polishing of wafers, crystals, stainless steel, glass, acrylics, ceramics and plastics. Pre-Conditioning: Polish with dummy work piece until a suede-like surface has been worked up. Flatness may be retained by the use of conditioning rings.	

SAINT-GOBAIN
CERAMIC MATERIALS

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ISO-9002 CERTIFIED SUPPLIER

io-4200P High density, laminated polishing material with a perforated surface for use – once conditioned – as a polishing discs with an extremely long service life. 100% polyester. A lamination of three materials. Intended for use with liquid abrasive slurries. Thickness: 0.88mm Hardness: 94° Shore A Density: 0.95 g/cm³ – (approximate values). Perforation: 1.5mm holes, straight pattern, app. 11.0% open area Applications: For final polishing of wafers, crystals, stainless steel, glass, acrylics, ceramics and plastics. Pre-Conditioning: Polish with dummy work piece until a suede-like surface has been worked up. Flatness may be retained by the use of conditioning rings.	
io-4300, io-4300P, io-4300E, io-4310 (io-4300 with barrier) Firm, dense and uniform non-woven polishing cloth with absorbent fibres, mechanically and chemically bonded. Double buffed surface. Excellent flatness. Intended for general polishing with diamond slurry or compound. Fiber: 100% 1,7denier polyester Binder: Nitrile rubber blend Fiber/binder ratio: Approx. 33/67% Polishing side: Double buffed Adhesive side: Single buffed Thickness: 0.65mm Hardness: 90° Shore A. Density: 0.60 g/cm³ – (approximates values). Applications: For final polishing of fiber optics, crystals, stainless steel, glass, acrylics, ceramics, plastics, sintered carbides	
io-4400 Firm, dense and hard polishing disc with excellent uniformity with buffed surface on one side. Intended for general polishing with diamond slurry or compound. Fiber: 100% 1,7denier polyester Binder: Nitrile rubber blend Fiber/binder ratio: Approx. 33/67% Polishing side: Double buffed and hot calendered Adhesive side: Single buffed Thickness: 0.78mm Hardness: 92° Shore A. Density: 0.73 g/cm³ – (approximates values). Applications: For final polishing of wafers, crystals, stainless steel, glass, acrylics, ceramics and plastics.	

io-4500 Dense and very uniform non-woven polishing cloth with 100% polyester fibers, both mechanically and chemically bonded. Single buffed surface. The plain surface makes this cloth suitable for stock-removal or prepolishing operations with diamond suspensions or compounds. Thickness: 1.15mm – Hardness: 55° Shore A. Density: 0.54 g/cm^3 – (approximates values). Applications: For final polishing of wafers, crystals, stainless steel, glass, acrylics, ceramics and plastics.	
io-4600 Firm, dense and non-woven polishing cloth with absorbent fibres, mechanically and chemically bonded. Single buffed surface. Excellent flatness. Intended for general polishing with diamond slurry or compound. Fiber: 100% 1, 35denier polyester Binder: Nitrile rubber blend Fiber/binder ratio: Approx. 55/45% Polishing Side: Single buffing Hardness: 87° Shore A Thickness: 0.52 mm Density: 0.31g/cm^3 - (approximates values). Weight, 76mm: 0.68- (approximates values). Applications: For general polishing of crystals, stainless steel, glass, acrylics, ceramics, plastic, and sintered carbide.	
io-4700, io-4710 Woven artificial silk polishing cloth. Protective barrier films allows the use of oil or alcohol based slurries for polishing without attacking the adhesive backing. This thin pad helps to maintain excellent flatness on workpieces with minimal edge rolloffs during polishing. Intended for general polishing with diamond slurry or compound. Hardness: N/A Too thin to measure. Relatively soft surface. Thickness: Approx. 0.45 mm io4700 – Mounted on a heavy barrier film. Suitable for metallurgic application Io4710 – Constructed on a internal barrier film. Applications: For general polishing of crystals, compound semiconductor wafers, stainless steel, glass and metallurgic specimens.	

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io-4800 Tighly woven polyester fiber pad. Extremely hard and flat surfaced synthetic polishing cloth. It prevents penetration of oils or liquids to the adhesive backing and keeps the adhesive backing dry and intact. This thin pad helps to maintain excellent flatness on workpieces with very minimal edge rolloffs during polishing. Used with diamond compounds or slurries in the pre-polishing step. Hardness: Hardness: 97° Shore A Thickness: Approx. 0.30 mm Density: 1.17 g/cm^3 Applications: For general pre-polishing of crystals, glass and metallurgic specimens.	

Adhesive/Backing

io-4000 series come with a pressure-sensitive adhesive coating that provides firm adhesion to metal and ceramic plates while making it easy to peal off the lap. It has a 0.003" polyester barrier between the pad material and the pressure-sensitive adhesive coating. This barrier is impervious to oil, alcohol, glycol and water. A removable paper protects the adhesive backing.

Product Benefits

- Provides fast MRR on hard substrates that utilizes abrasive slurry for polishing.
- Provides excellent flatness comparable to plate and pitch polishing.
- Extremely hard pads available – similar to polyurethane pads.
- Highly durable and long lasting performance.
- Excellent polishing repeatability.

Availability

The pads are available in sheets and discs up to 52.5" diameter. Dimensions may vary for different pad types as follows:

io-4000, io-4000P, io-4500:	Max dia. 52.5 inches
io-4300, io-4400, io-4600, io-4010:	Max dia. 48 inches
io-4000E, io-4100, io-4200P, io-4310, io-4300P, io-4300E:	Max dia. 27 inches
io-4700, io-4710, io-4800	

Minimum Order Requirement: $800 per order.
Standard lead-time: 4 weeks.

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