PREPARING A LENS FOR ANTI-REFLECTIVE COATING

From LabTalk April/May 2004 as written by Dave Cuff

The perfect Anti-Reflective coating begins with perfectly prepared lenses. When properly prepared, the lenses can be successfully worn by the patient for the life of the prescription.

LENS CONDITION
Lenses should be clean of any foreign substances before coating to minimize scratches and pits when edging. Always clean lenses before shipping to have coating applied.

BACK-SIDE HARD COAT
Follow the manufacturers instructions! Improperly applied back-side hard coat is the single biggest reason for A/R failures.

BLOCKING
Tape all lenses regardless of whether you use wax or alloy! Taping is important because wax and cleaners contain silicone which can prevent the A/R from adhering to the lens.

TINTING
Correct your color every day. Maintain the tint bath at 208 degrees and neutralize lenses for 3 to 5 seconds after tinting to clear surface dye. Tint lenses 10-15% darker than ordinary because the A/R process will remove color from the lens.

GENERATING
Use a coolant without silicone if you have a wet cut generator.

FINISHING
Use a plastic film or surface saver tape between the leap pad and on both surfaces of the lens. Deblock the lens immediately after edging. When deblocking, put the lens in warm, soapy water to ensure the block comes off easily. (Pulling the block off dry can cause stress cracks in the coating.) Keep the lab environment clean of foreign particles and handle the lenses as little as possible.

POLISHING
Use high quality materials and keep lenses wet until they’re cleaned.

CLEAN UP
Clean lenses immediately after polishing. DO NOT allow polish to dry on lenses.