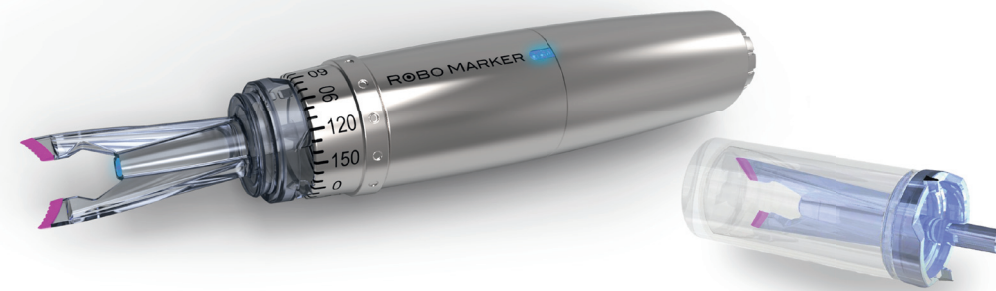




Love at first sight;
once you try it, you will
never use another
corneal marker



VIDEOS



DR. ALAN BROWN, MD
inventor and developer
of the RoboMarker™



RoboMarker™
By SurgiLum™

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Toric IOL alignment FACT:
1° of misalignment equals 3% loss of effect
10° misalignment equals 30% loss of effect

The manual marking methods yielded a
mean alignment error of about 5°*

NOW there is a better way...



ROBO MARKER
CORNEAL MARKING SYSTEM

* J Cataract Refract Surg. 2011;37(8):1394-1402

RoboMarker™

Eye surgeons spend a lot of precious time and money on expensive offices and intraoperative diagnostics in order to maximize patient outcomes and happiness. These high costs are justified in Premium IOL surgery in order to define the critical location and magnitude of a patient’s astigmatism. And yet, after all of the expensive analysis, surgeons have been forced to use outdated technology to mark the corneal astigmatic axis prior to surgery. Current corneal markers are prone to a 5% to 10% off-axis error placement.

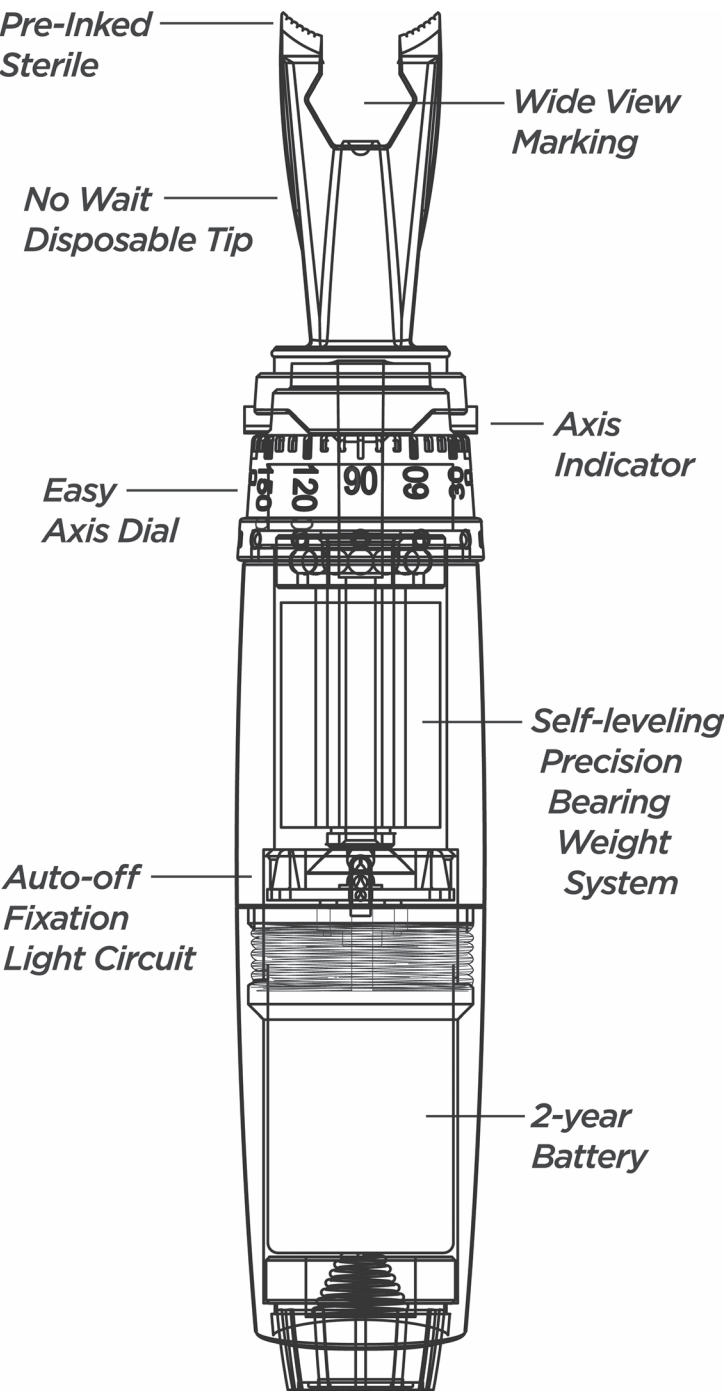
Current corneal markers are less than accurate because:

- Patients get measured using a fixation light but are marked while fixating on a distant object. No current markers have an integrated fixation light.
- Hand marking ink dots to the “eyeball” is prone to error that is compounded by “ink drift or smudging”.
- All current corneal markers require wet gentian violet ink to be applied to a wet cornea resulting in marks that are easily washed away in less than 20 minutes.
- Bubble markers require the surgeon to concentrate on a moving bubble while simultaneously trying to land the 180° marking fins accurately on the cornea. A separate sterile marker has to be used to define the particular astigmatic axis adding to error stack-up.
- Current pendulum markers can have the same stack-up and ink wash off errors.
- Intraoperative alignment systems flutter or jiggle the axis overlay as the computer processor struggles to keep up with the patient’s normal fixation microsaccades.
- Intraoperative aberometry systems suffer from corneal hydration issues, IOP issues and IOL unfolding and tilt in the capsular bag issues.

RoboMarker™ addresses all of these needs with a well thought-out and smartly engineered system.

RoboMarker™ Unique Patent Pending Benefits:

- A. Accuracy; enhanced self levelling gravity based pendular mechanism.
- B. Bearings; an industry first of 2 high precision bearings coupled to 2 hidden weights.
- C. Comfort; patient comfort of having an integrated fixation light just like the fixation light used to measure the corneal astigmatism. Doctor comfort of an ergonomic handle and knowing that the patients are being marked the way they were measured.
- D. Disposable; the RoboMarker™ Corneal Marking System is the first marker to offer single use disposable sterile pre-inked marking tips - RoboTips. No more looking for a marking pen and no more waiting for the autoclave.



Patents pending

Why Your Corneal Marker Should Have a Disposable Tip

Safety and Sterility

Cleaning of delicate eye instruments is time-consuming, costly, difficult and can delay OR turnover time. Consequently, reusable instruments always have a lingering safety concern over cross contamination and the risks of residual tissue fragments/biofilm. **Disposable sterile RoboTips eliminate safety and sterility concerns.**

Sterility/Availability of Marking Pens

Surgeons often grab several marking pens as they plan their “marking rounds” and so there exists the risk that a pen could be accidentally used on multiple patients resulting in cross-contamination. Often, pens are not available in each patient room due to restocking errors and the surgeon has to waste time trying to “find a pen” (1-2). **Single use disposable RoboTips are pre-inked and so eliminate cross-contamination of ink pens concerns.**

Quality, Reliability and Fragility

We have all seen damage to our instruments even in the hands of experienced ophthalmic surgical and cleaning technicians. The smallest alteration in the alignment of an astigmatic marking tip can affect accuracy. Surgeons want the “peace of mind” that their toric instrument will perform perfectly every time. **Disposable RoboTips eliminate quality, reliability and fragility concerns.**

Corneal Mark Quality, Longevity and Surgeon Productivity

Gentian violet ink pens leave large ink spots that can smear over time. Marks from reusable metal markers fade quickly because the wet ink is transferred to a wet cornea and so require marking right before surgery. Disposable RoboTips are pre-inked with dried gentian violet ink. When the dry ink encounters a moist cornea the ink enters solution on the cornea in a manner that allows clean linear marks that can last up to 2 hours. **When the surgeon can mark several patients in a row using single –use disposable RoboTips, they can move on to a more efficient surgical day knowing that the linear marks lefts by the RoboMarker™ Corneal Marking System will be there for them as they sit down to a prepared and draped ready patient.**

Cost-Benefit Analysis

Disposable RoboTips save the surgery center by eliminating reusable instrument cleaning, processing, sterilization and restocking issues. Surgeons don’t have to find a marking pen, and their day becomes more efficient by having long lasting cornea marks that can be applied in the pre-op area well ahead of surgery. **Surgery centers that provide disposable RoboTips give their staff and surgeons a time and safety edge that reusable instruments can’t offer.**

1. Ballal MS, Shah N, Ballal M, et al. The risk of cross-infection when marking surgical patients prior to surgery - review of two types of marking pens. Ann R Coll Surg 2007 Apr;89(3):226-8.
2. Wilson J, Tate D. Can pre-operative skin marking transfer methicillin-resistant Staphylococcus aureus between patients? A laboratory experiment. J Bone Joint Surg Br 2006 Apr;88(4):541-2.

ADVISORY BOARD



KARL STONECIPHER, MD
“The greatest thing I like about the RoboMarker™ is its ease of use and the fact that the marks last for over an hour. It really has improved my outcomes and my patient flow.”



MITCHELL A. JACKSON, MD
“RoboMarker™ is the most accurate way to mark for intended toric axis alignment prior to toric IOL and/or astigmatic corneal incision surgery due to its automatic cyclotorsion adjustment.”



GEORGE O. WARING, MD
“The RoboMarker™ is an advancement in the surgical planning of astigmatism correction. The intelligent balance takes the guesswork out of your alignment and is intuitive to use.”



WILLIAM TRATTLER, MD
“The RoboMarker™ is very easy to use in the Preop area, and once marked, it makes aligning toric IOLs very easy.”



R. DAX HAWKINS, MD
“When marking the axis for surgery, I need something that’s accurate, quick and easy. The RoboMarker™ is all of these in a package that fits in the chest pocket of my scrubs.”