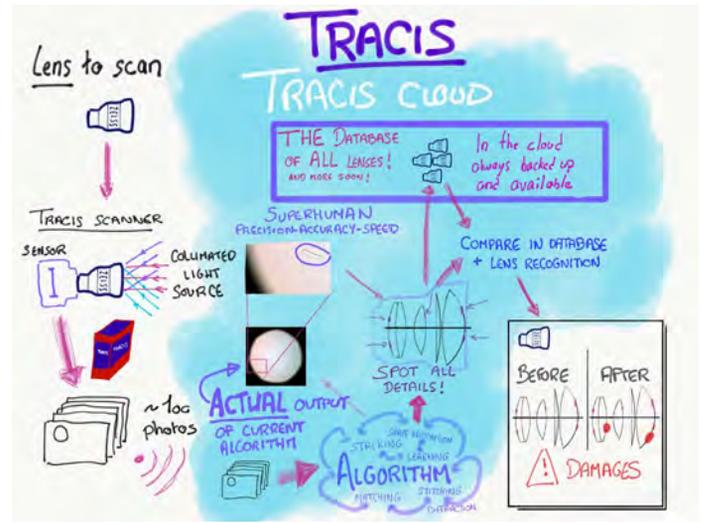


Camalot, Vocas, Tracis Scanner for Rental House Lens Checking



Back row, left to right: Robert-Jan Huijsman, André Kan, Adrien Sicart. Front row: Erik Gils, Martin de Kock. Above right: whiteboard!

Picture this. You're a producer and the DP rented a set of the latest lenses that cost more than a house. You assume the AC did a thorough check-out. The job goes well. A week after wrap you get a call from the rental house: bad news—there's moisture and mold inside the lenses. How could that be? You were shooting in the Sahara desert. And so begins the all-too-often dance of responsibility and financial liability between renter, rental house, insurance company and crew.

Imagine you're a rental house. Every time a lens goes out and returns from a job, someone has to check it. First the lens technician looks for obvious exterior things: scratches on the front element, barrel, dings, physical smoothness of focus, iris or zoom barrels, and so on. Next, the lens tech looks inside for dust, moisture, residue and elements that might be out of whack due to a drop or vibration. All of this takes lots of valuable time. And is everyone confident everything was checked properly?

What if disputes about lens salubrity could end? What if there were a test instrument to automate lens checking? Soon there will be. Camalot, Vocas and Tracis have teamed together to build and sell an exciting new lens "scanner" that promises to be a game-changer for the rental industry.

Camalot is a major camera, lens and accessory rental company in Amsterdam, founded in 1997 by Philippe Vié and Bernd Lesscher, and famous for a desire to be first to acquire the latest high-end equipment. In 2018, Sebastiaan van Zuylen and Yke Erkens became Camalot's new Managing Directors, with Philippe and Bernd onboard as Advisors. Camalot has a vast inventory of cine lenses—modern, classic and custom. Clearly, having a test instrument to check them would save lots of time and headache.

Vocas is both a key distributor and also a manufacturer of cine accessories and tooling. Founded in 1989, Vocas distributes major brands, including ARRI, Blackmagic Design, Zeiss, Angenieux, Canon, Fujifilm, RED and Sony. Vocas Systems designs and develops innovative, high-quality camera accessories to enhance and customize camera packages. Their matteboxes, focus units, supports, rigs, handles, handgrips and tools are on productions worldwide. Of particular interest to rental houses is that Vocas also builds and distributes the LumaCon automated linear collimator.

Tracis Inc is a California technology company founded by Adrien Sicart and Robert-Jan Huijsman. Adrien has a Masters Degree in Math and a profound knowledge of optics. He has lectured on large format lenses and exhibited a lens prototype at Cine Gear, Micro Salon and Imago. Robert-Jan Huijsman joined Tracis as a co-founder after 6 years at Google in California and brought his knowledge of cloud computing and software to enable the development of the scanner. Founded as a Silicon Valley startup, Tracis aims to apply the tech industry's rapid pace of development to the field of optics and cinematography.

Interestingly, these companies didn't initially set out to build a lens-testing device. Adrien originally started Tracis to develop a software-controlled lens that could produce unprecedented visual effects on-set; it was the prototype of that lens that first attracted Camalot's attention. Only later did the experience of redesigning lenses with software in mind lead to the development of the technology that now powers the Tracis lens scanner.

The new Tracis lens scanner provides an entirely new way of looking inside (and outside) a lens. It is called a scanner because it is sort of like an MRI or CT Scanner for your lens. Instead of magnetic resonance or computerized tomographer, this scanner is optical. The scan is fully automatic, takes just 1 minute, and shows scratches and dust that might otherwise be difficult for a lens technician to see. The Tracis scanner also reveals external damage to the lens barrel and housing. The technology will eventually also be able to spot misaligned elements, and is accurate enough to see the difference between any two lenses, even of the exact same type, essentially identifying the "fingerprint" of the lens. It also can check for fingerprints on the lens. Rental companies can take scans before and after every job to show wear and tear on the lens and to immediately find new damage.

The Tracis Scanner represents a novel way of building optical instruments. It uses artificial intelligence, a supercomputer and cloud computing capable of solving computationally difficult problems. Tracis can run its software algorithms on thousands of cloud-based computers simultaneously, piecing together a complex puzzle of measurements in seconds, when previously it would have taken hours. To connect to this supercomputer, the scanner uses a normal internet connection.

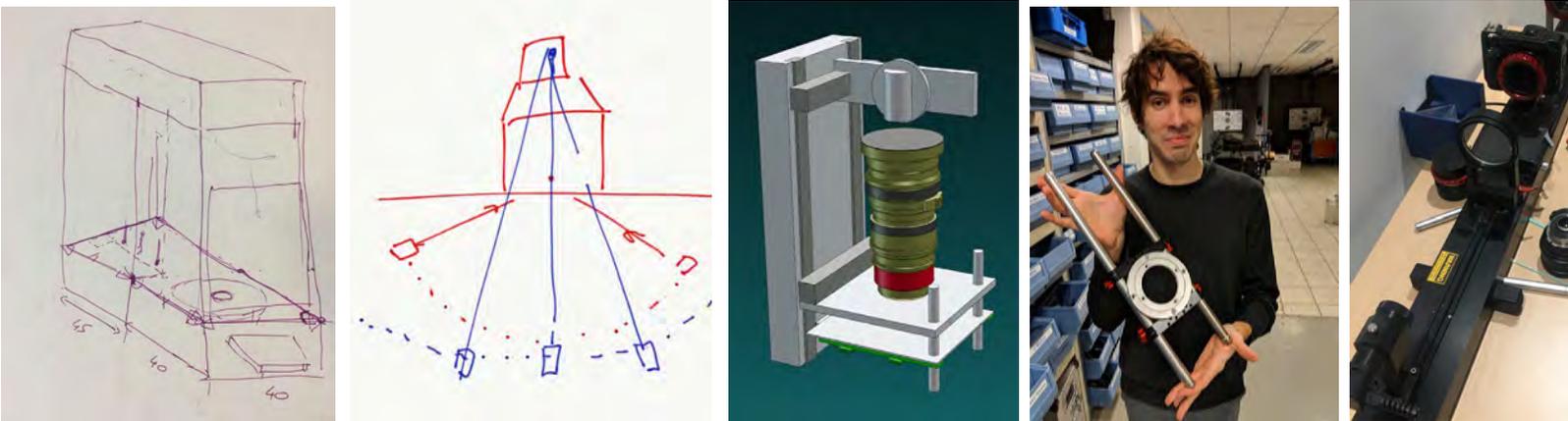
An added advantage of the scanner's internet connection is that it will continue to improve even after it's been purchased. Like a Tesla or an iPhone, the Tracis Scanner will receive software up-

dates to improve its capabilities for years to come. As more scans are processed the Scanner's algorithms self-learn to produce increasingly detailed results over time.

The scanner will be available for purchase for less than a typical collimator. The cloud services it uses are sold on a subscription model, with pricing dependent on the amount of use.

Vocas, building on their experience building the LumaCon linear collimator, will manufacture and distribute the Tracis Scanner. Camalot's expertise as a rental house proved invaluable to the project, offering design feedback and practical testing in real-life conditions. Together, Tracis, Vocas and Camalot developed a range of prototypes of the scanner. The latest prototype will be shown at Cine Gear, booth 37. Anyone who'd like to learn more can contact Tracis: [info\(at\)tracis.eu](mailto:info(at)tracis.eu)

Tracis Scanner from Concept to Prototype to Product



From drawings and calculations to first concept to prototype build from spare parts and a kitchen utensil—to production-ready model.

