

# Teaming up WITH A DRY EYE INNOVATOR



SBM Sistemi's IDRA device is considered a gold standard diagnostic tool.

BOC Ophthalmic Instruments forged a new alliance with Italian ophthalmic device manufacturer SBM Sistemi four years ago with a focus on innovative dry eye devices. As TONY COSENTINO explains, the relationship has advanced at a rapid pace and there's more to come in 2021.

In his 50-year career in ophthalmic equipment sales and distribution, BOC Ophthalmic Instruments managing director Mr Tony Cosentino has had a front row seat to some of the major trends that have shaped and reformed eyecare in Australia.

The push for all optometrists to own a slit lamp, and the introduction of non-contact tonometry and OCT are among the major technological milestones he's witnessed and, subsequently, aligned his company with to bring the best overseas equipment to local eyecare practitioners.

One of BOC's most enduring partnerships has been with the Japanese firm Nidek, which – like Cosentino – is also celebrating a 50-year milestone in 2021. At the other end of the spectrum is one of BOC's newest agencies, SBM Sistemi, a firm in northwest Italy punching above its weight in terms of ophthalmic innovation.

The entrepreneurial spirit of SBM is what initially attracted Cosentino (who is also Italian) when they first met by chance at the MIDO trade show in Milan in 2017. But it's also the fact its team of 20-odd employees is developing new technology for one of the next major growth areas of eyecare – dry eye.

The company entered the ophthalmic arena in 2015 and has since expanded its portfolio to encompass six diagnostic dry eye devices – supported by its own software – and now a new treatment option for meibomian gland dysfunction.

"They are a company that innovates by research – not by copying other technology that is out there – that's why we have introduced them into the portfolio," Cosentino says.

"We always say we want to bring the best factories to our customers, and this is a relationship that has evolved at a rapid pace over the past four years."

## SMALL ITALIAN FIRM GOES GLOBAL

Headquartered in Turin and commencing operations in 1984, SBM Sistemi initially produced software for optical practices in its region. Within a few years it began opening new distribution facilities across Italy before expanding into other European markets and later developing equipment for the pharmaceutical market.

But it was six years ago – in 2015 – when the company took its first step into the ophthalmic market with a focus on dry eye diagnostics. The technology came amid mounting research that helped define dry eye disease, its causes and the various ways in which it could be measured.

A tear film screening device called the I.C.P. Tearscope and its meibomian gland evaluator, I.C.P. MGD, were among SBM's early instruments.

But the company soon went to a new level with the I.C.P. OSA (Ocular Surface Analyser), which offered practitioners a full assessment of the ocular surface through a combination of tests, from tear break up time to tear volume production tests, as well as various measurements and classifications according to international grading scales. A later version, the OSA Plus was then developed, with a key feature being auto meibography.



Tony Cosentino, managing director, BOC Ophthalmic Instruments.

Then in 2019, SBM released IDRA, its most comprehensive ocular surface analyser yet, incorporating all OSA features, plus more. The company says it is a gold standard dry eye diagnostic instrument, with key functions including auto interferometry test, auto 3D meibography, auto non-invasive break-up time (NIBUT), eye blink detection, tear meniscus height (evaluation of the tear film quantity, up to five values), blepharitis examination without additional lenses, break-up time staining test, white to white measurement and pupillometry, among others.

Cosentino says with IDRA comes a tool that takes full control of the dry eye examination, with automated functions supported by upgradable software. For eyecare practitioners it removed the need for manual testing procedures across multiple devices, while also eliminating any grey areas or guess work.

"What's so great about dry eye instrumentation like this is that it can measure and identify the type of dry eye and determine which layers can be treated with a specific treatment, in relation to the type of deficiency. And it helps inform the diagnosis with a colour coded system from red to green, which provides an indication of someone with severe dry eye or who might be on the verge, for example. Now all you need to do is determine the treatment," he says.

The tests and images can also be shown to patients during visits, as well as printed, sent by email, or collected with a smartphone app that the patient can keep and compare over time if they're undergoing therapy.

"I'm always excited about being involved with state-of-the-art technology that comes along like this, which help optometrists and ophthalmologists give better service to their patients and grow their practices as well," Cosentino adds.

In Australia, SBM's dry eye range has been popular among independent optometrists seeking to differentiate their business, as well as those who have set up dedicated dry eye practices. But time and space are critical in the modern-day eye clinic, which SBM has factored into the design of its equipment.

The IRDA and I.C.P. OSA, for example, can be mounted to the existing slit lamp tonometer hole, while the Tearscope is fitted to an iPad for examination and data collection.

"SBM is also trying to bring down the examination time. They can get tear analysis and whole dry eye examination down to about four minutes with their devices, so that means valuable time isn't being taken away from the optometrist or ophthalmologist," Cosentino explains.

"For optometrists in Australia, there is no separate Medicare item for these tests so it has been a challenge trying to fit dry eye diagnostics into [billable] examinations because previously it had to be done manually and could take 10-15 minutes. But now with the automation that's been introduced, it basically does everything for you and gives you results, within minutes."

## MULTIPLE NEW RELEASES IN 2021

Reflecting on the beginning of his career in 1971, Cosentino recalls simpler times when manufacturers would release updated equipment and new inventions every two to three years.

But times have changed, and this is particularly the case with SBM who have essentially rolled out a new product every six to eight months.

This year BOC is introducing two new diagnostic platforms from SBM, as well as the manufacturer's first foray into dry eye treatment.

The first of the diagnostic platforms are two new modules: the DSLC200 which adds digital capabilities to slit lamps; and the Dry Eye Module (DEM 100), a software interface that attaches to the slit lamp and DSLC200 and offers a comprehensive set of dry eye diagnostics.

The DSLC200 is said to transform slit lamps into a high-quality digital imaging device and is compatible with various makes and models, including CSO, Zeiss, Haag-Streit, Nidek, Topcon, Takagi, Righton, Keeler, Huvitz, Mediworks, Shin Nippon.



Activa for meibomian gland dysfunction is SBM Sistemi's first dry eye treatment device.



The company manufactures its devices at its headquarters in northern Italy.

The module's key difference is the use of an optical image splitter, which is fitted between the eyepieces and magnification optics of the slit lamp. This means it is not mounted to the eyepieces like other after-market cameras, allowing the eyecare professional to use the eyepieces normally, while offering superior image quality.

The system is also accompanied by software that allows the user to save images and video, with functionalities such as the Efron and CCLRU grading scales, comparison between exams, patient follow-up and reports.

The DSLC200 can be combined with the DEM 100 on Haag-Streit devices, which converts slit lamps into a dedicated dry eye platform.

It can also perform various tests including lipid layer thickness, meibography, tear meniscus height, automatic detection of blinking motion and quality, and bulbar redness.

The software is designed to guide the eyecare professional through the dry eye examination and all software automations are provided to obtain reliable and complete objective results.

Soon, Cosentino says BOC will be distributing a new topographer by SBM called the OS 1000, which also includes a module dedicated to the evaluation of the ocular surface. It's an integrated true diagnostic workstation, featuring complete dry eye assessment with tear film analysis and 3D meibography.

And in the therapy space, SBM recently unveiled Activa for meibomian gland dysfunction, featuring an eye mask with heating and automatic squeezing technology.

The device provides heating at 42C, and after a few minutes starts massaging through pads designed to push on the lids, avoiding pressure on the cornea, and with gentle vibrations it squeezes meibum from the glands. This process is also thought to be useful in conjunction with IPL (intense pulsed light) therapy for evaporative dry eye.

"Compared with existing treatments like IPL, SBM have found this is a much easier treatment that you can even do at home," Cosentino explains.

"It's not always easy for patients to go in and have IPL treatment, and then come back again for another treatment, and sometimes it is not even necessary to go down the IPL path, so this has a place in dry eye management." ■