



The Next Generation of Dentistry is Here.

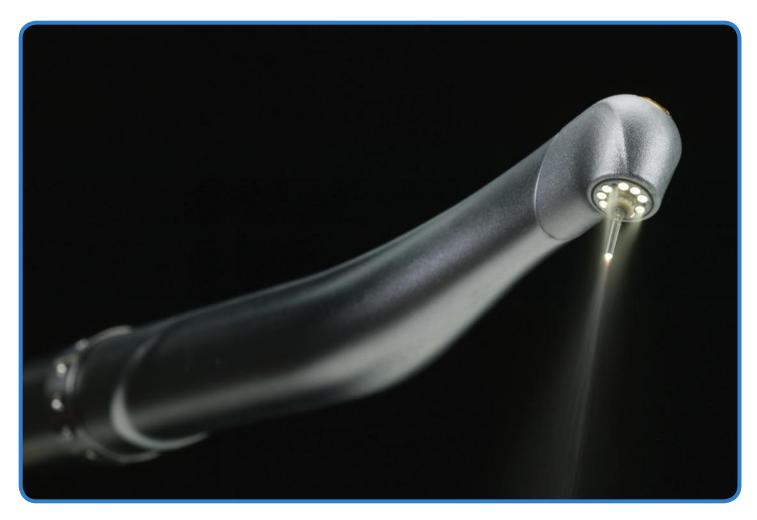


Introducing the Waterlase® MD

The Waterlase® MD features an all-new MD laser technology platform that heralds the next generation of dentistry with superior clinical outcomes and a more pleasant patient experience for many dental procedures. The Waterlase MD incorporates an extraordinary set of innovative features, as well as many features requested by laser owners from around the world. The Waterlase

MD also utilizes an all-new chassis that contains components, materials and design technology from the same creative minds that put high-performance luxury automobiles on the road (Mercedes Benz-AMG), and NASA's rockets into orbit (Northrup Grumman).

Voaterase vid



Featuring the most advanced, state-of-the-art design ever introduced in laser dentistry, the Waterlase® MD's handpiece is built using aerospace materials for extreme durability and complete comfort. The all-new HydroBeam™ handpiece is a 360° fully rotating instrument with exclusive contra-angle design and an ultra-low-mass head for maximum visibility in the surgical field. Plus, laser dentists can take advantage of an exclusive ultra-white, shadow-free LED illumination system.







The Waterlase® MD's exclusive new HydroBeam™ handpiece features state-of-the-art LED technology for ultra-white, shadow-free illumination.

The HydroBeam™ Illuminated Handpiece.

"Consistent results, ease of use, excellent patient care -the new Waterlase MD has it all."

HydroBeam[™] **Features**

Ultra-white, shadow-free illumination from the handpiece based on cutting-edge, bulbfree LED light technology — a first for dental lasers. This new feature significantly enhances visibility in the surgical field

Contra-angle, 360° rotatable handpiece for supreme comfort and easier access to all areas of the oral cavity

ComfortJet[™] air/water delivery system for maximum patient comfort, enhanced visibility for the clinician and improved clinical results

Advanced materials and components based on NASA and aerospace technology for improved reliability and ergonomics

Ultra low-mass handpiece head design, greatly maximizing visibility and access



"The Waterlase MD's new contra-angle, illumination handpiece and touch screen panel are major advancements for laser dentistry. Consistent results, ease of use, excellent patient care - the new Waterlase MD has it all. This laser enables me to provide a wide range of dental procedures at the level my patients have come to expect. Incorporating the Waterlase MD has re-energized my practice, my patients, and it has brought a new level of excitement to practicing dentistry."

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The Waterlase® MD features a dazzling, new high-resolution control system, using Windows® CE with intelligent touch-screen navigation for complete on-the-fly control. Whether you need advice for choosing a tip for a procedure, or suggestions for power settings, the Waterlase MD's new LaserPal™ help system is at your service.







SensaTouch™ uses high-resolution screens to adjust aiming beam intensity, handpiece illumination intensity, air/water spray, and much more.

The SensaTouch™ Laser Control System.

"I cannot think of any objection or rationale that isn't completely addressed by the new features of this laser."

SensaTouch™ Features

10 to 50 hz. selectable pulse repetition rate for expanded versatility across all tissue types

Touch-screen control system features Windows® CE

Unique, selectable pulse modes for hard and soft tissue, with enhanced coagulation capabilities

0.1 to 8.0 watts of power for precise, rapid tissue ablation

16 optimized, factory-loaded pre-sets for new users and completely customizable for experienced laser dentists

On-the-fly LaserPal™ help system to enhance training and suggestions for proper tips and settings



"The suite of new features that have not previously been available on any other laser gives me a degree of control to cut tissue far more effectively and precisely than ever before. After using the Waterlase MD, I cannot think of any objection or rationale that isn't completely addressed by the new features of this laser."



Soft Tissue Procedures

Gingivectomy & Frenectomy Dr. Kenneth Canzoneri Private Practice • Arcadia, CA



PRE-OP

A patient presented with an excessively thick frenum which was causing recession. Plus, the patient also requested that their anterior teeth appear longer and more natural.



INTRA-OP
The Waterlase MD is a versatile instrument, and can sculpt and shape soft tissue and perform bloodless frenectomies with no anesthetic.



ONE-WEEK POST-OP
One week after treatment, the surgical sites have healed without incident and the patient's anterior teeth are visibly more agesthetic

Incision, excision, vaporization, ablation and coagulation of oral soft tissues

Excisional and incisional biopsies Exposure of unerupted teeth Fibroma removal

Flap preparation – incision of soft tissue to prepare a flap and expose the bone.

Frenectomy and frenotomy Gingival troughing for crown impressions

Gingivectomy Hemostasis

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Implant recovery

Incision and drainage of abscesses

Operculectomy

Pulpotomy

Pulp extirpation

Pulpotomy as an adjunct to root canal therapy

Root canal debridement and cleaning

Removal of pathological tissues from around the apex

Soft tissue crown lengthening
Sulcular debridement

Treatment of canker sores, herpetic

and aphthous ulcers of the oral mucosa

Vestibuloplasty

Flap preparation — incision of soft tissue to prepare a flap and expose unerupted teeth (hard and soft tissue impactions)

Removal of granulation tissue from bony defects

Laser soft tissue curettage

Additional Soft Tissue Procedures



Lingual Frenectomy



Fibroma Remova



: Exposure



Gingivectomy



"When I first tried the Waterlase, it blew me away; I couldn't believe what I saw. For the first time, I was using a product that actually did what its manufacturer claimed. It's easy to quantify what the YSGG laser has done for my business: referrals have shot way up, production is through the roof, and I am doing a wider range of procedures than ever before."

Christopher Walinski, DDS

Private Practice • Fall River, Massachusettes



Hard Tissue Procedures

Class I Cavity Prep

Dr. Mark Colonna Private Practice • Whitefish, Mont.



PRE-OP
Decay is present on the mesio-occlusal surface of #14. Case



INTRAOP
The Waterlase MD allows for precise cavity preps with no pain, needles or drills (in most cases). Plus, you'll remove minimal amounts of tissue, helping the patient to preserve as much tooth structure as possible.



POST-OP
The composite restoration is placed within minutes of the procedure beginning, and the patient was sent on their way with no discomfort or no numb lip.

Class I, II, III, IV, and V cavity preparation

Caries removal

Hard tissue surface roughening or etching

Enameloplasty, excavation of pits and fissures for placement of sealants

Osseous crown lengthening

Cutting, shaving, contouring and resection of oral osseous tissues

Osteoplasty and osseous recontouring (removal of bone to correct osseous defects and create physiologic osseous contours)

Ostectomy (resection of bone to restore bony architecture, resection of bone for grafting, etc)

Cutting bone to prepare a window access to the apex (apices) of the root(s).

Apicoectomy – amputation of the root end.

Root end preparation for retrofill amalgam or composite.

Tooth preparation to obtain access to root canal

Root canal preparation including enlargement

Root canal debridement and cleaning

Additional Hard Tissue & Bone Procedures



Bone Grafting



Class II Cavity Prep



Osseous Recontouring



Osseous Crown Lengthening



"The Waterlase(r) is a remarkable tool in my practice. Time and time again, I've been so impressed with its clinical capabilities from cutting soft tissue, enamel - even bone. The results are excellent for the patient, and my patients have never been happier."



Specialty Procedures

Osseous Crown Lengthening

When it comes to a procedure like osseous crown lengthening, the Waterlase® MD excels. Because it cuts soft tissue, hard tissue and bone, you can use a single instrument to create the biologic width necessary for problem-free aesthetic restorations.



Pre-op view, no biologic width for crowns



Trough soft tissue, shaving osseous tissue

Courtesty of David Rhoden, DDS Private Practice, Waco, Tex.



Immediately post-op, temporaries in place

Courtesty of Chris Walinski, DDS

Laser Curettage & Perio Therapy

The Waterlase® MD is FDA cleared for all major steps of periodontal therapy, including laser curettage, sulcular debridement, removal of pathological tissue, and many other procedures. Better yet, Waterlase MD therapy is faster and easier on your patients.



Pus oozing from the pocket on no. 31.



Laser curettage performed



Immediately post-op, the pustule has been removed and the pocket debrided

Courtesty of David Rhoden, DDS

Oral Surgery & Implants

Whether you are harvesting block graft tissue or creating a pilot hole for an implant, the Waterlase® MD is a highly capable, atrauamtic instrument for oral surgeons and implant dentists.



Pre-op view.



After laying a bloodless full-thickness flap, the bock grafts are excised.



The donor tissue is harvested, leaving the periosteum intact and unaffected.

Courtesty of William Chen, DMD

Root Canal Therapy & Laser Endo

The Waterlase® MD performs all steps of endo, including pulp therapy, canal access, shaping and debridement. Plus, the Waterlase MD is even cleared for apicoectomy.



The pulp chamber and root system is accessed.



Shaping and debriding the canal



Prior to obturation, the integrity of the lasershaped canal is tested with a #15 K file



"After comparing conventional techniques and new laser techniques through a surgical microscope, there is no comparison. The Waterlase, in my opinion, when used as an adjunct to traditional endodontic methods, allows me to come closer to a true sterilization in the canal, which maximizes the chance for success and survival of the tooth."

David Browdy, DMD

The MD Technology Platform

The Waterlase MD is loaded with patented, proprietary features that are firsts in laser dentistry. Built on BIOLASE's exclusive new MD laser technology platform, the unit has many features requested by laser owners from around the world, and innovative new features designed to simplify laser dentistry for beginners, and maximize the experience for veteran users.

Exclusive **telescopic fiber management system** improves the laser fiber's reach and intuitively follows the clinician's movement.

Exclusive snap-and-go water cartridge system for on-the-fly replenishment

MDFlow™ water-level laser sensor that alerts the operator when the snap-in water system needs replenishment.

Laser Operatory Management System with storage racks for power cables and air lines — even a storage rack for your foot pedal.

Hinged access door for fast and easy access to system components.

Durable, stainless steel foot pedal that mounts to the back of the Waterlase MD when not in use.

Heavy-duty casters designed for velvetsmooth movement from room to room.

Technical Specifications

Wavelength: Er,Cr³⁺:YSGG, 2780 nm

Power: 0.1 to 8.0 W Repetition Rate: 10 to 50 hz. Pulse Energy: 300 mJ Laser Classification: IV

Operating Voltage: $115 \text{ VAC} \sim \pm 10\%$ Dimensions: 12.5 x. 26 x 32 in

Weight: 75lbs

Additional patents pending

Related Patents: 6,567,582; 6,561,803; 6,389,193; 6,350,123; 6,288,499; 6,231,567; 6,086,367; 5,885,082; 5,785,521; 5,761,501; 5,741,247; 5,194,005; 5,020,995; 4,818,230 4,940,411; 5,055,048; 5,122,060; 5,123,845 5,232,367; 5,257,935; 5,342,198

Convenient **on-board storage wells** for laser tips, extra hand pieces, and other accessories

Unique SensaTouch™ laser control system, with touch-screen, 16 pre-sets, self-calibration, and on-board help.

Exclusive **HydroBeam** contra-angle 360°, rotating handpiece with high-intensity LED illumination, and a unique, low-profile holder for safe storage.

Proprietary MD laser technology platform featuring exclusive unibody mounted optics in a durable, DSO-coated laser chamber



ISO 9001 SEN 46001



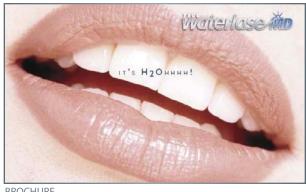
* Specifications subject to change without notice.

Patient Marketing

BIOLASE has developed a complete collection of patient marketing materials from bumper stickers and flashing lights to coffee table brochures and posters to inform your patients about the benefits of Waterlase Dentistry.







BROCHURE





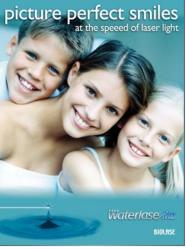


BUMPER STICKERS



CHILD BROCHURE





Your Complete Source for Dental Lasers

Waterlase® MD







The Waterlase® MD is the new flagship of BIOLASE's proven line of laser products, which includes: the #1-selling Waterlase® YSGG all-tissue laser, the versatile LaserSmile™ for soft tissue procedures and laser whitening, and the DioLase[™] Plus entry-level diode cosmetic & hygiene laser.

LaserSmile™



DioLase™ Plus



