stomdevice

THE DENTAL SOLUTIONS COMPANY™

Dentsply Sirona

SiroLaser Blue

Versatility in Laser Dentistry

dentsplysirona.com



First FDA-cleared dental laser with blue wavelength

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SiroLaser Blue – the next step in laser dentistry

Triple-Wavelength-Technology

SiroLaser Blue is equipped with a high-tech laser module, which provides three different forms of laser in a single device.

Blue wavelength
445 nm
Surgery

Best cutting efficiency of all dental diode lasers

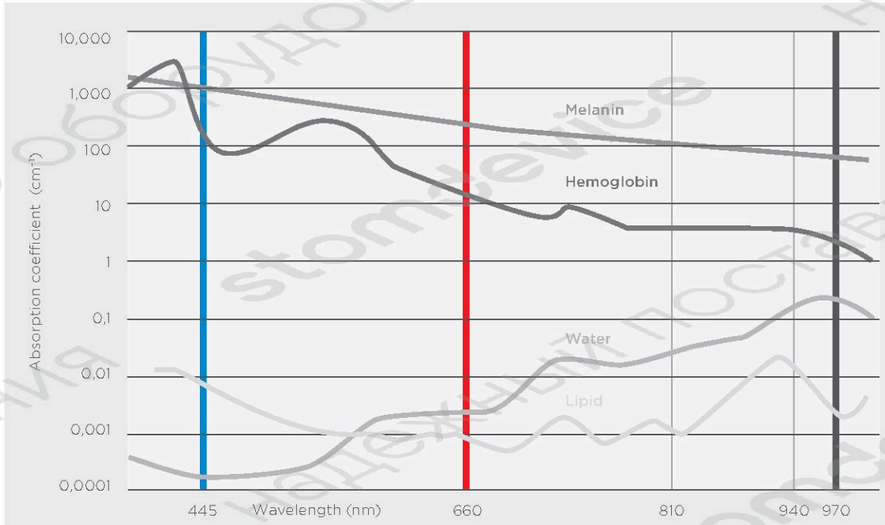
Infrared wavelength
970 nm
Perio & Hygiene

Effective wavelength for perio and hygiene indications

Red wavelength
660 nm
Photobiomodulation

Perfect for Photobiomodulation (PBM) / Low-Level-Laser-Therapy (LLLT)

Absorption of the laser radiation by biological tissue



Range of absorption coefficient of endogenous chromophores in tissue, adapted from P. Beard (Biomedical photoacoustic imaging. Interface Focus 2011; 1: 602-631)

SiroLaser User Training

Enhance your knowledge of the science, safety, functionality and importance lasers bring to everyday patient care.

Visit: sirolaser.com

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Blue wavelength – 445 nm

The first FDA-cleared Blue Laser for dental use. Blue laser light has a much higher absorbtion in soft-tissue (i.e. hemoglobin and melanin) than conventional infrared diode laser wavelengths (810nm, 940nm, 970nm). This leads to a much improved soft-tissue cutting efficiency which allows non-contact cutting, a first in dentistry for diode lasers. No fiber initiation is required and non-contact cutting means there is no need to remove tissue residue from the fiber during treatment. Due to the high degree of absorption in hemoglobin, the hemostatic effect is outstanding, helping during all surgical treatments, as well as within CAD/CAM workflow.

Unique cutting eficiency

Non-contact mode & no fiber initiation

Outstanding coagulation



"The cutting performance of 445nm is simply phenomenal and it makes my work even more efficient."

Dr. Simone Suppelt, Germany

Frenectomy

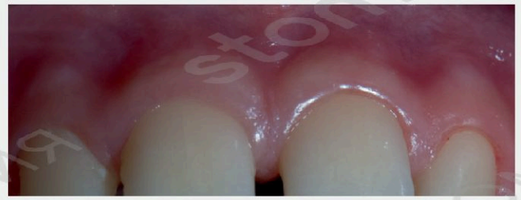
- Reduced pain and bleeding
- Reduced need for injected anesthesia
- Outstanding hemostatic effect
- No sutures and less scarring
- Accelerated wound healing and improved post-operative experience



Before



Immediately after



Wound healing after 10 days

Images provided by Dr. Peter Kleemann, Luxembourg

Gingivoplasty

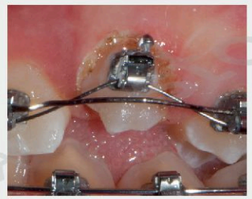
- Easy visualization of tissue contours
- Reduced bleeding
- Improved post-operative experience



Before



Immediately after the exposure



Immediate placement of the bracket



After

Images provided by Dr. Peter Kleemann, Luxembourg

Tissue management

- Replaces retraction cords
- Clearly defined margins around the preparation site
- Minimizes damage and bleeding to the tissue
- Optimal technique for digital impressions



Before



Immediately after



Digital impression with CEREC™ Omnicam



Finished restoration

Images provided by Prof. Dr. Giuseppe Iaria & Dr. Matteo Iaria, Italy

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Infrared wavelength – 970 nm

Infrared laser light is used in management of periodontal disease as an adjunct to scaling and root planing (SRP).

In addition, infrared laser light can be applied to the perio pockets within the hygiene workflow.

Laser assisted periodontal therapy (LAPT) leads to an improved periodontal status without surgical intervention and with minimal discomfort.

Adjunct to conventional perio treatment

Reduced use of antibiotics

Optimized hygiene workflow

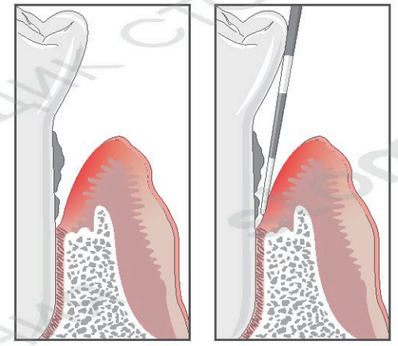


"The 970-nm diode laser has significantly improved my day-to-day workflow efficiency in addition to having amazing treatment results every time."

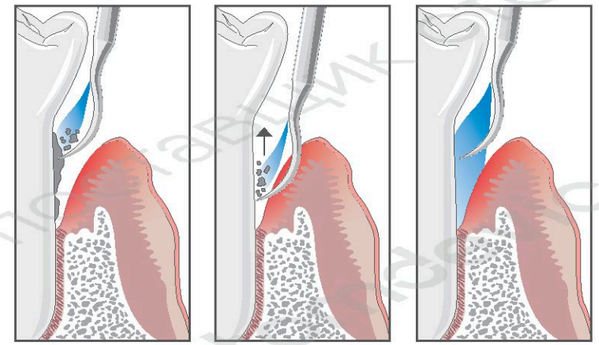
Joy Raskie, USA

Hygiene & Perio workflow

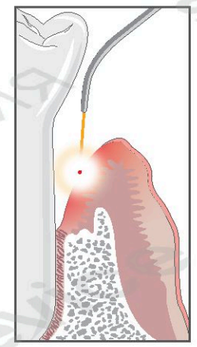
- The use of anesthesia should be administered as needed – often topical is adequate.
- Probe the periodontal pocket to confirm the pocket depths and become familiar with the architecture



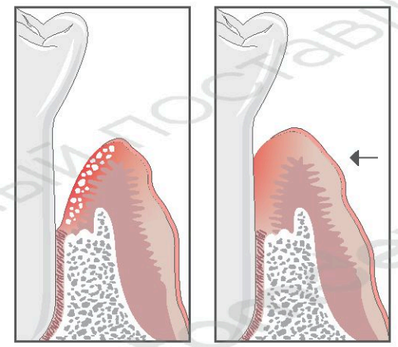
- Ultrasonic scaling and if desired an antimicrobial agent may be used to assist in removing the biofilm from the root surface. The goal is to remove the calculus and other debris from the root surfaces of the tooth and pocket while leaving cementum intact.
- Light-handed instrumentation of the tooth surfaces as necessary
- Irrigate the pocket with water to dilute the antimicrobial agent and flush remaining debris



- Laser decontamination of the entire diseased epithelial lining of the periodontal pocket. The goal is to inactivate the bacteria and microorganisms in the soft tissue and to create the formation of a blood and fibrin clot to facilitate healing and the reattachment of the soft tissue to the root surface.



- If the use of a Locally Administered Antibiotic (LAA) is desired it should be placed at this time to become part of the blood and fibrin clot.
- Apply finger pressure to the gingiva to place it in close contact with the tooth structure.



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Red wavelength – 660 nm

Red laser light is used for photobiomodulation, also known as low level laser therapy.

Photobiomodulation works through the application of photon energy of light to the tissue. It passes through the skin barrier and is absorbed by the cells where it initiates physiological reactions within the mitochondria.

Photobiomodulation can be used throughout the dental practice, supporting indications in both surgical and therapeutic procedures.

Additional treatment options	Improved wound healling & tissue regeneration*	Reduction of acute and chronic pain**

* facilitated by the increase of local blood circulation
** with the meaning of temporary relief of minor muscle and joint pain



"The advent of the 660nm wavelength for Photobiomodulation Therapy has given me more options to enhance my patient treatment and post-op results. With the 970nm wavelength as well this dual wavelength diode laser has everything I need for simple and complex soft tissue procedures."

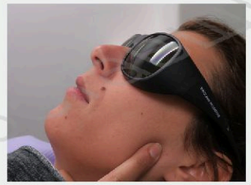
Dr. Alfred Wyatt, USA

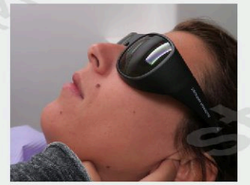
Temporomandibular joint dysfunction (TMJD)

- Pain reduction
- Improvement of mandibular movement; i.e. better mouth opening



Before treatment


Pain TMJ


Pain masseter muscle


After treatment

With kind permission of: Dr. Giovanni Olivi, Italy

Sirolaser Blue – All indications at a glance

Intraoral and extraoral surgeries including incision, excision, hemostasis, coagulation and vaporization of soft tissue including marginal and interdental and epithelial lining of free gingiva and is indicated for:

Surgery	Perio & Hygiene	Endodontics	Other
• Biopsy • Crown lengthening • Excision of lesions • Exposure of unerupted/ partially erupted teeth • Fibroma removal • Frenectomy • Frenotomy • Gingival incision and excision • Gingival troughing • Gingivectomy • Gingivoplasty • Implant recovery • Incisions and draining of abscesses • Laser assisted flap surgery • Leukoplakia • Operculectomy • Papillectomy • Reduction of gingival hypertrophy • Removal of granulation tissue • Removal of hyperplastic tissues • Tissue retraction for impressions • Vestibuloplasty	• Debridement of diseased epithelial lining • Laser removal of diseased, infected, inflamed and necrosed soft tissue within the periodontal pocket • Laser soft tissue curettage • Sulcular debridement (removal of diseased, infected, inflamed and necrosed soft tissue in the periodontal pocket to improve clinical indices including gingival index, gingival bleeding index, probe depth, attachment loss and tooth inability)	• Pulpotomy • Pulpotomy as adjunct to root canal therapy	• Hemostasis of donor site • Herpetic ulcers of the oral mucosa • Treatment of aphthous ulcers • Treatment of canker sores • Bleaching / Whitening • Low Level Laser Therapy (LLLT)/ Photobiomodulation (PBM)

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Scope of delivery
SiroLaser Blue incl. stainless steel handpiece with integrated finger switch
Battery pack (already mounted)
Additional handpiece sleeve for alternating operation efficient
Demo set of disposable, non-sterile fiber tips: 2x EasyTip 320 µm, 2x EasyTip Endo, 2x EasyTip 200 µm
Combined bending tool
Fibercutter
3 laser safety goggles (for dentist, dental assistant and patient)



Sterile disposable fibers and therapy light guides for various applications



Sterile disposable fibers (EasyTips)



Laser safety goggles for users



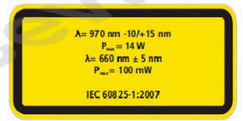
Laser safety goggles for patient

Accessories	Ref.
Handpiece sleeve with keypad	64 87 784
EasyTip 320 µm (25 pieces)	64 98 062
EasyTip 200 µm (25 pieces)	64 98 484
EasyTip 200 µm Endo (25 pieces)	65 35 905
MultiTip 8 mm, therapy light guide	65 41 465
MultiTip 4 mm, therapy light guide	65 41 499
Optic protective cap for handpiece (5 pieces)	65 79 580
Fibercutter	60 91 669
EasyBend – Bending tool (2 pieces)	66 18 180
Wireless foot control	62 56 841
Laser safety goggles for users SiroLaser Blue	65 41 515
Laser safety goggles for patients SiroLaser Blue	65 41 523
Laser safety goggles for eyeglasses wearers SiroLaser Blue	65 46 407

Technical data	
Wavelength and operating performance	445 nm +/–5 nm / 0.2 – 3.0 W (CW) 660 nm +/–5 nm / 25, 50 and 100 mW (CW) 970 nm –10/+15 nm / 0.2 – 2.0 W (CW)
Laser operating mode	Continuous Wave, Chopped Mode
Frequency	1 – 10.000 Hz
Duty cycle	Variable
Weight	- 1,3 kg (incl. handpiece and battery)
Dimensions	- 19,7 cm x 18,2 cm x 18,9 cm

Please note the following guidelines:





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Implants
Prosthetics

Enabling Technology

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Instruments

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