SMART LASER TECHNOLOGY



405nm/635nm/808nm/980nm/1064nm

ALL - IN - ONE



WHY CHOOSE SMART^M ST LASER?

- guided treatment with laser precision
- time effeciency shorter treatment with less visits
- noticeably higher revenue
- bloodless incision with 200 micron accuracy
- incision line disinfection = faster healing
- fast diagnostics
- effective elimination of bacteria and inflammation
- whitening without hypersensitivity
- allows general dentist to do most surgical procedures
- allows hygienist to do more income making procedures
- more satisfied and recommending patients

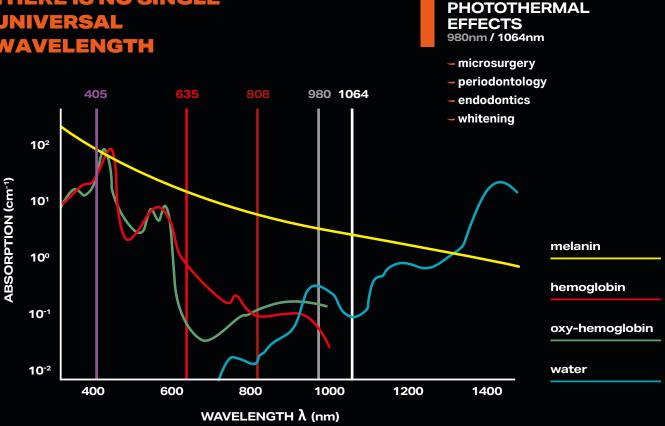
THERE IS NO SINGLE UNIVERSAL AVELENGTH

7 DEVICE TYPES IN ONE LASER

- CO2 Laser
- Nd:YAG Laser
- LED Lamp
- HPDL Laser
- LLLT Laser
- OZONE Device / PAD Laser
- DIAG Device

PHOTOCHEMICAL AND PHOTOBIOLOGICAL EFFECTS 405nm /

- PhotoBioModulation soft
- PhotoBioModulation hard
- PhotoActivated Disinfection
- diagnostics



SMART^{MI} ST platform utilizes 5 complementary wavelengths 405/635/808/980/1064nm producing the most comprehensive device of the kind, applicable in every dental office.

405nm - the phenomenon of natural tissue autofluorescence - precise detection of lesions invisible to the naked eye in hard and soft tissue, such as bacterial or fungal infections, inflammatory conditions, or early dysplastic (precancerous) lesions.

- photobiological effects (photobiomodulation – PBM) in soft tissue. Used for effective stimulation of mitochondria and ATP production, which leads to effective cell regeneration, improved circulation and reduced inflammation. Also optimal for obtaining photochemical effects (PAD) - by activating a dedicated photosensitizer, the effect of intra-tissue ozone therapy is achieved, reducing bacteria, viruses and fungi.

- photobiological effects (photobiomodulation - PBM) in hard tissue. Used to effectively stimulate osteoblasts, it allows effective stimulation and regeneration of bone tissue, as well as reduction of tension and pain resulting from long-term overload and degeneration of joints.

980nm - photothermal effects - due to the high absorption properties of soft tissue, it achieves excellent surgical effects with simultaneous coagulation and decontamination of the treatment area, making the work quick, predictable and safe. It also works great in activating products for laser whitening of endodontically treated teeth.

1064nm - thanks to its natural physical properties and the smallest dispersion in tissues, it allows for deep penetration into muscle structures to reduce chronic pain. Additionally, it effectively eliminates bacteria during endodontic and periodontal treatment thanks to the enhanced decontamination effect compared to other wavelengths, allowing for even better results in deep treatment.



5λ UNIQUE APART PERFECT TOGETHER



405nm/635nm/808nm/980nm/1064nm







PROSTHETICS, IMPLANTOLOGY, SURGERY: soft tissue cutting and coagulation, gum contouring and reshaping, gingival retraction, management and haemostasis in the gingival sulcus for prosthodontic impressions, exposure of implants, lingual and labial frenotomy and frenectomy, abscess opening, epulis papilloma and fibroma removal.

PERIODONTOLOGY: elimination of bacteria in periodontal pockets.

ENDODONTICS: sterilization of root canal and closure of microchannels.



AESTHETIC DENTISTRY: bleaching of vital and non-vital teeth, gum depigmentation.

THERAPY: chronic pain, acute pain, temporomandibular degenerative joint disease, lockjaw, hand arthritis, wrist arthritis, carpal tunnel syndrome, omarthrosis.

PHOTOBIOMODULATION

635nm / 808nm

PBM-SOFT 635: reduction of inflammation in soft tissue, edema and traumatic hematomas, pulp diagnostics, reduction of pulp irritation, treatment of hypersensitivity, regeneration of gingival papillae and periodontal tissues, regeneration of soft tissue after surgical procedures, decubitus ulcers, stabilization of bleeding after extraction, dry socket regeneration, reduction of trigeminal neuralgia, nerve damage regeneration, stimulation of vascularization of tissue grafts, gag reflex reduction, xerostomia, dysgeusia, treatment of aphthae and herpes.

PBM-HARD 808: hard tissue pain therapy, ossification stimulation, postextractive wound regeneration, lockjaw reduction, sinuses inflammation, temporomandibular joint overload, orthodontic teeth movement stimulation.



PHOTOACTIVATED DISINFECTION: root canals, periodontal pockets, support in treatment of periapical lesions, periodontitis and periimplantitis, decontamination of cavities before filling, treatment of chronic and recurrent aphthae, widespread and local inflammation of the mouth caused by a herpes virus and other viruses, hygienisation of cervical area after scaling.







DIAGNOSTICS: dental caries, calculus, plaque, enamel fracture, non-vital teeth, fillings, prosthetic restorations, detection of bacteria and extent of oral mucosa pathologies invisible to the naked eye, precancerous changes, possibility of checking the preparation precision of cavity, root canal or implant area.





AESTHETIC MEDICINE: wrinkle reduction, pore reduction, face and neck lift - restoring elasticity and vitality, moisturizing and illuminating the skin, reducing hyperpigmentation, soothing acne lesions, eliminating bacteria that cause purulent and inflammatory lesions, healing wounds, frostbites and burns, reducing pain and swelling after fractional laser treatment, platelet-rich plasma stimulation, making post-surgery scars more elastic and brighter.











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