

SPECTRALASE

IMPLANTOLOGY DIODE LASER

SPECTRUM LASERS
SINCE 1998

The laser used by the Misch Institute

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The Only Diode Laser Developed To Treat Peri-Implantitis

In Addition To Standard Soft Tissue Procedures



SPECTRALASE IMPLANTOLOGY DIODE LASER

SPECTRUM LASERS INC.

Manufacturing Diode Lasers In San Francisco Since 1998.

Built by renowned laser physicist Dr. George Bekov, PhD,
with over 30 years experience manufacturing medical and LASIK surgery lasers.

Proven Effective

- Using a 980nm diode laser has been recommended by many authors (1-17,20,22,25-31,37) and proven in numerous *in vivo* studies (1-14) to effectively eliminate bacteria and contribute considerably in successfully treating peri implantitis.

Proven Safety

- Extensive research concludes that 980nm diode lasers can be used safely on implant surfaces, (2,3,5,12,14,16,17,18-19,23,24,29,30-31).

Spectralase Advantages

- **Most effective and safest 980nm wavelength** (2,5,13,16-17,19,)
- **20 watt laser to insure bacterial elimination**
- **Most advanced pulse mode**
- **History of dependability, 10+ year life**
- **Energy calibrated to 99% accuracy**
- Science based, no commercial gimmicks
- Closed pocket access.
- Support, call the owners
- No maintenance
- 3 year warranty
- No expensive single use tips

Essential Advanced Pulse Mode

- A pulse mode allows tissue and implant to cool in between each pulse. **Using a high power pulsed interval versus continuous wave (CW) allows for maximum bacterial mortality without exceeding the critical temperature threshold,**(18,21,32)
- **Greater damage to the collateral tissues with the use of continuous wave, CW mode,** (32).



Cost

A Fraction Of The Cost Of Other Lasers

- **Spectralase Implantology Diode Laser \$14,995**
No maintenance, 3 year warranty
No single use tips, \$150 per yr to use
- **CO 2 Lasers \$30,000-\$55,000**
Expensive maintenance, 1-2 year warranty
Replacement tube \$2500-\$7500 every 2-5 years
Extended warranty \$3,000-\$6000 per year
- **Er:YAG LASERS \$80,000-\$125,000**
Expensive maintenance
Expensive extended warranty
- **Nd:YAG Contraindicated**
- **Other Diode Lasers**
Expensive non efficient single use tips \$2000 pr yr

Laser Comparison

- **An alternative to expensive CO2 lasers**
- **According to many studies, Nd:YAG and Ho:YAG are not suitable for use in decontamination of implant surfaces,** (2,3,5,12,14,17-19,29,30-31,)
- Er:YAG and CO2 power must be limited, (23). Previous studies with CO2 lasers have shown the associated risk with high temperature,(17,34).
- **Some studies do not recommend CO2 lasers for peri-implantitis,** (17). **CO2 induced surface changes in the hydroxyapatite** (31)
- The wavelength of the diode laser is considerably more absorbed in hemoglobin than an Nd:YAG laser. This causes not only a better incision but also an excellent coagulation of tissue deeper incisions achieved with the diode laser than with the CO2 or Nd:YAG laser at the same power setting, (21).
- Precise incision margin with 980nm Diode (13,37). Without damage to underlying tissue, (12)
- **Other Diode Lasers**
Insufficient power and pulse mode to treat peri-implantitis and history as unreliable.

“Periimplantitis is a problem we must deal with. We are excited about this science based necessary innovation as an alternative to expensive and high maintenance CO2 lasers. Manufactured by a reputable laser company in San Francisco.” Dr. Randolph Resnik, Prosthodontist, Pittsburgh, PA, Surgical Director, Misch Implant Institute

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18+ Years, Over 5000 Owners, 22 Residency Programs

