

Laser Surgery with Diode Lasers

Diode laser energy can be applied superficially, as well as in open and endoscopic surgery. Thin flexible fibers deliver required amounts of energy into the body in a minimally-invasive technique. Both cutting and coagulation are performed in a single step reducing bleeding, less pain, faster healing and quicker recovery.

Clinical Benefits of Diode Laser Surgery An Alternative to Traditional Surgery

REDUCED PAIN

The Diowave™ Laser seals nerve endings as it cuts through tissue; this reduces the amount of pain the patient feels during and after surgery.

REDUCED BLEEDING

The Diowave™ Laser cauterizes and seals small blood vessels as it cuts; this laser energy achieves hemostasis and provides the surgeon with a bloodless surgical field in most procedures.

REDUCED SWELLING

Diowave™ laser surgery is minimally invasive, eliminating the tearing and bruising of tissue associated with traditional surgical methods; lymphatic vessels are also sealed.

QUICKER RECOVERY

Laser surgery CAN ENHANCE RECOVERY times by reducing swelling, lessening the chance of infection, reducing pain, and preventing blood loss.

Smoke Evacuation Systems Available (Additional Cost)

High Dose Laser Therapy

Common Small Animal and Equine Clinical Applications

- Arthritis, Degenerative Joint Disease
- Tendon Suspensory and Ligament Disorders
- Back and Muscle Soreness
- Disc and Neurologic pathologies
- Stifle Hip and Sacro-iliac disorders
- Epiphysitis, Carpitis, Sesamoiditis
- Laminitis and Navicular Disease
- Pre and Post-Surgical Hard and Soft Tissue Trauma
- Wound Healing – Acute or Chronic
- Dental Conditions – Surgical and Non-Surgical
- Otitis Externa
- Non-specific Dermatological Conditions



DIOWAVE™ LASER SYSTEM – 30, 45 Watts

TECHNICAL SPECIFICATIONS

Laser Type	GaAlAs Diode Laser
Models	Diowave 30WLS, Diowave 45WLS
Wavelength	980nm
Maximum Power	30W or 45W
Operation Mode	CW, Single or Repeat Pulse
Pulse Duration	5µs-3s
Fiber Sizes	Fibers of 400µm and 600 µm
Fiber Connector	SMA905
Aiming Beam	Red Diode Laser of 635nm, Power: <5mW
Control Mode	True Color Touch Screen
Main Control	Power Switch
Disable Control	Emergency Stop Button
Voltage	100V-240 V, ~ at 1.4A
Frequency	1-20,000 Hz
Accessories	Heavy Duty Carrying Case (standard), Safety Goggles (3 pairs included), Hand piece 1 (HP) – Zoom Therapy HP, Hand piece 2 – Patent Pending Right Angled HP 45W, Mobile Cart (included)
Dimensions	230 (W) X 180 (L) X 133 (H)
Weight	4.6 kg
Warranty	3 Years, 2 Years Hand Piece



Diowave 30WLS, 45WLS

DIOWAVE™ LASER SYSTEM – 30, 45, 60 Watts

TECHNICAL SPECIFICATIONS

Laser Type	GaAlAs Diode Laser
Models	Diowave 30W, 45W, 60W
Wavelength, Laser	980nm, 810nm also available
Maximum Power	30, 45 or 60 watts
Operation Modes	CW, Single or Repeat Pulse
Pulse Duration	5µs-3s
Repetition Rate	0.2Hz-50KHz
Fiber Sizes	400µm and 600µm
Fiber Connector	SMA905
Aiming Beam	Red Diode Laser Wavelength: 650nm Power: <5mW
Control Mode	True Color Touch Screen
Main Control	Keyless MicroTouch Key
Disable Control	Emergency Stop Button
Voltage	100-240 VAC ~ at 1.4A
Frequency	1-20,000 hz
Features	Programmable Presets, Customizable Parameters
Accessories	Heavy Duty Carrying Case (standard), Safety Goggles (3 pairs included), Hand piece 1 (HP) – Zoom Therapy HP, Hand piece 2 – Patent Pending Right Angled HP, Mobile Cart (included)
Dimensions	380mm (W) X 430mm (L) X 220mm (H)
Weight	11 kg
Warranty	3 years, 2 Years Hand Piece



Diowave 30, 45, 60W

How Does HDLT Work?

Anti-Inflammation

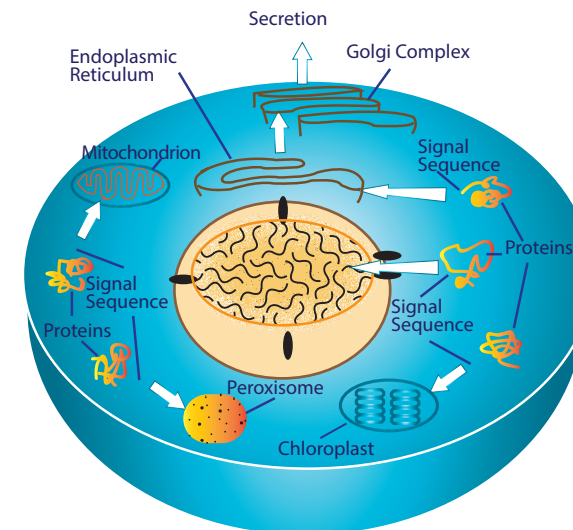
Laser light causes vasodilation, and activates the lymphatic drainage system (drains swollen areas). As a result, there is a reduction in swelling caused by bruising or inflammation and less pressure on pain receptors.

Anti-Pain (Analgesic)

Laser light facilitates better transmission of nerve impulses through the stimulation of neurotransmitter cells, reducing and eliminating pain through more effective function of tissue surrounding peripheral nerves and by temporarily suppressing pain receptors.

Increased Nerve Regeneration and Function

Slow recovery of nerve functions in damaged tissue can result in numbness and impaired limbs. Laser light will speed up the process of nerve cell reconnection and increase the amplitude of action potentials to optimize muscle action.



Improved Vascular Activity

Laser light will significantly increase blood flow to injured tissue as well as the formation of new capillary growth.

Accelerated Tissue Repair and Cell Growth

Photons of light from lasers penetrate deeply into tissue and accelerate cellular reproduction and tissue regeneration and growth. Laser light also activates stem cells in the treatment area. This leads to faster wound healing with minimal scar tissue.

Trigger Point Resolution and Acupuncture Stimulation

Laser therapy stimulates muscle trigger points and acupuncture points on a non-invasive basis providing musculoskeletal pain relief.