1.9µm. Why operate on the lower slopes when you can scale the peaks with this revolutionary new family of laser systems?

vela®



Lyntonsurgical

Take simply the best!

vela®

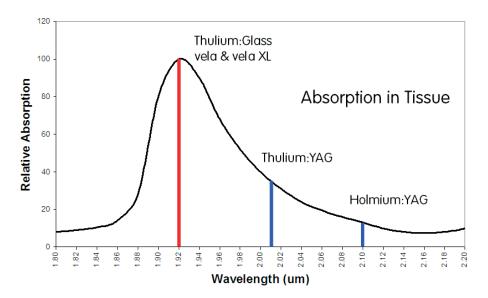
For a state-of-the-art answer to your current and future surgical laser needs, look no further than the vela® family of surgical laser systems. Combining pioneering technology with innovative design and premium components, the vela® surgical laser systems allow you, the surgeon, to concentrate on the most important thing - the patient.

A NEW TECHNOLOGY

The vela® and the vela®XL Surgical Thulium Laser Systems from StarMedTec GmbH are a new breed of state-of-the-art surgical lasers that operate continuous wave (cw) at 1.9µm. Not only are these two lasers highly efficient and very precise in the effect that they have on tissue, but they are also characterised by allowing treatments that have fewer side effects than current technologies. In addition to this, an intelligent user-interface, coupled with careful design of the applicators, results in a user-friendliness across the family of systems, allowing the Healthcare Professional to concentrate fully on the most important aspects of any procedure - the needs of the patient.

OPERATING AT 1.9µm

The pioneering technology of the **vela**^{\circ} and **vela**^{\circ}XL Surgical Thulium Laser Systems utilizes the tissue/water absorption peak at 1.9µm for extremely precise cutting with a minimal, yet clearly defined and reliable, thermal necrosis zone. The absorption at 1.9µm is ~2.5 times stronger than it is at the 2.01µm wavelength of the Thulium:YAG Surgical Laser System, and ~6 times stronger than at the 2.1µm wavelength of



the well-known Holmium:YAG Lasers (see graph above). Of the other laser systems currently available, only Erbium:YAG at ~3µm and Carbon Dioxide (CO₂) at 10.6µm have stronger absorption in tissue/water, but these wavelengths cannot be delivered through standard flexible optical fibres. Thus, the 1.9µm output of the **vela®** and **vela®XL** Surgical Thulium Laser Systems is the optimum wavelength for minimally invasive or "keyhole" surgery where any form



of endoscopy is used. This, in turn, makes it particularly applicable in urology.

vela®

The **vela®** Surgical Thulium Laser System is a powerful 50W system operating cw at 1.9µm. It is a highly efficient desk-top system measuring only 530mm x 500mm x 285mm (W/D/H). The high internal efficiency and all-solid-state-technology means that only air cooling is required, resulting in reliable, smooth operation and minimal maintenance.

The power output of up to 50W at the optimized wavelength of 1.9µm allows maximum precision and control. This, in turn, translates to stunning results for a large variety of surgical applications, even challenging ones. Laser enucleation or laser resection of the prostate gland treating BPS, and a variety of open or even laparoscopic surgical procedures in general surgery, are well within the capabilities of the **vela®** Surgical Thulium Laser System. Everything comes with the post operative recovery of the patient in mind.

Premium components and a stunning, yet ergonomic, light weight design combine to create a compact, but still powerful, desktop laser unit. Easy-to-use operating elements



and a highly visible colour touchscreen (see above) result in an intelligent, self-explanatory user interface. Features such as an automatic fiber recognition system and carefully designed treatment applicators provide not only an innovative laser system, but also a very user-friendly surgical instrument.

A broad range of accessories is available.

vela®XL

The 120W maximum power output of the **vela®XL** Surgical Thulium Laser System, again optimized at 1.9µm to match the tissue/water absorption peak, allows an almost unlimited range of surgical procedures. Highly efficient and safe treatment of BPS: alternatively enucleation, vaporization or vaporesection; tumor resection, surgical and even laparoscopic procedures and much more.

The pioneering technology at 1.9µm again allows maximum precision and control of cutting, with a minimal, yet clearly defined and reliable thermal necrosis zone. The realization of the innovative and powerful **vela®XL** Surgical Thulium Laser System makes the full potential of minimally-invasive procedures available, where now the high power allows for vaporisation techniques to be more generally applied, larger volumes to be addressed and more high risk patients to be brought within the scope of many of the procedures.

Premium components and a striking design combine to create an ergonomic, extremely powerful floor-standing laser unit. Easy-touse operating elements and a highly visible colour touchscreen result in an intelligent, self-explanatory user interface. Features such as the same automatic fiber recognition system used on the 50W **vela®** system, and an extended range of carefully designed treatment applicators, combine to create one of the most user-friendly surgical laser systems in modern medical engineering.

A broad range of accessories is again available, including end and side-firing fibres (all utilising RFID technology), treatment handpieces and scopes.



For more information, or to book a demonstration, go to www.lyntonsurgical.co.uk or contact Lynton Surgical on 0845 612 1545

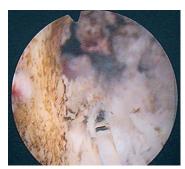
APPLICATION SUMMARY

vela®

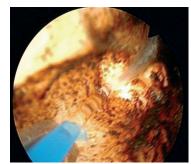
- Hemostatic cutting of Soft Tissue.
- Open or laparoscopic applications with single-use or reusable fibres.
 - Urology BPS: Enucleation, Vaporesection
 - High Risk Patients.
 - Tumor Resection.
 - Strictures.
 - Condylomata.
 - Partial Kidney Resection.
- General Surgery Liver or Gallbladder resection.
- Multi-disciplinary: Gynaecology, ENT, Neurosurgery.

vela®XL

- Hemostatic cutting of Soft Tissue (with selectable thermal effect).
- Open or laparoscopic applications with single-use or reusable fibres.
- Urology
- BPH: Enucleation in High Risk Patients.Vapourisation using bare fibres.
- Tumor Resection.
- Strictures.
- Condylomata.
- Partial Kidney Resection.
- General Surgery Liver or Gallbladder resection.
- Multi-disciplinary: Gynaecology, ENT, Neurosurgery.



CONDYLOMATA



ENUCLEATION OF PROSTATE



RESECTION OF LIVER OR KIDNEY



MISC SURGERY

"We develop high-quality, but affordable laser systems which are extremely effective and can be used for many different applications."

Dr. Werner Falkenstein MD, StarMedTech GmbH

For more information, or to book a demonstration, go to www.lyntonsurgical.co.uk or contact Lynton Surgical on 0845 612 1545

ABOUT STARMEDTEC



Star/MedTec GmbH is a young, dynamic company that develops cutting edge medical laser systems for surgical applications especially in the field of urology. Skilled staff with many years of experience in the medical laser business are the basis of an outstanding expertise in the development, production, servicing and marketing of these new products. In the area of laser urology Star/MedTec is already one of the top ten providers worldwide.

With 30 years of experience in the field of laser physics, 20 of those in the area of medical laser applications, Managing Director Dr. Werner Falkenstein can be considered one of the experts in this industry. He and the key members of the Star/MedTec management team have also worked together for more than 10 years; initially in the "Medical Laser" business unit of Carl Baasel Lasertechnik GmbH, Starnberg, then in the "Surgery Division" at WaveLight AG, Erlangen. In the last 7 years more than 850 holmium lasers have been sold throughout the world. This success encouraged Division Manager, Dr. Falkenstein, to lead a management buy-out at the end of July 2006 and form the new company of "StarMedTec GmbH" (based on the Starnberg location - Starnberger Medizintechnik). Supported by the experienced and committed team of employees the activities were rapidly expanded and new, cutting-edge laser systems, such as the **vela® & vela®XL** Thulium Lasers, are now being launched on to the market.

StarMedTec GmbH Kreuzstraße 22 82319 Starnberg, Germany Phone: +49 (0) 8151/268 61-0 Fax: +49 (0) 8151/268 61-35 web: www.starmedtec.de

ABOUT LYNTON SURGICAL

Based in Holmes Chapel, Cheshire, The Lynton Group (more generally known as Lynton Lasers Ltd) has been supplying the medical and aesthetic laser industry for over 16 years. Lynton Surgical is a recently formed division of the company specifically created to address the needs of those customers in NHS and Private Hospitals requiring surgical lasers and their associated accessories & consumables.

The Lynton Group has always recognised the importance of after-sales support, building its name on the ongoing customer services

that it provides. A 6-strong team of fullytrained UK-based service engineers (plus administrative support) is available to ensure that a customer's system is always ready and always performs to its full specification. The availability of such a team also allows Lynton Surgical to supply systems on long or short term rentals as an optional alternative to standard purchase options.





• Please note : Use of the vela® Laser Systems by Healthcare Professionals in England may require registration with the Care Quality Commission

SYSTEM SPECIFICATIONS

WAVELENGTH MAXIMUM OUTPUT POWER MINIMUM OUTPUT POWER BEAM DELIVERY PILOT BEAM USER INTERFACE COOLING MAINS CONNECTION DIMENSIONS WEIGHT ELECTRICAL PROTECTION APPLICATION PART SWITCHING CYCLE STANDARDS

LASER CLASSIFICATION

SYSTEM SPECIFICATIONS

WAVELENGTH MAXIMUM OUTPUT POWER MINIMUM OUTPUT POWER BEAM DELIVERY PILOT BEAM USER INTERFACE COOLING MAINS CONNECTION DIMENSIONS WEIGHT ELECTRICAL PROTECTION APPLICATION PART SWITCHING CYCLE STANDARDS

LASER CLASSIFICATION

vela®XL

1.9µm (approx)
120W
5W
Optical Fibre
532nm <1mW
Touch Screen
Water-to-Air, Internal Compressor
200-240Vac @ 50Hz or 200-230Vac @ 60Hz 16A (max. 3kW)
295mm x 950mm x 1035mm (W/D/H)
150kg (approx)
Protection Class 1 Protection Type IP20
Туре BF
cw, pw
EN/IEC 60601-1 CE 1275 Labelling
Medical product Class IIb (Rule 9) according to MDD 93/42/EEC
Laser Class 4 (EN / IEC 60825-1)
120W max output with 600um Fibre
80W max output with 365um Fibre
30W max output with 230um Fibre

$\label{eq:constraint} \begin{array}{c} \text{VISIBLE AND INVISIBLE} \\ \text{LASER RADIATION} \\ \text{AVOID EYE OR SKIN EXPOSURE TO DIRECT} \\ \text{OR SCATTERED RADIATION} \\ \text{CLASS 4 LASER PRODUCT} \\ \text{ACCORDING TO EN 60825-1:2007} \\ \text{M} \\ \text{LASER} \\ \text{LASER CLASS 4} \\ \text{P}_{\text{s}} \leq 150 \text{ W} \\ \text{$\lambda = 1,9 \ \mu\text{m}} \\ \text{PILOT} \\ \text{LASER CLASS 2} \\ \text{P}_{\text{s}} < 1 \text{ mW} \\ \text{$\lambda = 0,5 \ \mu\text{m}} \\ \end{array}$

vela®

1.9µm (approx)
50W
5W
Optical Fibre
532nm <1mW
Touch Screen
Integrated air cooling system
100-240Vac @ 50-60Hz 12A (max. 1kW)
530mm x 500mm x 285mm (W/D/H)
25kg (approx)
Protection Class 1 Protection Type IP20
Туре ВҒ
CW
EN/IEC 60601-1 CE 1275 Labelling
Medical product Class IIb (Rule 9) according to MDD 93/42/EEC
Laser Class 4 (EN / IEC 60825-1)
50W max output with 600um Fibre
50W max output with 365um Fibre
30W max output with 230um Fibre

$\begin{array}{c} \text{VISIBLE AND INVISIBLE}\\ \text{LASER RADIATION}\\ \text{AVOID FYE OR SKIN EXPOSURE TO DIRECT}\\ \text{OR SCATTERED RADIATION}\\ \text{CLASS 4 LASER PRODUCT}\\ \text{ACCORDING TO EN 60825-1:2007}\\ \end{array}$

Head Office

Lynton House, Manor Lane, Holmes Chapel, Cheshire, CW4 8AF, UK Tel +44 (0)845 612 1545 Fax +44 (0)1477 536978

info@lynton.co.uk www.lyntonsurgical.co.uk

Lyntonsurgical