

# MOST POWERFUL HOLMIUM LASER EVER MORE THAN UROLOGY



**SURGICAL HOLMIUM LASER**

***The HP Series***





# Certificates

Leading Patents



ISO13485



CE



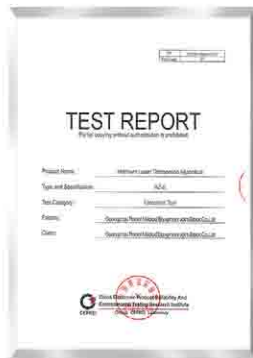
CFDA



FSC



IEC60601



National High-tech Enterprise



National Key Products





# About Potent

Potent Medical Equipment Joint-Stock Co.,Ltd.is located on 5th Floor,C2 Building,NO.11, Kaiyuan Road, Science City,High-tech Industrial Development District, Guangzhou, China, specializing in the R&D, manufacturing and marketing of Medical laser therapeutic apparatus, Patient lift system and Optoelectronic medical Equipments,The self-developed "Holmium Laser System" ranks in leading edge in the Chinese market occupancy,been stably supplied to over 45 countries for over 15 years.Also,Potent has been manufacturing and marketing "Patient Lift System" over 5000 units in the domestic market and global market every year,and the"Diode Laser Therapeutic Apparatus",also show its leading status in the domestic market.

Potent owns a large number of experts who are experienced in electronics,machinery and laser devices. The company has employed some well-known domestic therapeutics and biomedical experts as the part-time senior research fellows and has a good cooperative relations with the"School of Information and Optoelectronics of South China Normal University", the "Institute of Laser and Life Science", the "South China University of Technology", the "Affiliated Hospital of Sun Yat-sen University" and "First Affiliated Hospital of Guangzhou Medical College", which provides a good guarantee to the sustainable development of the company.

Ever since its establishment,Potent has set up a management system according to ISO9001 and ISO13485 Quality Control Standard.Endeavoring to supply customers with"Advanced Techniques,Satisfied Products, Excellent Services", Potent has acquired"Innovation Fund of Guangzhou Science Bureau","Innovation Fund Of Ministry of Science and Technology"and gets support by "Combination of Producing R&D Project of Ministry of Education of Guangdong Province",and now Potent Medical has been identified as "National Hi-tech Enterprises".

- + National New Key Products
- + National High-tech Enterprise
- + Approved by CFDA,ISO13485 and CE
- + Innovation Fund of Guangzhou Science Bureau
- + Innovation Fund of Ministry of Science and Technology
- + Member of the Guangdong Association of Medical Apparatus
- + Combination of Producing R&D Project of Ministry of Education of Guangdong Province

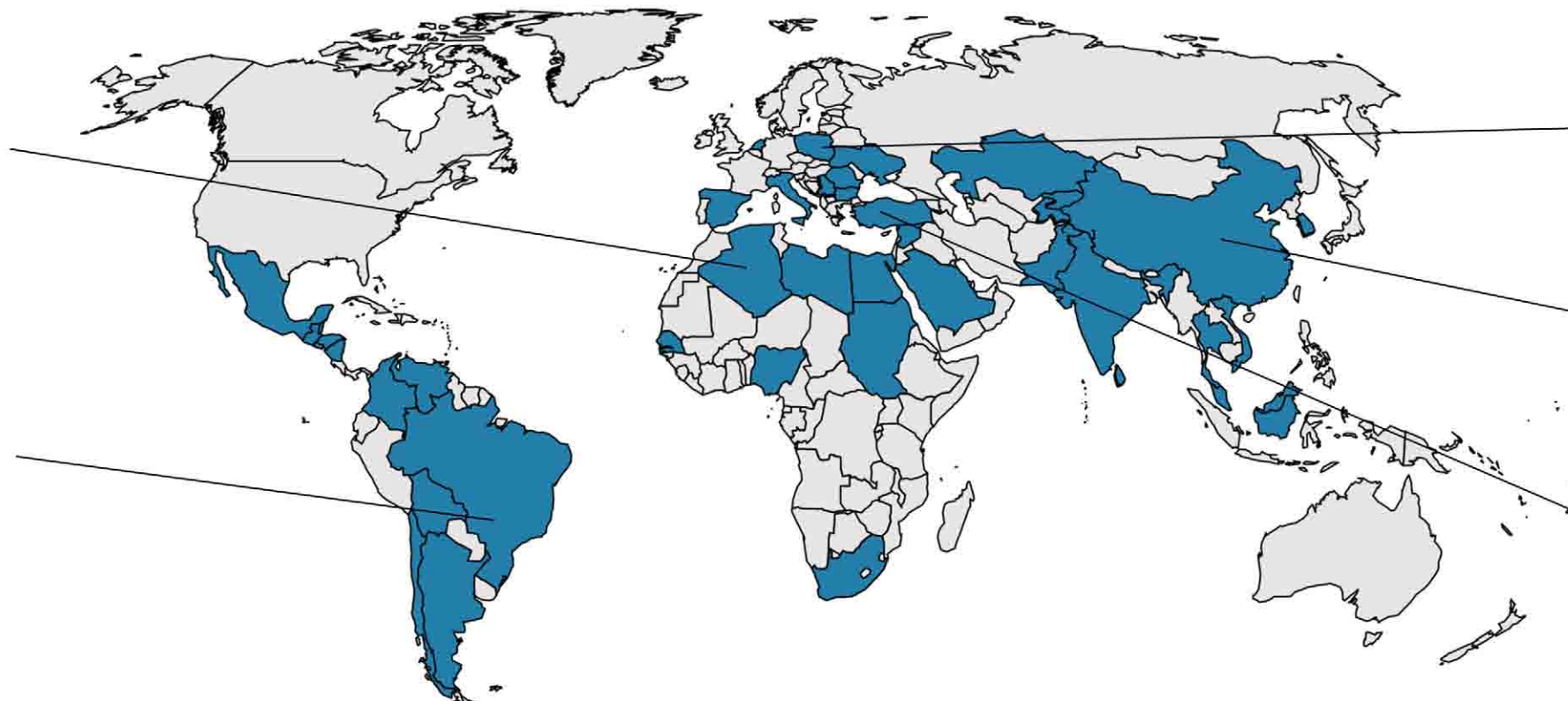


## Africa

South Africa,Nigeria,Sudan,Ethiopia  
Kenya,Tanzania,Senegal,Côte d'Ivoire  
Zambia etc.

## America

Brazil,Argentina,Mexico,Bolivia,Chile  
Colombia,Salvador,Ecuador,Peru  
Guatemala etc.



## Europe

Spain,France,Russia,Ireland,Ukraine,Denmark,Netherland  
Poland,Romania,Bulgaria,Albania,Armenia,Moldova etc.

## Asia

China,Japan,India,Korea,Singapore,Malaysia,Vietnam  
Indonesia,Philippines,Thailand,Pakistan,Uzbekistan,Nepal  
Tajikistan,Kazakhstan,Bangladesh,Azerbaijan etc.

## Middle East

Turkey,United Arab Emirates,Saudi Arabia,Qatar,Yemen  
Iraq,Bahrain,Jordan,Syria,Iran,Egypt,Lebanon,Morocco  
Algeria etc.



# INTRODUCING THE HP SERIES

BORN FOR  
POWERFUL

LITHOTRIPSY

SOFT TISSUE

EXPERT

## ■ Dual Pedal Foot Switch

Orange and blue pedals can be used to easily switch for example between "Power Fragmentation" and "Popcorning". An additional standby function allows the user to activate/deactivate the laser as needed.



## Power.

Developed to impress. The Potent Medical HP Series holmium laser system offers superior frequency and energy, and multi EXPERT Modes, which allows the user to select pulse lengths on an individual basis.

- |                         |                          |                            |
|-------------------------|--------------------------|----------------------------|
| ■ Power: max. 100 Watts | ■ Energy: max. 0.1-6.0 J | ■ Frequency: max. 2-80 Hz  |
| ■ Power: max. 120 Watts | ■ Energy: max. 0.1-7.0 J | ■ Frequency: max. 2-100 Hz |
| ■ Power: max. 160 Watts | ■ Energy: max. 0.1-8.0 J | ■ Frequency: max. 2-120 Hz |

## Flexibility.

The Potent Medical HP Series holmium laser system is the ideal solution for stone and BPH treatment in urology as well as other interventions across a range of specialties:

- |                    |                    |                   |
|--------------------|--------------------|-------------------|
| ■ Urology          | ■ ENT              | ■ Orthopedics     |
| ■ Gynecology       | ■ Dermatology      | ■ Plastic Surgery |
| ■ Oral Surgery     | ■ General Surgery  | ■ Etc.            |
| ■ Arthroscopy      | ■ Vascular Surgery |                   |
| ■ Gastroenterology | ■ Thoracic Surgery |                   |

## Usability.

Intuitive and convenient handling allows the user to easily navigate between different clinically-tested modes.



# APPLICATIONS

## Urology

### Laser Lithotripsy

Calculi in the bladder, ureter or kidney are fragmented by rapid evaporation of residual water inside the stone upon absorption of the laser radiation. At the long pulse setting the Potent HP Series Holmium laser does not apply external kinetic force, thus preventing the calculi from being pushed further inside the ureter.

The Potent Flexible reusable laser fiber insertion sheath provides protection of the flexible scope against damage during insertion of the laser fiber. Please refer to our laser fiber brochure.

### Treatment of BPH/Prostate

Potent HP Series Holmium lasers offer different treatment modalities for BPH. Depending on the surgical situation and the delivery system used the adenoma may be resected, enucleated (HoLEP) or ablated (HoLAP). All treatment modalities benefit from the excellent haemostatic properties of the Potent HP Series Holmium laser which is provided by the long pulse duration in the tissue mode. The patient benefits from the bloodless laser treatment, early catheter removal, immediate symptomatic improvement, better urinary flow and a shorter hospital stay. Resected tissue is available for subsequent biopsy.

### Opening of Strictures

Strictures in the ureter and the urethra are easily opened - virtually without any bleeding.

### Treatment of Bladder Tumours

Turner Warwick incisions are quick and easy. Excellent vision is provided during the entirely bloodless procedure.

### Bladder Neck Incisions

The low penetration of the Potent HP Series Holmium laser makes it the ideal instrument for the treatment of bladder tumours. A special aiming beam setting allows the usage together with photo-dynamic-diagnosis under blue light illumination.

### Ablation of Condylomata

Condylomata are precisely ablated by the Potent HP Series Holmium laser. The superficial tissue effect excises the tissue to the desired depth providing excellent haemostasis. Shallow necrosis enables immediate healing.

## Urology

Laser lithotripsy  
HoLEP  
HoLAP  
Opening of strictures  
Excision of bladder tumours  
Condylomata

## Spine

Minimally invasive spine surgery (MISS)  
Foraminoplasty  
Discectomy  
PLDD

## ENT

Endonasal surgery  
Larynx surgery  
Ablation of nasal and laryngeal polyps

## Spinal Surgery

The Potent HP Series Holmium laser offers a variety of treatment options for cervical and lower back pain patients. The Potent HP Series Holmium laser ablates soft tissue such as disk material and hard tissue such as bone and osteophytes in Laser Foraminoplasty. In Laser Discectomy it removes residual nucleus pulposus material in preparation for stabilisations and fusions. The thermal load to the surrounding tissue is controlled by the shallow penetration of the Holmium laser radiation and the adjustable pulse duration.

## ENT

Stenosis of the nose is treated by trimming of turbinates and the nasal septum. Nasal and laryngeal polyps can easily be removed. All of these procedures can be performed as outpatient treatments. Due to the narrow zone of necrosis, postoperative pain is significantly reduced compared to other laser techniques like Nd:YAG and Diode lasers and conventional procedures.





# Laser Fibers

Potent Holmium Laser System can be operated with a large range of fibers, depending on the application, flexibility and settings required.



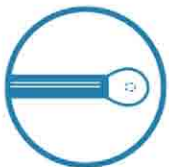
## Technical Data

|                                 |  |
|---------------------------------|--|
| Wavelength / spectral range     | Optran ® UV: 190 – 1200 nm<br>Optran ® WF: 300 – 2400 nm   |
| Holmium laser fiber             | 200µm,275µm,365µm,550µm,800µm,1000µm   |
| Numerical aperture (NA)         | 0,12 ± 0,02   0,22 ± 0,02   0,28 ± 0,02 or customised  |
| Operating temperature           | -190° to +350°C  |
| Core diameter                   | Available from 25 µm to 2000 µm  |
| Standard core / cladding ratios | 1 : 1,04   1 : 1,06   1 : 1,1   1 : 1,15   1 : 1,2   1 : 1,25   1 : 1,4 or customised  |
| OH content                      | Optran ® UV: high (> 700 ppm)<br>Optran ® WF: low (< 1 ppm)<br>Fibers with OH contents < 0,25 ppm and < 0,1 ppm are available upon request |
| Standard proof test             | 100 kpsi (nylon, ETFE, acrylate cladding)   70 kpsi (polyimide cladding)   |
| Minimum bending radius          | 50 × cladding diameter (short-term mechanical stress)<br>150 × cladding diameter (during use with high laser power)                        |



### STANDARD FIBERS

For general use in stone and soft tissue treatments



### BALL TIP FIBERS

Strongly simplify the insertion in already bent scopes



### PERFORMANCE FIBERS

Designed to deliver great power even with small fibers



### GASTRO FIBERS

Specifically designed for the fragmentation of gallstones



# Potent®

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