Be an artist of the new era.

XP-2 Focus

- Highest Performance Benefits in Surgical Procedures
- Exceptional Procedure Control with Wide Pulse Duration Range
- Designed with the Surgeon in Mind
- Gold Standard Transdermal Aesthetic Treatments
- Wider Versatility in Aesthetic Surgery
- Less Invasive, Fast and Effective Treatments
- Optimal Clinical Results

Fotona
choose perfection

The Highest Performance, Best Made Laser Systems in the World
Advanced Technology for Precision, Comfort and Safety

To effectively handle your patient’s surgical needs and aesthetic requirements, you’ll need a laser system that is fast, safe, reliable and precise. The XP-2 Focus offers all this and more. It’s the ideal choice for combining popular aesthetic surgical procedures with a wide range of non-surgical aesthetic laser treatments.

Innovative QCW mode for surgical precision
The XP-2 Focus’ QCW surgical Nd:YAG laser can generate peak powers beyond 5 kW, providing maximum speed and performance efficiency in surgical procedures. It is the ideal tool for high-precision soft-tissue incision and excision, endovenous laser ablation of varicose veins, laser lipolysis, hyperhidrosis, and much more.

Why Nd:YAG?

Homogeneous absorption – deep penetration
The Nd:YAG laser is homogeneously absorbed in the three main chromophores targeted in surgical and aesthetic laser treatments, namely, melanin, blood and water. This makes it an ideal laser source for those who seek versatility for their practice by combining surgery and non-ablative aesthetics. For decades the deeply penetrating 1064 nm Nd:YAG wavelength has been accepted as safe, effective and suitable for all skin types.

Mature technology
Additionally, the Nd:YAG laser is renowned for its technical reliability, especially in the high performance ranges required for fast and effective procedures. The Nd:YAG laser rod is not sensitive to temperature changes and thus remains very stable and reliable during laser operation. Laser rods that contain Cr³⁺ ions (e.g. ruby and alexandrite) are very sensitive to thermal and pumping non-homogeneities, leading to unstable and unpredictable operation. In addition some laser sources need to be cooled down below room temperature, and others heated to high temperatures before the lasers can be operated.

High peak powers – selective photothermolysis
Depending on their absorption levels in specific skin chromophores, different laser wavelengths interact differently with various tissues and consequently produce very different effects. Fotona’s Nd:YAG is a true, reliable all-rounder – the combination of its 1064 nm wavelength and high peak power range outperforms all other laser sources commonly used in multi-application surgical and aesthetic laser systems.

Patented VSP technology for perfect control and safety
Nd:YAG’s homogeneous absorption makes it safe to use on all skin types, without compromising patient comfort and treatment efficacy. Fotona’s patented VSP (Variable Square Pulse) technology creates precisely controlled sequences of square-shaped pulses to maximize safety and ensure ultimate performance and patient comfort.

FRAC3® technology for comfortable aesthetic treatments
The XP-2 Focus’ pulsed Nd:YAG laser, with its exceptional procedure control and unique FRAC3® technology, is the gold standard for non-surgical aesthetic laser procedures such as onychomycosis, acne and vascular treatments, permanent hair reduction, skin rejuvenation and more.
Laser Lipolysis is among the most popular aesthetic procedures in the world, and the least invasive surgical bodyshaping method available to aesthetic practitioners. Market studies suggest that the laser lipolysis market will continue to experience double-digit growth in the future.

**Lipolysis with simultaneous skin tightening**
Compared to mechanical liposuction, laser lipolysis with the XP-2 Focus is faster and easier to perform, requiring less external force and exertion from the surgeon. Thermally induced coagulation minimizes bleeding and trauma as well as post-treatment bruising and swelling. These are important advantages for both the patient and practitioner, especially when treating resistant fatty tissue deposits and topographically awkward areas like the upper arm or neck. Complementary skin tightening effects are another advantage of laser lipolysis, which further adds to higher patient acceptance and shorter recovery times.

**Laser hyperhidrosis treatment**
Laser Axillary Hyperhidrosis Treatment is another safe, effective, and minimally invasive surgical solution that can be performed with the XP-2 Focus. For treating hyperhidrosis, the XP-2 Focus’ Nd:YAG laser is used to permanently destroy axillary sweat glands by irradiating the glandular tissue via a simple subdermal procedure.

Laser lipolysis is a fat reduction treatment in which laser light energy is used to cause swelling and rupture of adipocytes. The procedure requires only a barely noticeable incision to insert the cannula with a laser fiber. The laser provides an instantaneous blood-coagulating effect when melting the fatty tissue, keeping trauma to a minimum and averting excessive bleeding and post-treatment swelling. Patients can thus expect shorter recovery times and a reduced need for compressive garments.

**Research**
Studies show that compared to other wavelengths, using the XP-2 Focus’ 1064 nm wavelength in laser lipolysis exhibits the largest directly heated volume of subcutaneous tissue, making it exceptionally efficient. This wavelength also has the smallest undesirable thermal effect on neighboring dermal tissue and is therefore less invasive, and the treated area heals faster. These characteristics allow the practitioner to adopt a “less-is-more” approach to laser lipolysis without compromising the results.

Endovenous Laser Ablation (EVLA) for Higher Treatment Success Rates

Fotona’s EndoVenous Laser Ablation (EVLA) treatment works on the principle of ablation and photocoagulation of a vein’s interior through laser-induced thermal effects. It is a minimally invasive procedure in which an optical fiber is inserted into the vein and slowly withdrawn while the laser is activated. The treated vein subsequently contracts and the vein wall is destroyed. The healthy veins that surround the closed vein can then restore the normal flow of blood to the treated area.

Why is Nd:YAG more Effective in EVLA than other Lasers?

The Nd:YAG laser’s ability to optimally deliver laser energy into vein walls and limit undesirable mechanical and thermal effects in the surrounding tissues makes it the ideal wavelength for laser occlusion of varicose veins.

Research

In a recent study, EVLA was conducted on 525 legs at a single clinical site over a 2.5 year period using Fotona’s XP-2 Focus laser system. After 1 year, the results revealed that 88.2% of veins in the 15W to 18W average power treatment group (102 legs) remained occluded, while in the 25W group (423 legs) 98.5% of veins remained occluded. Side effects were minimal and all patients, even those whose veins were not fully ablated, reported satisfaction with the treatment.


Although both diode lasers and Nd:YAG lasers have been found to be effective, studies have noted distinct differences between these laser technologies. Namely, QCW Nd:YAG modalities reportedly produce fewer side effects and provide greater patient comfort than diode laser treatments. Endovascular therapy with the XP-2 Focus is quickly becoming a proven choice alternative to traditional therapies in terms of efficacy, treatment time, patient comfort and cost.
Non-Ablative Skin Treatments

In addition to its extraordinary surgical abilities, the XP-2 Focus is also equipped with a pulsed Nd:YAG laser that enables a wide range of non-ablative aesthetic procedures.

**Onychomycosis**
Fotona’s ClearSteps onychomycosis treatment is a revolutionary new method for treating onychomycosis (nail fungus). It is a simple and effective procedure that uses the power of Nd:YAG laser light to heat evenly throughout the depth of the effected nail and skin tissue, effectively weakening and killing the parasitic fungi that have infected the patient’s nails.

**Acne treatments**
For patients with active acne, the XP-2 Focus’ precisely controlled Nd:YAG laser safely penetrates skin to effectively target overactive sebaceous glands and to reduce the risk of developing new acne inflammation. It is also highly effective for wart removal, as the Nd:YAG laser’s targeted absorption of vascular tissue coagulates the wart’s blood vessels, causing subsequent necrosis.

**FRAC3® skin rejuvenation and hair reduction**
The XP-2 Focus’s FRAC3® technology is also perfect for permanent hair reduction and non-ablative skin rejuvenation, such as Fotona’s unique 3D self-induced fractional transdermal treatments. Due to its three-dimensional treatment pattern, more surrounding tissue remains unaffected to provide faster healing than with conventional fractional treatments.

**Why is FRAC3® Better than a Two-Dimensional Treatment?**

As a fractional technique, FRAC3® has a distinct advantage over conventional two-dimensional fractional treatments in that not all of the targeted skin tissue is uniformly thermally affected or removed. FRAC3® is non-ablative and leaves the maximum of healthy tissue untouched, thus promoting rapid healing and minimizing patient downtime.

The secret to safe, effective and minimally invasive transdermal treatments lies in Nd:YAG’s ultra-short pulsed laser width range. Its pulses have been shown to selectively heat small skin imperfections and inhomogeneities of a <50 μm size range throughout the skin tissue, effectively forming FRAC3®’s distinct three-dimensional pattern of fractional islands of thermally affected skin.

Thermal skin images and ultra-structural analysis show a decrease in overall collagen fiber diameter in the papillary dermis, which promotes new collagen formation and leads to improvements in the overall skin quality.

Laser induced damage islands as healing centers:
- a) standard uniform laser treatment;
- b) standard two-dimensional fractional treatment;
- c) novel self induced three-dimensional FRAC3® laser treatment
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XP-2 Focus International Recognition

IMCAS Paris 2012, France
D. Maletic MD: “Skin tightening of neck and jowl lines under local anesthesia with subcutaneous treatment of Nd:YAG laser”

BAPRAS 2011, BH
D. Maletic MD: “Three Years Experience in Laser Treatment of Axillary Hyperhidrosis”

European Venous Forum 2011, Slovenia
A. Sikovec MD: “Comparison of 1064 nm Nd:YAG and 980 nm Diode laser for endovenous laser ablation (EVLA) of varicose veins. Randomized prospective study”

The European Aesthetic Guide, issue Spring 2012
I. Petrou MD: “Fotona’s XP-2 Focus Laser Proves Effective in Treatment of Onychomycosis”

Journal of the Laser and Health Academy, Vol. 2010
A. Sikovec MD: “Saphenous Vein Occlusion by Endovenous Laser Ablation(EVLA) with a 1064 nm VSP Nd:YAG Laser”

Journal of the Laser and Health Academy, Vol. 2009
M. Lukac et al.: “QCW Pulsed Nd:YAG 1064 nm Laser Lipolysis”

Journal of the Laser and Health Academy, Vol. 2008
M. Lukac et al.: “FRAC3 - Three Dimensional Non-Ablative Fractional Laser Skin Rejuvenation”

Global Leader for over 45 Years
Since 1964 Fotona has set industry standards of excellence in laser systems for medicine, communications, industry, and defense. Our laser systems are the result of over 45 years of experience and expertise in producing high-tech products for these respective fields. Consequently Fotona is a globally recognized leader and pioneer in the innovation, development and manufacture of laser systems.

High Technology - Made in Europe
As one of the top manufacturers of medical laser systems, our commitment to state-of-the-art, in-house production sets us apart from the competition, which typically outsources the production process. Fotona’s in-house manufacturing and stringent testing of all components, in compliance with applicable international standards, ensures that our systems are of the highest quality, reliability and durability. When you choose Fotona, you choose the highest performance, best-made laser systems in the world.

Best Training and Support
To get the most out of your XP-2 Focus laser system, our practitioner workshops, coorganized with the Laser and Health Academy, provide hands-on demonstrations of our lasers from international clinical experts.


In-House Technology

Since 1964