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
- Offer Gold Standard Transdermal Aesthetic Treatments
- Wider Versatility in Aesthetic Surgery
- Less Invasive, Fast and Effective Treatments
- Achieving Optimal Clinical Results

Fotona
choose perfection

The Highest Performance, Best Made Laser Systems in the World

Highest Speed, Precision and Efficiency

To be effective in satisfying your patient's needs, you need a laser that is fast, precise and safe.

Nd:YAG's homogeneous absorption in skin makes it safe to use on all skin types, without compromising patient comfort and treatment efficacy. Fotona's unique VSP Technology further increases procedure safety. The square pulses reach peak powers faster, remain constant and return to zero immediately. This contributes to XP-2 Focus treatments' long-term success and shorter recovery times.

XP-2 Focus is your ideal choice for combining the trendiest aesthetic surgical procedures with a wide range of popular non-surgical aesthetic laser treatments. The XP-2 Focus' QCW Nd:YAG laser can generate peak powers beyond 5 kW, ensuring speed and highest performance efficiency in surgical procedures. It is the ideal precision tool for soft tissue incision and excision in surgical treatments, endovenous laser ablation of varicose veins, laser lipolysis and many more.

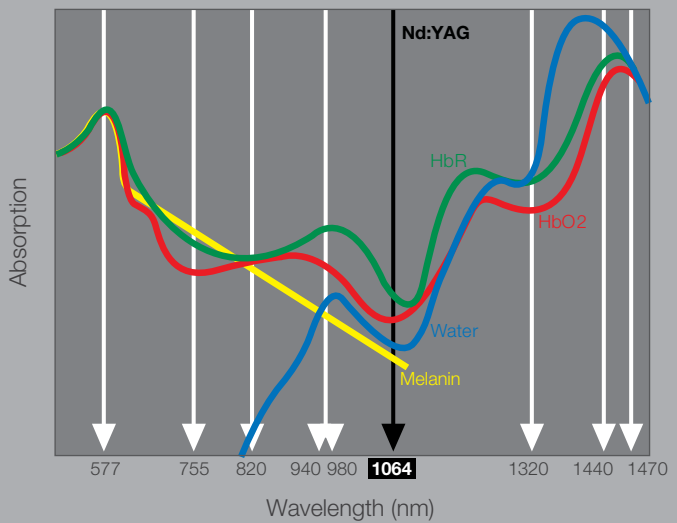
The XP-2 Focus' PULSE Nd:YAG laser is a Gold Standard in revenue-boosting procedures like acne and vascular treatments and offers exceptional procedure control through its wide pulse duration range. One of the main strengths of the XP-2 Focus is that it performs both trendy aesthetic surgical procedures and a wide range of popular non-surgical aesthetic laser treatments such as Fotona's unique FRAC3®, non-ablative, 3D self-induced fractional transdermal treatments.

Why Nd:YAG?

The Nd:YAG laser is homogenously 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 Nd:YAG's 1064 nm has been accepted as a safe wavelength, achieving deep penetration and suitable for all skin types.

Additionally, the Nd:YAG laser is renowned for its technical reliability, especially in the high performance ranges required for effective and fast 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 Cr^{3+} 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 will need to be cooled down to sub-room temperatures, and others heated to high temperatures before the lasers can be operated.

Depending on their absorption levels in different skin chromophores, different laser wavelengths interact differently with various tissues and consequently produce very different effects. The Nd:YAG is a true reliable all-rounder. Its combination of 1064 nm wavelength benefits and high peak powers range outperform all other laser sources commonly used in surgical and aesthetic combination laser systems.



Lipolysis – No. 1 in Aesthetic Surgery

Laser lipolysis is one of the most popular aesthetic procedures in the world. Market studies suggest that the laser lipolysis market will, on average, grow 15.3% per year.

Compared to mechanical liposuction, laser-assisted lipolysis requires less external force and exertion from the surgeon. Larger quantities are easier to remove since the fatty tissue has been liquefied using the laser's thermal effect. 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 very resistant fatty tissue deposits and topographically awkward areas like the upper arm or neck area.

Complementary optimal skin tightening effects are another advantage of laser lipolysis. This adds to high patient acceptance and shortened recovery times.

It is the least invasive surgical bodyshaping method available to aesthetic practitioners. Thanks to the numerous safety and treatment enhancement features on the XP-2 Focus procedures are faster and easier to learn and perform.

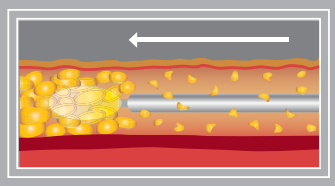
Before

After

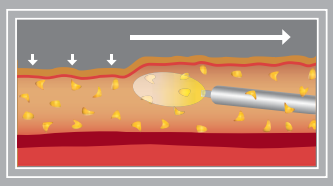
Before

After

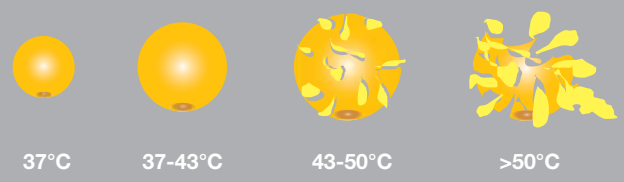
How does Laser Lipolysis Work?



a) The canula with a laser fiber targeting the fatty tissue.



b) The melted fatty tissue and an instantaneous skin tightening effect.



Fat cells are destroyed at temperatures above 50°C

Laser lipolysis is a fat reduction treatment in which laser light energy is used to cause swelling and rupture of adipocytes. Procedures require only a hardly noticeable incision to insert the canula with a laser fiber. The laser provides an instantaneous blood-coagulating effect when melting the fatty tissue. This keeps trauma to a minimum, and averts 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 XP-2 Focus' 1064nm wavelength in laser lipolysis exhibits the largest directly heated volume of subcutaneous tissue, making it more 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 comprising the results.

Lukac M, Vizintin Z, Zabkar J, Pirnat S (2010) QCW Pulsed Nd:YAG 1064 nm Laser Lipolysis. LAHA Journal of the Laser and Health Academy 1: 24 – 34.

Endovenous Laser Ablation (EVLA) – Higher Success Rates, Fewer Side-Effects

Endovenous Laser Ablation (EVLA) therapy works on the principle of ablation and photocoagulation of the vein interior by laser induced thermal effects. It is a minimally invasive procedure in which an optical fiber is inserted into the to-be-treated vein, and laser energy is directed into the interior of the vein. The vein contracts as the vein wall is destroyed while the optical fiber is slowly withdrawn. This leads to occlusion of the vein and resolves the problem of varicose veins.

Before

After

Before

After

Dr. Andrej Šikovec from Avelana Vein Clinic, Slovenia, has been using Fotona's XP-2 Focus for EVLA of varicose veins for over 4 years now and is very satisfied with the results: *"Having had experience with both diode lasers and RF methods, and while all of these methods work, I can say that EVLA with the Fotona's system enabled faster, more cost-effective procedures than RF devices. In comparison with diode lasers, it offers faster post-treatment recovery with less pain, less ecchymosis and less bruising. I would recommend the XP-2 Focus laser to any vascular surgeon planning to carry out EVLA."*

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

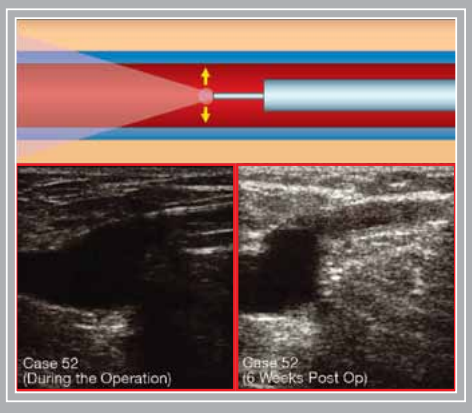
The Nd:YAG laser's ability to optimally deliver laser energy into vein walls and limit undesirable mechanical and thermal effects in the surrounding tissues, makes it the ideal wavelength for laser occlusion of varicose veins.

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, results revealed that 88.2% of veins in the 15W to 18W average power treatment group (102 legs) remained occluded; 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.

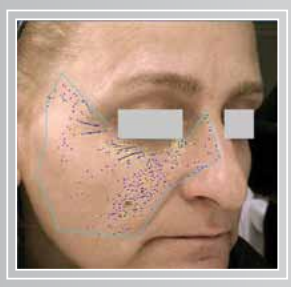
Sikovec A (2009) The Treatment of Saphenous Vein Occlusion by EVLA with 1064nm VSP Nd:YAG laser. LAHA Journal of the Laser and Health Academy 2: 6–9.

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



FRAC3® – A Revolution in Non-Ablative Skin Treatments


Before


After


Before


After

To complement the XP-2 Focus' extraordinary surgical ability to treat varicose veins and perform laser lipolysis, Fotona's Nd:YAG laser gives you FRAC3®, a three-dimensional, non-ablative, fractional, transdermal treatment concept.

A revolutionary treatment, FRAC3® is particularly popular in transdermal treatments such as skin rejuvenation and hair removal. Due to its three-dimensional treatment pattern, more surrounding tissue remains unaffected to provide faster healing than in conventional fractional treatments which remain limited to a two dimensional pattern. With FRAC3®, treatment intensity is minimized while efficiency is maximized.

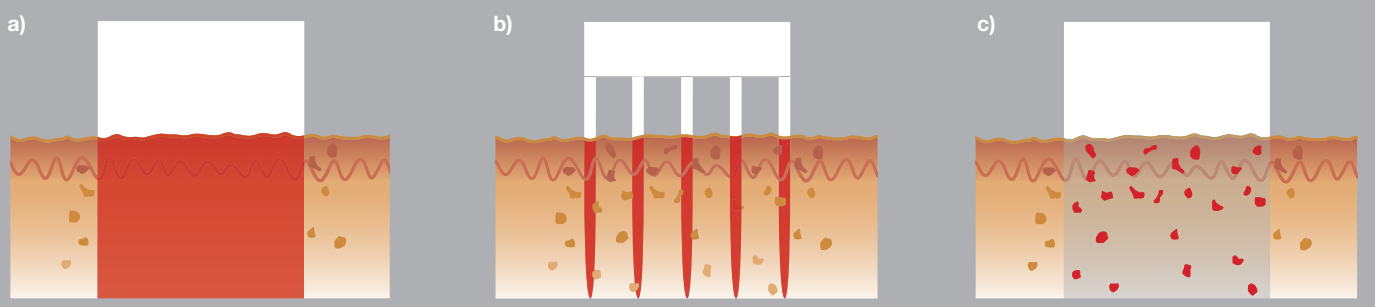
The new FRAC3® laser method is the next step in improved laser transdermal treatment procedures, with its speed, effectiveness, selectiveness and short healing time.

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 pulse-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 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

Fotona
choose perfection

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.

Global Network of Experts

Our global network of Fotona representatives and partners brings together the most capable and experienced laser experts in the world. By developing and nurturing close relationships with our partners, we ensure that our products and services fulfill the most current market needs. Through our global Fotona network we guarantee exceptional customer service, support and training.

All In-house Technology

To fulfill market needs and maintain a short time-to-market Fotona invests in outstanding manufacturing and R&D facilities. In-house manufacturing and stringent testing of all our systems' components, in compliance with all applicable international standards, ensures that our laser systems are of the highest quality, reliability and durability.

Choose Fotona, Choose Perfection

Choosing Fotona ensures innovative solutions, superior performance capabilities, technical perfection and unrivalled clinical results. Achieving unmatched levels of precision, efficacy, efficiency and safety are key to the success of our laser systems. When you choose Fotona, you choose the highest performance, best made laser systems in the world.

Focus range

Model	XP Focus	XP-2 Focus
Laser type	Nd:YAG	Nd:YAG
Wavelength	1064 nm	1064 nm
Modalities	LP, FRAC3®	LP, FRAC3®, QCW
Energy / Power	10 W	30 W

The Highest Performance
Best Made Laser Systems in the World

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CE 0123

Fotona is certified to: ISO 9001:2000, EN ISO 13485:2003, MDD 93/42/EEC, ANNEX II.3, ISO 13485:2003 (CMDCAS), GMP according to FDA regulations

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