

# Fotona XP MAX Designed as a Powerful and Versatile Nd:YAG

BY BOB KRONEMYER, ASSOCIATE EDITOR

Exceptionally high output power, impressive energy, large scanner spot size and huge scanner treatment area make the Fotona XP Max Nd:YAG from Fotona (Ljubljana, Slovenia) one of the most powerful and fastest aesthetic lasers on the market for hair removal, vascular conditions, skin rejuvenation and wrinkle reduction.

“Modern practices need a laser system that can perform all the key applications, for all skin types, quickly and with the maximum efficacy,” said Pierre André, M.D., a dermatologist in private practice in Paris, France. The Fotona XP MAX features energy up to 120 J and 130 watts of power.

Dr. André primarily uses the laser system in combination with the Fotona S-11 scanner, thus providing a scan area of 6.5 x 6.5 cm<sup>2</sup>, a repetition rate of up to 75 Hz and 3, 6 and 9 mm scanner spot sizes. The various spot sizes are used to control penetration depth, improve accuracy and control the treatment speed in large areas.

For hair removal, “the high peak power combined with variable scanner spot sizes allows us to remove even light, thin hairs in a quick and easy manner, because the laser energy is better distributed than with any other scanner and better able to thermally affect these follicles,” explained Dr. André. “This has opened up a new segment of patients we were unable to treat previously.” Dr. André also appreciates the fact that the Fotona XP MAX can effectively treat the wide range of skin types found in the population of Paris.

Angelika Hempel, director of an aesthetic clinic in Stuttgart, Germany, has been using a long pulsed Nd:YAG laser since 2001 for hair removal, vessel treatment and skin rejuvenation. “Our experience in general with Nd:YAG is very satisfying,” she said. “Because



of the low absorption of Nd:YAG laser energy in the skin, you can treat all skin types without thermally affecting the epidermis, thereby eliminating the side effects commonly observed in other light-based treatments. Therefore, Nd:YAG applications are safe, efficient and more comfortable for the patient. However, the powerful Fotona XP MAX, with its high repetition rate, allows us to maintain the safety profile of the 1064 nm wavelength, but with the additional benefit of high speed treatment.”

With scanner support, Ms. Hempel can comfortably treat a man’s back within 30 minutes. “Initial settings are between 40 and 60 J/cm<sup>2</sup> at a 25 ms pulse width,” she noted. “For follow-up sessions, the energy level is raised slightly, up to a maximum of 15% above the initial settings.” Treatment intervals are up to 12 weeks for backs and legs, and eight weeks for face and bikini line. Many patients can conclude their treatment scheme in five sessions.

Vessels up to 4 mm in diameter can also be successfully treated. “Settings for smaller vessels (up to 3 mm) are 70 to 150 J/cm<sup>2</sup>, and a 10 to 20 ms pulse width,” said Ms. Hempel, who provides training and clinical support for Fotona lasers. For larger vessels, the pulse width is increased to between 30 and 50 ms, with an energy range between 60 to 120 J/cm<sup>2</sup>. “The spot size remains 3 to 4 mm, even for vessels smaller than 1 mm,” Ms. Hempel said.

For skin rejuvenation, Ms. Hempel performs three passes at settings of 40 to 50 J/cm<sup>2</sup> at 50 ms. Patients schedule a total of five sessions, spaced eight weeks apart. “Skin looks fresher and wrinkles are reduced,” she said. “Patients are very satisfied. Immediately after treatment they feel tighter skin. There is also no downtime.” ■

