

Systems for hair removal using lasers seek to achieve a satisfactory, stable result without causing any damage (dyschromia or scarring) to epidermal structures, thus minimizing the number and length of sessions.

It should be remembered that effective long-term hair removal requires inducing a selective destruction of both the bulge and its vascular papilla. Hair removal lasers target the eumelanin concentrated in the hair shaft and, inside the follicle, at the level of the bulge. Since these structures are located deep within the skin surface, the laser must be well-absorbed by eumelanin and able to penetrate into tissue. This explains the popularity, due to its good penetration in depth and its selectivity towards eumelanin, of the 755nm Alexandrite laser system with pulse durations in the order of ms, and a wavelength of proven efficacy in hair removal.



One important innovation in this area is **DEKA's Moveo Technology**, featured on the **Motus AX** and **Synchro REPLA:Y** platforms. These are Alexandrite lasers equipped with a special handpiece that, after applying a transparent gel, can be slid across the skin in a series of circular or linear movements, aiming to pass several times over the same area (especially useful for larger surfaces such as trunk, limbs, inguinal and axillary areas). The repeat passes make it possible to gradually administer an energy dose capable of damaging the hair bulb (as shown histologically) without compromising skin safety. In our experience, this new technique has proven to be both effective and safe. It has also proved popular among patients, especially as it causes no pain or irritation (a problem encountered with all other hair-removal systems, and especially with Alexandrite lasers). Indeed, the repeat-pass technique that this handpiece requires uses fairly low energy levels, around 6-7 J/cm². They are therefore very well tolerated by patients and allow the desired end point (mild erythema-perifollicular oedema) to be achieved without causing any pain. The low energy levels mean we can work safely even at times of the year when patients' skin is more exposed to the sun. Accurate phototyping and careful observation of the skin during application should in any case always guide the practitioner. If well-performed, the repeat-pass technique with the **Moveo** handpiece reduces application times and makes it possible to treat particularly demanding skin areas quickly and safely. A simple, clear display makes it possible to set the treatment parameters quickly and efficiently, making the system flexible and adaptable for every operational situation. The **Moveo** handpiece with integrated cooling makes it possible to use fluid continuous movements over the treatment area by performing multiple steps so as to give this area an adequate therapeutic dose. Nor should we underestimate the effect of the lower energy levels on keeping down maintenance costs, as the consumable components of the laser and the optical components of the platforms last longer than on classical Alexandrite systems.

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