



STALAM has developed a specific Radio Frequency machine for the drying of natural (human) hair after the bleaching and colouring process. The machine aims at meeting the needs of hair extensions and wigs producers in terms of product quality and drying speed. The RF technology has proven to be far superior compared to the conventional drying methods also in this peculiar application.

How it works

STALAM's RF drying system provides a gentle dielectric heating of the hairs by means of an electromagnetic field at 27.12 MHz, inside a temperature-controlled tunnel with minimal air circulation. The electromagnetic energy is absorbed in proportion to the water contained in the hairs, so that by controlling the RF power it is possible to bring the moisture content down to the desired residual value. As the RF energy is only transferred to the wet areas, the drying process is not affected by the hair fineness, texture or the size of the bundle, even where they are held together by cords, elastics or sewn on a support, so that all parts dry quickly and uniformly. The complete process takes just a few minutes, with no over-drying, no wet spots, no hair entanglement. The conveyor belt, where the hair bundles are laid down for drying, has a fine-mesh structure to allow for easy evaporation of the water, yet preserving the hairs physical integrity. The low temperature eliminates the risk of thermal degradation of the hairs, that retain their biological, aesthetic and functional characteristics. As there are no energy losses to the environment (the electromagnetic field heats up the water, not the air) RF drying is also energy-efficient and economically convenient.



"RF 7 kW" dryer for about 15 Kg/h of natural hair extensions

BENEFITS

- Gentle yet fast drying
- Uniform drying irrespective of hair fineness and texture
- No overheating, no overdrying, no wet spots
- Uniform drying of bundles, even where hairs are held together
- No physical degradation, no hair breakage or entanglement
- Full retention of colour, texture, naturality and healthiness
- Continuous process, easy operation
- Energy efficient, environmentally friendly

MODELS

OUTPUT RF POWER	PRODUCTION CAPACITY (kg/h)*	DIMENSIONS L(m) x W(m) x H(m)
7 kW	10 - 15	5.7 × 1.5 × 2.9
15 kW	20 - 30	6.5 x 1.5 x 2.9

* Production capacity may vary depending on product type, loading density, actual moisture content, etc. Contact us for specific information about your product.





