

# Enercon Atmospheric Plasma Surface Treating



**The Dyne-A-Mite™ IT effectively cleans and etches surfaces to promote adhesion on both conductive and non-conductive surfaces.**

The new Dyne-A-Mite IT™ delivers highly effective treatment for a wide variety of applications. It is simple to use, cost-effective and a safe treatment solution for a wide variety of applications.

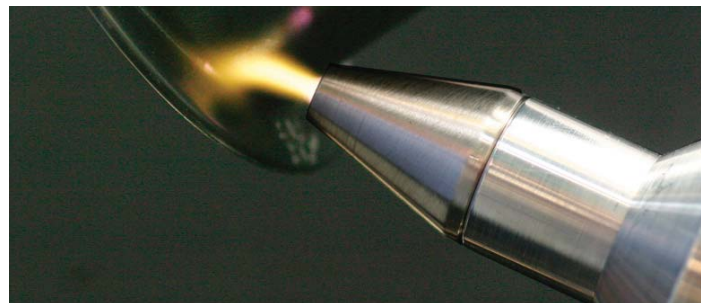
It generates a concentrated blown-ion discharge that bombards a material surface with a high-speed discharge of ions. Positive ion bombardment facilitates a micro-etching or scrubbing (ablation) effect which can remove (desorb) organic and inorganic contaminants from the surface of an object.

Without changing the substrate morphology, the system successfully changes the mechanical and chemical properties of a surface. It cleans surfaces and initiates cross-linking effects.

Blown-ion treatment allows for easier application and improved adhesion of coatings, adhesives, inks, labels and markings of all types. In-line treatment eliminates the need for costly chemical priming, etching and vacuum processes.

Dyne-A-Mite™ IT is highly effective at treating and cleaning all types of polymers, elastomers, glass and even conductive surfaces. Typical applications include removing grease, oil, oxides or silicone; pre-treatment and preparation for bonding, soldering or gluing and pre-treatment for finishing metals.

For speciality applications ask us about our Dyne-A-Mite™ IT with CO<sub>2</sub> capabilities.



## Effectively Treats

**ABS ASA EPD EVA HDPE LDPE PC PE PET PMMA  
PP PS PU PVC PBT TPU TPO and many more**  
Also ideal for clean-room applications

## System Features

- **Easy Operation** - Operator friendly controls
- **Remote Start/Stop**
- **Rugged Continuous Duty Power Supply**
- **Safety Interlocks**
- **Communication interface cable**- for remote operation, loss of treatment indicator, safety and operational interlocks.
- **Advanced protective circuitry** monitors and protects against over current, under power and air flow.
- **Virtually No Maintenance**
- **Dual Head Option** - can be aligned to increase treat width, extend dwell time, or be used to treat multiple angles.
- **Optional Tri-functional Treater Switch**

Dyne-A-Mite™ IT Specifications <small>(Specifications subject to change without notice)</small>	Model	Dimensions	Weight	Voltage
	<b>Single Head</b>	10"D x 21"W x 10"H	40 lbs.	120V, 7 Amps/240V 3.5 Amps
	<b>Dual Head</b>	16"D x 21"W x 10"H	70 lbs.	120V, 14 Amps/240V 7 Amps



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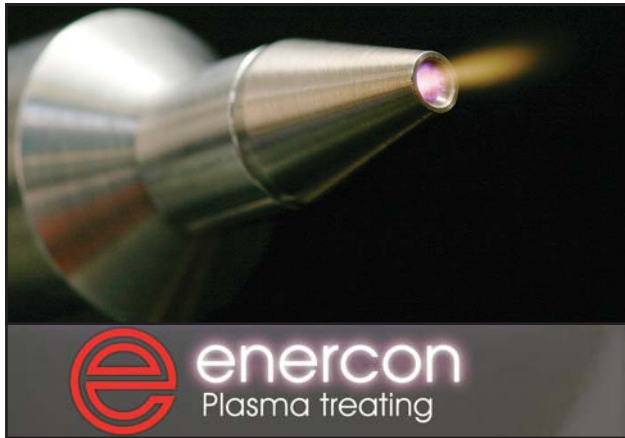
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# Enercon Surface Treating Systems



## How *blown-ion* air plasma treating works:



Blown-ion air plasma systems push pressurized air past a single electrode which discharges inside the treater head. The electrode creates positively charged ions in the surrounding air particles. The air pressure forces the air particles to accelerate out of the tip of the head as a high-velocity stream of charged ions directed toward the substrate surface.

Through direct contact, these particles positively charge the object's surface, increasing its surface energy and making it more receptive to inks and coatings.

Air plasma is a popular surface-treatment technology because it is effective, easy to use and inexpensive to operate.

## Why surface treat?

**Cleaning-** Positive ion bombardment facilitates a micro-etching or scrubbing (ablation) effect which can remove (desorb) organic and inorganic contaminants from the surface of an object.

**Printing-** Surface treating parts prior to printing enhances ink adhesion. It makes printing easier, and for others it makes printing possible.

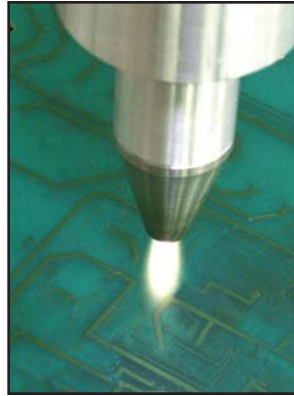
**Painting-** Injection molded or thermoformed parts are often treated prior to painting. Surface treatment allows the paint to adhere and also increases the life and durability of the paint on the object's surface. Reduce scrap and eliminate dust particles, fish eyes, and other surface imperfections.

**Coating-** Products are coated to protect and decorate. Doors, frames, and extrusions/profiles are often coated. The medical industry uses surface treating to improve adhesion of antimicrobial/antibiotic coatings. Reduce scrap and eliminate dust particles, fish eyes, and other surface imperfections.

**Bonding-** Bonding is primarily used to increase the strength of an adhesive. The medical and automotive industries rely on surface treating to remove contaminants such as dust, grease, oils, or mold to improve bonding. Typical cleaning solvents such as methyl ethyl ketone (MEK), trichloroethylene, toluene, or acetone may be used for this purpose, but cleaning agents that leave a film residue upon evaporation will retard bonding.

## Application Gallery

Dyne-A-Mite IT™ is ideal for: Conductive and non-conductive surfaces, Medical applications, Electronics applications, Automotive applications, Thermoplastics, Elastomers and Glass



[www.enerconind.com/treating](http://www.enerconind.com/treating)

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