

### PIASMA

- DRY PROCESSING TECHNOLOGY
  plasma technology allows dry processing
  of materials to achieve new products or
  replace products of traditional wet processing.
- WHAT IS A PLASMA ? plasma, also called the 4th State of matter, is an electromagnetic gas discharge, creating an ionising gas. This ionising gas, consisting of atoms, molecules, radicals, ions, electrons, ihas the potential

to super-fine-clean products to activate, etch or finish products to coat materials by plasma polymerisation

#### SUBSTRATES:

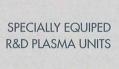
- polymers
- ceramics
- metals

With this technology, it is possible to perform surface engineering without interfering with the bulk properties of the substrate.

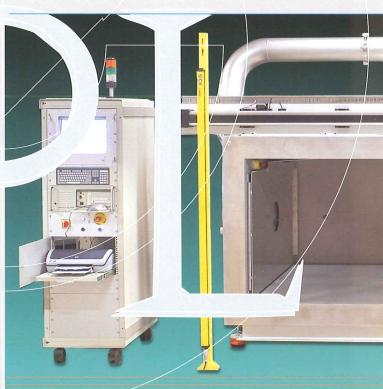
### WHY USING A PLASMA?

- DRY ... no solvents, water or heating required.
- ENVIRONMENTALLY FRIENDLY
- FLEXIBLE ... various processes possible.
- QUALITATIVE...
  High level of surface modification and finishing, uniform processing
- LOW COST PROCESSING









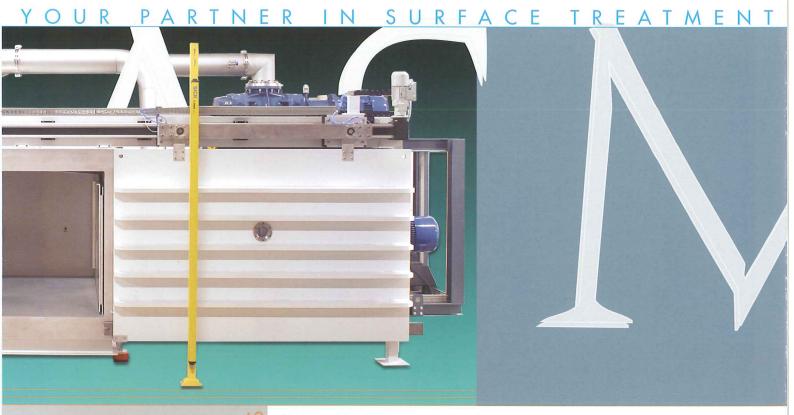
# PLASMA APPLICATIONS

#### **GENERAL APPLICATIONS:**

- Activation and cleaning of metallic, ceramic and other polymer surfaces.
- Removal of organic impurities
- Hydrophilisation and activation (chemical functionalisation) of plastic surfaces.

#### For:

- Automotive : before flocking, gluing or painting of interior parts and before painting of bumpers.
- Medical: before gluing and printing of catheters, valves, syringes, etc.
- Consumer electronics: compact disc player plastic parts, mobile phone covers,...
- Electronic: cleaning and etching of PCB's and connectors.
- Textiles and foams: hydrophilisation, hydrophobation and oleophobation.



## PLASMA CLEANING:

Removal of invisible organic contamination and adsorption layers. Also thin coatings can be removed. A super-fine-cleaning which can solve adhesion problems and improve quality.

## PLASMA ACTIVATION:

The preparation of polymer and natural substrates prior to gluing, printing and painting, by creating bonding sites on the surface.

### PLASMA POLYMERISATION:

Sub-micron highly cross-linked layer deposition by means of plasma technology to get new structured performance coatings and finishing. Examples are hydrophobic, oleophobic, permanent hydrophilic and barrier coatings.







CD1000 PC

**CD300 MC** 

# STANDARD SYSTEMS





CD1800 PC

CD roll 1100/600

# LARGE SYSTEMS





Cleaning system for optical instruments

CUSTOM DESIGN

CD1200 PC rotating





Automotive parts to be plasma treated



Medical parts to be plasma treated

