

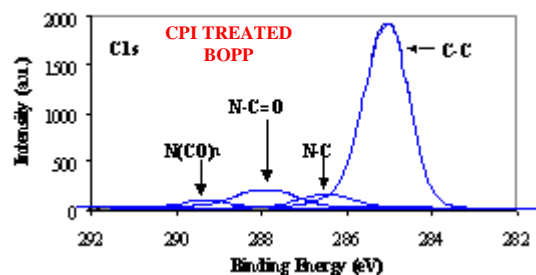
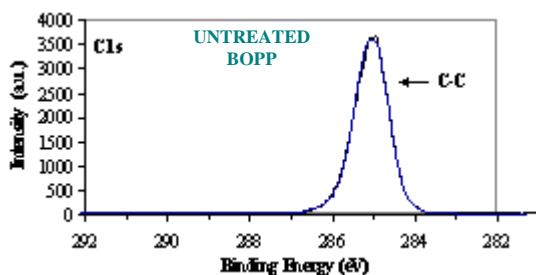
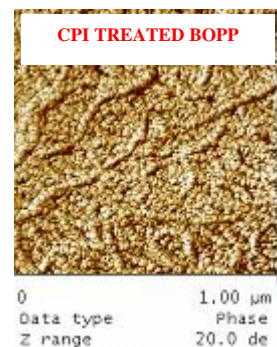
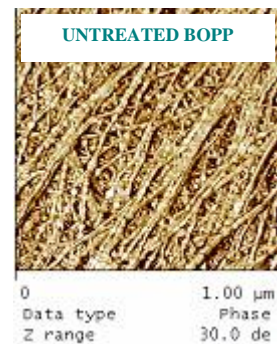
Flexible packaging suppliers and converters, get more value-added products, have access to new applications and penetrate new market sectors by using industrial surface treatments under atmospheric and low pressure cold plasma conditions.

Thanks to its high-tech manufacturing equipments, CPI will ensure your product and market requirements at very competitive costs compared to standard treatments.

CPI PRODUCTS

- **A large panel of surface treatments**
 - ✓ Increase of surface energy
 - ✓ Permanent modification of surface wettability
 - ✓ Improvement of bio-compatibility properties
 - ✓ Barrier coatings
 - ✓ Anti-fog coatings
 - ✓ Surface functionality
- **All type of substrates, 2- and 3-dimensional**
 - ✓ Plastics and bio-polymers
 - ✓ Metals
 - ✓ Ceramics
 - ✓ Glasses
 - ✓ Flat films
 - ✓ Products with complex geometry
 - ✓ Powders
- **Competitiveness based on technological knowledge**
 - ✓ New processes developed by our engineering team
 - ✓ Efficiency of treatment controlled by specific tests (standard tests methods)
 - ✓ Preferential partnership with Biophy Research for surface analyses

Morphology evolution of APP CPI treated BOPP AFM analyses



Chemical surface evolution of APP treated BOPP – XPS analyses

CUSTOMERS SERVICES

- *Supplying of manufactured products*
- *Custom applications under industrial subcontract*

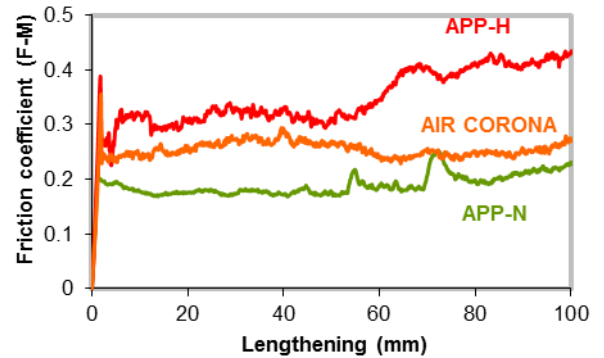


ATMOSPHERIC PLASMA PRESSURE PROCESS (APP)

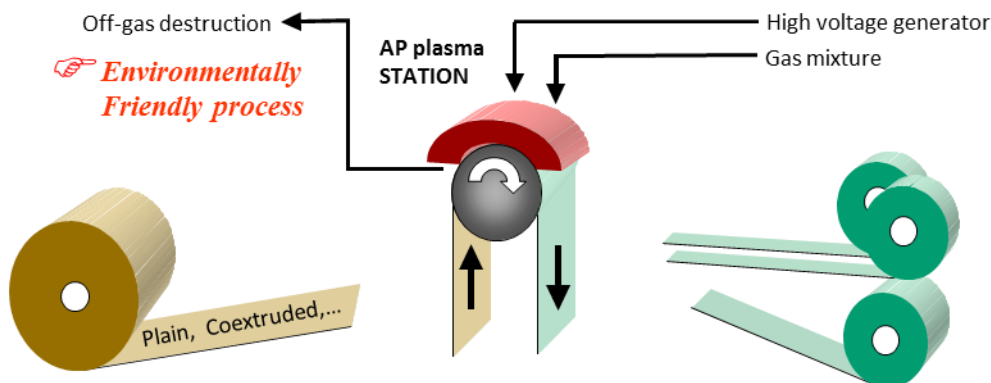
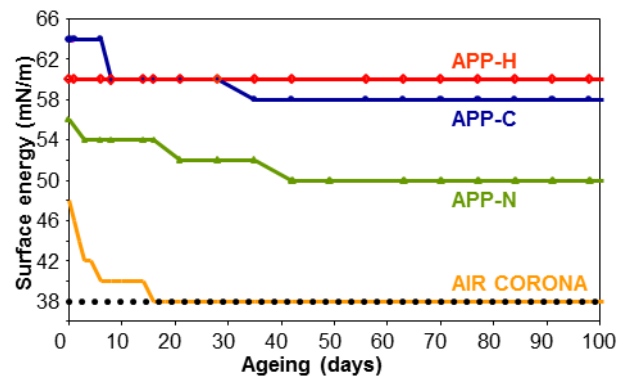
CPI provides modifications of polymer surfaces using an Atmospheric Pressure Plasma process. This chemical functionality grafting process is particularly suitable for flexible packaging and other plastic film converting industries :

- **On a large range of substrates**
 - ✓ Polymer films and non wovens (BOPP, PP cast, PE, PA, PET or PVC), papers and metals (Al)
 - ✓ Any width up to 2.0 m
- **With exclusive surface performances**
 - ✓ High level and stable surface energy
 - ✓ High level and permanent wettability
 - ✓ Adjustable coefficient of friction
 - ✓ Anti-blocking effect
- **Allowing exceptional advantages**
 - ✓ Suppression of adhesion primers
 - ✓ Printing with all types of inks (water-based, solvent-based, UV curable)
 - ✓ Improve adhesion of laminate, metallized, and varnished films

Coefficient of friction modulation of BOPP after APP CPI treatment (film / metal COF)



Surface energy evolution of BOPP after APP CPI treatment



CPI Treated film according to the customer requests

Adjustable dimensions

- Width.....200 - 2000 mm
- Core diam.76 / 152 mm
- Outer diam.≤800 mm

New surface properties without any primer addition

- Printable film with all type of ink (water, solvent, UV)
- Improvement of adhesion quality
- Adjustable friction coefficient

A HIGH QUALITY FILM AT A VERY COMPETITIVE COST