



# PRE-COATING: SEALING FUNCTION

## PRESENTATION

The sealing function is often both complex and costly to obtain in mechanical assemblies. The pre-coating of fasteners makes it possible to ensure a completely reliable, easy-to-use seal with no installation costs.

The product we apply to your parts is dry, non-sticky and completely localized.

During assembly, whether by screwing, press fitting or crimping, fills in spaces in the assembly to ensure an immediate sealing.

A variety of fluids can be sealed using the pre-coating technique:

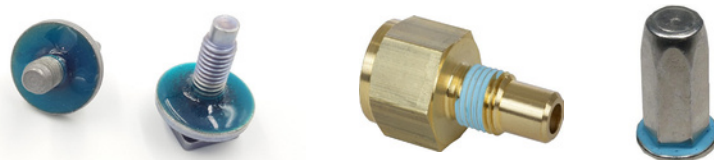
- Compressed air and gas
- Oils and hydrocarbons
- Cooling liquids and brake liquid
- Water for spraying or immersion



## BENEFITS

- Elimination of costs for workshop or construction site assembly
- Replaces O-rings or flat seals as well as difficult to-apply pastes and liquid resins.
- Perfect seal: 100% sealing with no leakage.
- Flawless quality: the sealing system is guaranteed and visible
- Immediate sealing after assembly, up to 50 bars for certain assemblies.
- High admissible pressures
- Sealing level of up to IP67
- Control of technical parameters
- High resistance to chemicals
- Works on all types of metal as well as on plastic parts





# #1 UNDER-HEADS SEALING OF SCREWS & CRIMPED PARTS

Pre-coating involves applying a bead of product under the heads of screws for an immediate seal following assembly. Their re-use depends on the shape and profile of the interface.

## Sealing of screwed parts :

- M2 to M4 electronics screws
- Screws for plastic
- Standard screws
- Threaded plugs

## Sealing of crimped parts :

- Blind rivet nuts
- Clinch studs
- Small head rivet nuts



## PERFORMANCES :

- Tension is maintained in screwed assemblies as the metal-to-metal contact is maintained.
- Compact sealing function design
- No added parts (washers, paste, etc.)
- Streamlined industrial process: automatic assembly using a vibrating bowl, etc.
- A lower overall cost than traditional solutions



# #2 SEALING OF THREADED PARTS

## APPLICATIONS :

- Screws, axis, studs
- Stoppers and connectors for fluids
- Sensor and contactor plugs
- Special parts

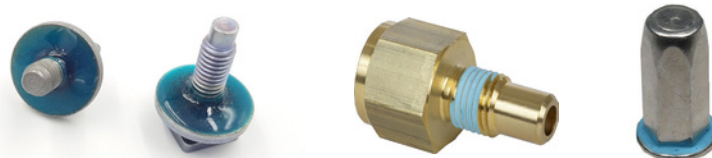


Pre-coated parts can be used for a variety of applications including electronics, automobiles, motorcycles, household appliances, electric motors...

## PERFORMANCES :

- A more effective substitute for flat seals and O-rings
- Prevents loss of clamping force due to vibration
- Simplified industrialization in air, water or oil circuits
- Good heat and chemical resistance





## #3 SEALING OF TUBES & SOCKETED PARTS



Soprima has developed special expertise in the pre-coating of socketed parts.

Our pre-coating technique for tubes, axis and other smooth parts offers superior technical performance and substantial savings in a variety of sectors.

### APPLICATIONS :

- Pump outlet cannula and rigid pipes
- Press-fitted socketed smooth nozzles
- Grit removal plugs

This type of sealing is primarily used in the automotive sector to seal many engine components.

### PERFORMANCES :

- Robust sealing for automobile fluid circuits
- 0 ppm application quality on large series
- Replaces Banjo-type threaded connections
- Effective on aluminium, steel or stainless steel bar-turned tubing or seamless drawn tubing
- Replaces in-line bonded grit removal caps



## #4 SEALING COMBINED WITH LOCKING FUNCTION

Fasteners to be sealed can also be secured to prevent loosening by adding a locking product to the threading: a micro-encapsulated adhesive such as threadlock or polyamide resin for repositionable parts.

Under some conditions (fluid, pressure, assembly design), locking products can also provide the sealing function on the threading.

### CBLX M2X8 SCREW







## CHARACTERISTICS AND PRODUCTS

We offer a wide range of products to meet a wide variety of sealing needs.

Brand	Product	Color	Max use Temp.	On threaded parts	On smooth parts	Under head of threaded parts		Under head of crimped parts	
						Coun-Flat head head	ter-sund	Standard Thin head Head	
<b>ThreeBond</b>	TB 2353	White	150°C	✓	✓				
<b>precote</b>	Precote 5	Light Blue	160°C	✓	✓				✓
	Precote 15	White	200°C	✓					
	Precote 200	Dark Blue	100°C			✓		✓	
<b>NYLOK</b>	Nyseal	Green	66°C				✓		

\*Datasheet upon request



## QUALITY

Our sites are all ISO 9001 certified and our quality systems meet the specific requirements of the automotive and aeronautics industries.



## CERTIFICATIONS

Our products have been certified by a variety of automotive standards:

Renault CDC 39.02.010

PSA B14.12.35

Volvo STD 1262.2

Ford WX 201