

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 connectors
- 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.

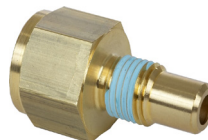
CBLX M2X8 SCREW

Sealing →



← Locking





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	
						Flat head	Counter-sund head	Standard head	Thin Head
ThreeBond	TB 2353	White	150°C	✓	✓				
precote	Precote 5	Light Blue	160°C	✓	✓				✓
	Precote 15	White	200°C	✓					
	Precote 200	Dark Blue	100°C			✓		✓	
NYLOK	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