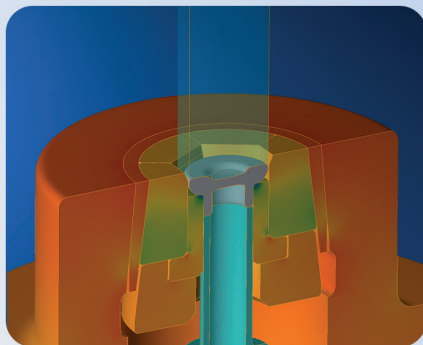


# INNOVATIVE SOLUTIONS

*The quality of solutions advances through innovation. That is why Ciser has an area exclusively dedicated to innovation, which develops fasteners according to market trends and novelties.*



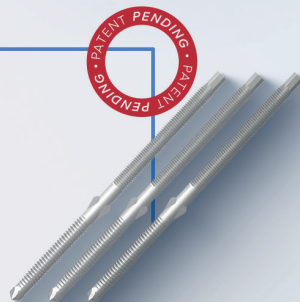
## PLAST ULTRA SCREW

Ideal for fastening on plastic substrates that are subjected to vibration. **It was developed to increase the anchoring between the fastener and the substrate after application, guaranteeing a minimum 20% increase in the torque necessary for removal.** The fastener is removable and can be re-applied without causing damage to substrates. Recommended use in washing machines, electric saws, pressure washers, lawn mowers, among other applications, especially when vibration levels are substantial.



## CARBON STEEL SOLAR HANGER BOLT WITH DRILL POINT

The rod is used with nuts and a sealing washer to fix the solar module support structure on the metal purlin and roofs with single trapezoidal and/or thermoacoustic shingles. The product offers increased tensile, bending, and shear strength, with one-time installation without the need for pre-drilling. Furthermore, the calibration wings significantly reduce the risks of leakage, ensuring a good fit of the sealing.



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# TECHNOLOGY THAT WITHSTANDS TIME

Nanotec consists of a top coat that contains, among other chemical compounds, **ceramic nanoparticles in its composition where corrosion resistance can reach up to 20 times more compared to other similar items**. It has excellent adhesion to the base coating, whether it is an electrolytic zinc, zinc alloy or organometallic.

## Nanotec Aluminium



**PATENT PENDING**

The Nanotec Aluminium coat relies on a combination of nanoparticles to minimize the accelerated galvanic corrosion of fasteners mounted on aluminium profiles and structures. **The result is increased longevity of the materials on which it can be applied.**

## NanoGeo



**PATENT PENDING**

Innovative and unique zink flake coating patented by Ciser, being suitable for hexagonal or slotted fasteners **offers greater surface hardness of the protective film in relation to other organometallic coatings on the market, mitigating failures due to coating peeling**. Furthermore, the coating prevents hydrogen embrittlement in high-strength items.

## NanolInox 410



**PATENT PENDING**

High-tech transparent top coat composed of organo-ceramic nanomaterials and stainless steel microparticles for increased corrosion resistance for coated metal materials. **The coating ensures up to 1,500 hours of corrosion resistance in the Salt Spray test, surpassing the strength of 410 stainless steel by 70%.**

## Nanotec K



**PATENT PENDING**

The coating has a combination of nanoparticles that inhibits acid rain corrosion, **resisting 45 cycles in the Kesternich controlled test, in addition, of course, to the resistance to Salt Spray that is already a trademark of the Nanotec line**. The result is increased longevity in fasteners applied to metal roofs, for example.

