

COOPER STANDARD'S ARMORTUBE ENGINEERED METAL TUBE COATING PROVIDES SUPERIOR PROTECTION AGAINST ABRASION/CORROSION

As the automotive industry continues to move towards an electrified future, advancements to improve the robustness of legacy products will become a critical component of that transition. Current vehicles are staying on the road longer than ever before, and consumers purchasing a new vehicle today are expecting them to last just as long as the one they replaced.

As a global leader in fluid handling solutions and driven by our Mission to Be the First Choice of the Stakeholders We Serve, Cooper Standard recognizes the need for innovation for all vehicle architectures, regardless of their powertrain or propulsion systems.

Our research and engineering teams have developed a new, patent-pending solution for automotive metal tube coating which provides superior abrasion resistance and reduces the amount of secondary protective sleeving and/or jacketing used to protect metal tubing on a vehicle.

ArmorTube is a Polyamide (PA) based tube coating solution that provides superior abrasion resistance when compared to other traditional PA tube coating solutions. This coating technology meets all the standard tubing requirements used by major OEMs and provides the consistent corrosion performance of PA-coated tube while offering enhanced abrasion resistance.

The coating technology offers significant (up to 20x) the abrasion protection when compared to a traditional PA-coated tube and performs slightly better than a PA-coated tube with a secondary protection sleeve (such as a heat shrink sleeve) installed. This solution is manufactured with little-to-no impact on existing equipment and processes. The finished, coated tube is compatible with current PA-coated metal tube dimensions from our customers, which limits the need for new fittings or clips to accommodate the new coating.

ArmorTube is just one of the engineered tube coating solutions that Cooper Standard offers for both single-wall (fuel and vapor) and double-wall (brake) applications. When paired with our MagAlloy[®] base tube coating, Cooper Standard offers a wide range of solutions that meet or exceed the needs of our customers globally.

ArmorTube Features

- Superior abrasion and corrosion protection compared to existing Nycla[®] (Polyamide-coated) tubing
- Compatible with standard metal tube dimensions without custom clips or fittings
- 100% end-to-end tube protection coverage
- Manufactured using existing equipment and processes without additional tooling
- Lighter weight eliminating secondary protective sleeving and/or jacketing such as Polypropylene
- Further enhanced when paired with our MagAlloy[®] base coat technology

Cooper Standard is a leading global provider of fluid handling solutions. The Company plays a vital role in the once-in-a-generation evolution of the automotive industry that is creating innovative materials, technologies and solutions for a better tomorrow.

To learn more, please visit https://www.cooperstandard.com/products/Engineered_Tube_Coatings

<https://ir.cooperstandard.com/Cooper-Standards-ArmorTube-Engineered-Metal-Tube-Coating-Provides-Superior-Protection-Against-Abrasion-Corrosion>