

Rotor Blade Manufacturer to Apply Nano Hybrid Polyurethane Topcoat on All Products

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Beginning with April 2020 deliveries, Van Horn Aviation (VHA) customers may notice a matte finish on their main and tail rotor blades. VHA has begun applying a new nano hybrid polyurethane (NHP) topcoat to all of its main and tail rotor blade products.

Designed for aviation applications, the NHP topcoat uses a 3D nanoparticle structured chemical formula unlike any previous linear cross-link paint. The result is an extremely durable, flexible, and corrosion-resistant product that resists paint cracking and saltwater corrosion.

According to the paint manufacturer, the matte finish is rated at 7H pencil hardness while retaining flexibility. Undergoing ASTM 4000hr salt spray tests resulted in no rust or blisters. The product is also resistant to chemical corrosion, with an MEK (methyl ethyl ketone) resistance above 1500 double rubs in the ASTM D4752 solvent resistance rub test.

For operators, this new topcoat should eliminate paint cracking or peeling in most environments, and should significantly reduce erosion/corrosion in the harshest of environments. The NHP paint can be applied on top of existing paint to provide an extra layer of protection.

There is no extra upcharge for the new NHP topcoat to [VHA](#) customers receiving delivery of new blades or for paint warranty work. Customers who send their blades to Van Horn Repair for any other type of repair not associated with paint may opt to have the NHP topcoat applied for a small fee.

Read the [original article](#) on Vertical Magazine.