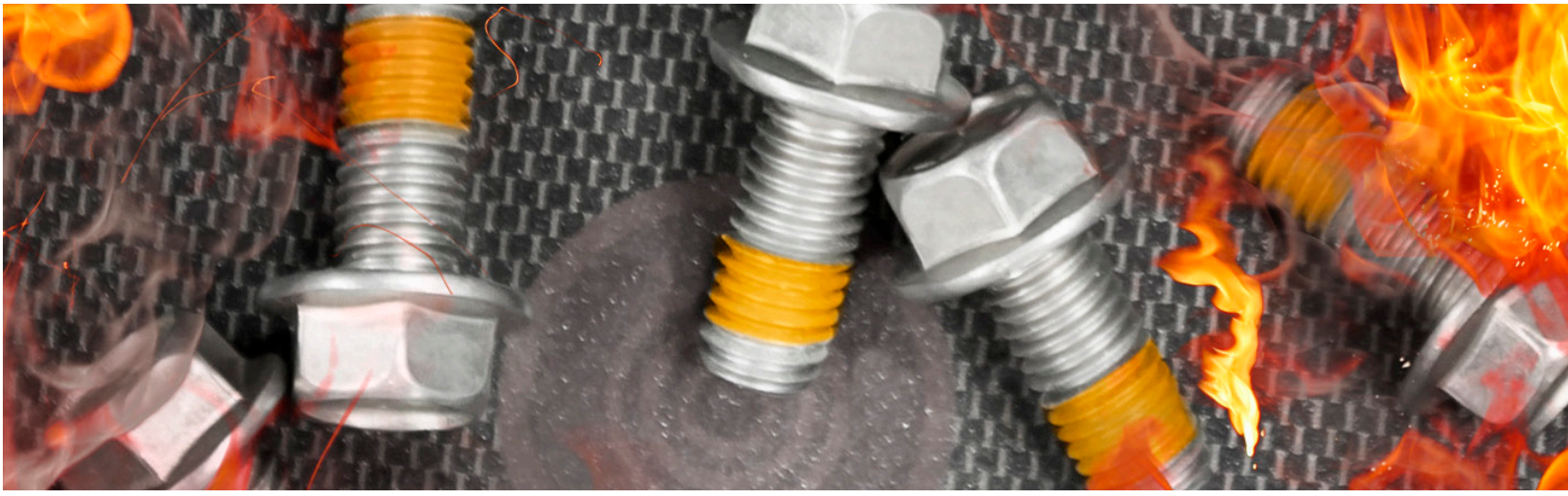
ND® INDUSTRIES

Advanced Fastening and Sealing Technologies

PRE-APPLIED

ND PATCH® HI-TEMP

ND Patch® Hi-Temp is a pre-applied process which fuses a custom high temperature nylon threadlocking coating to internal or external threads of fasteners making them self-locking and self-sealing. ND Patch Hi-Temp fasteners are dry to the touch and ready for immediate use and unlike reactive thread lockers, require no cure time after installation.



PRE-APPLIED PROCESS INFORMATION

How It Works

During the ND Patch Hi-Temp pre-applied process, fasteners are heated and sprayed with a custom nylon powder which adheres to the threads. During the heating process, the melted nylon formula crosslinks, causing it to strengthen. Once cooled, the material can then withstand higher temperatures then those at which it was melted.

When assembled with a mating part, the nylon patch is compressed. This compression creates a dam-like action on the opposite side of the coated fastener creating very strong metal-to-metal contact.

Hi-Temp Resistance

Applied fasteners maintains their torque performance through temperatures as low as -70°F (-56°C) and as high as +500°F (+260°C). ND Patch Hi-Temp is the highest temp nylon available.

Low-Temp Application

Unlike many other high temp nylon threadlockers, the ND Patch Hi-Temp process requires fasteners only be heated to 250°F during application. This reduces damage to the fastener and its finish.

Reuseable

ND Patch Hi-Temp pre-applied fasteners can be re-used repeatedly without damage to the threads. ND Patch Hi-Temp is particularly resistant to deformation, which makes it ideal for reuse.

Retains Full Strength

ND Patch Hi-Temp processing involves no drilling or milling, so there is no loss of the fastener's strength or hardness and no troublesome burrs or chips.

Chemical Resistant

The nylon used in ND Patch Hi-Temp will not dry, shrink, or otherwise be effected when exposed to commercial solvents, alcohol, gasoline, oil, caustic soda, jet fuel, etc.

Improved Sealing

Nylon is typically applied 90° which helps prevent gas and fluid leakage along the thread helix. However sealing functionality can be increased by completely coating the fastener 360°.

CONTACT US

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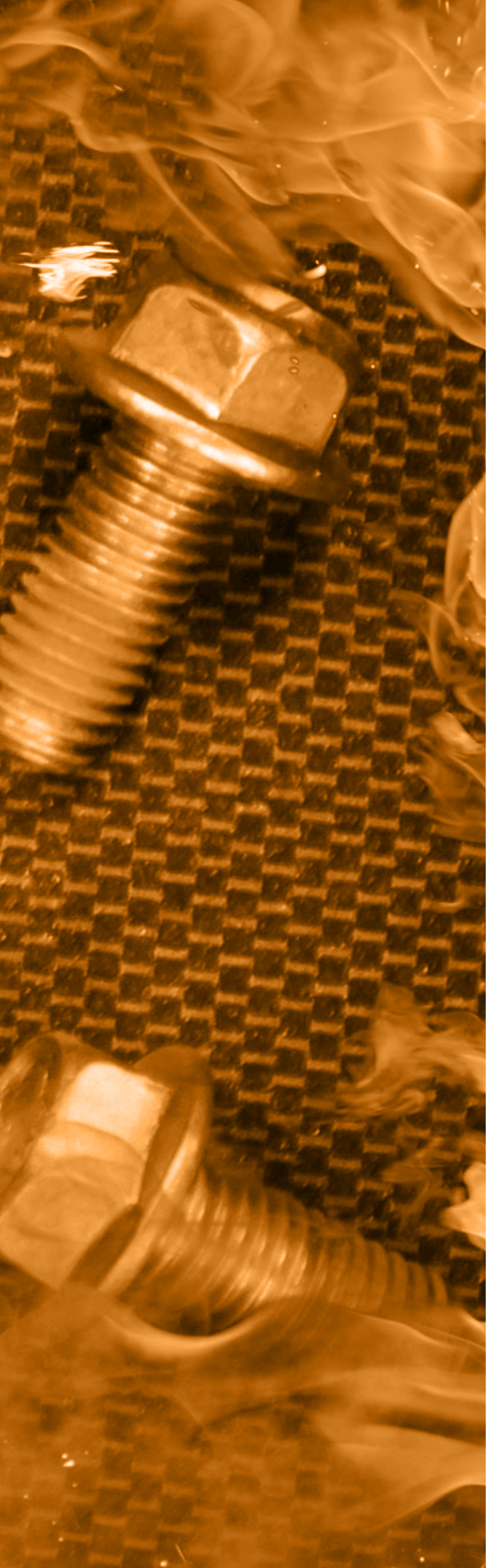
CERTIFICATIONS & ACCREDITATIONS
AS9100:2009, Rev. C • QPL-18240F • QSLM
ITAR • ISO-9001:2008 • ISO/IEC 17025:2005
CE Directive 2006/42/EC • ISO-14121
ISO-12110-1/12110-2 • IEC-EN 60204-1



PRE-APPLIED

ND PATCH® HI-TEMP

ND PATCH HI-TEMP APPLICATIONS

Engine Applications, Brakes, Rear-End, Transmissions, Areas of Vibration, Areas of Heat. Meets low outgassing NASA Spec ASTM E595.

APPROVED SPECIFICATIONS

Meets or exceeds the performance requirements of the following specifications and/or standards:
Chrysler: PF-5144, PF-5461, PF-6157, PF-6158
Ford: ES-382101-S100, ES-378813-S100, ES-N800688-S100, WA970, ES-21002-S100
General Motors: GM 6189P

PROCESSING NOTES

- Nylon is normally positioned one to three threads back from the end of the fastener to assure ease of starting.
- The normal coating length of the Patch is four to six threads. Special Patch location and coating length can be specified for specific applications.
- Indefinite on part life under ideal storage conditions [+40°F (+4°C) to +90°F (+32°C)], but re-certification must occur once a year.
- All fasteners should be from the same lot to insure consistent induction heating during the application process.

PROCESS BENEFITS

Saves Time: Pre-Applied ND Patch Hi-Temp fasteners can be automatically fed through standard feeding devices and require no cure time after installation.

Saves Money: Eliminates the need for costly lock washers, cotter pins, or castellated nuts. Moreover, ND Patch Hi-Temp is less expensive than applying bottled threadlockers at the point of assembly.

Quality Control: Pre-Applied parts are coated to specification, insuring consistent performance unlike bottled products. ND Patch application area and torque can be customized to meet specific needs.

In-Line Inspection: During the ND Patch Hi-Temp process, camera systems are used to verify parts are coated exactly to customer's specifications. This often removes a secondary sorting operation at the end customer.

PRE-APPLIED SERVICE

Step 1 - Process Selection: Our sales and R&D staff will help you find the right process to meet your performance specifications.

Step 2 - Shipping: Once a selection has been made, have your fasteners shipped to one of our worldwide processing centers.

Step 3 - Processing: Utilizing custom, high-speed equipment, we apply the necessary materials to your exact specification.

Step 4 - Delivery: Once processing is complete, parts are shipped back ready for distribution or assembly.