capricorn

INFO SHEET

CERAMIC 2000
Ni SiC Coating

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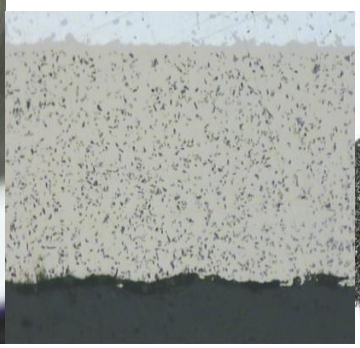
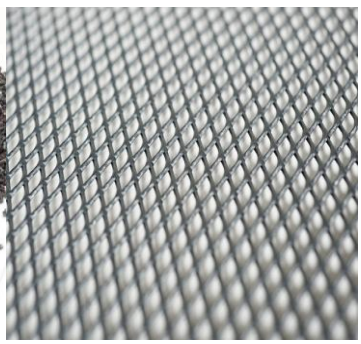
Specialist and precision surface treatments at
capricorn APPLIED TECHNOLOGY Ltd





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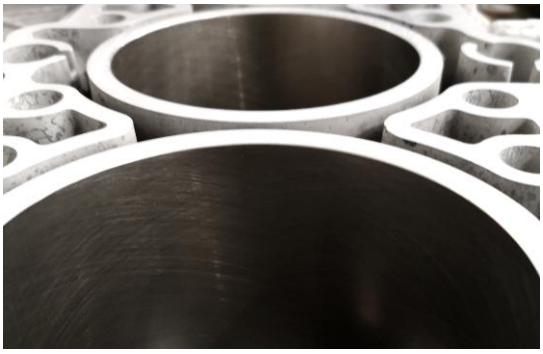
Why choose Nickel Ceramic?

Nickel Ceramic has a proven track record for durability. It has excellent wear resistance, improving component life and increasing performance. Due to it's oleophilic surface properties and our team of skilled honers, the finish we obtain reduces engine friction whilst maintaining all important bore lubrication.



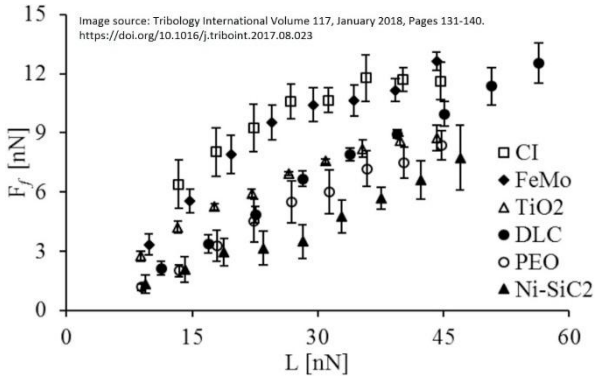
Nickel ceramic plating by capricorn

Our in-house nickel ceramic coatings are applied electrolytically from a nickel and silicon carbide solution, commonly known as nikasil® with surface pre-treatments that are specifically tailored to suit the substrate material that requires coating.

Maintaining the perfect hardness and SiC levels with extensive testing and measurement we ensure that our coatings provide the best wear performance possible. After in-house honing the typical coating thickness is between 70µm and 90µm, although we routinely coat +500µm.

All of our quality controls including plating use SPC analysis to maintain optimum performance characteristics. 100% bonding to the substrate is confirmed by regular destructive testing (cut tests) and are all carried out to AS9100 standards.

Our facilities allow us to plate cylinder liners and engine crankcases directly with our nickel ceramic depending on specifications from single cylinders right through to V12 engine configurations as well as our well proven process for the coating of rotary housings including those for use in UAV applications.



Research carried out by capricorn in conjunction with the Loughborough University, has proven that nickel ceramic has the lowest frictional properties when compared to other alternatives.

Units B & C Lutyens Industrial Centre, Bilton Road,
Basingstoke, Hampshire, RG24 8LJ, United Kingdom.
Telephone +44 (0)1256 365 800

www.capricornappliedtechnology.com