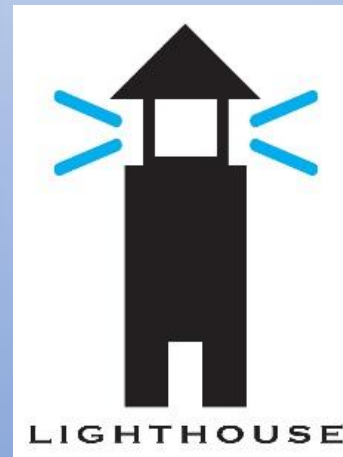
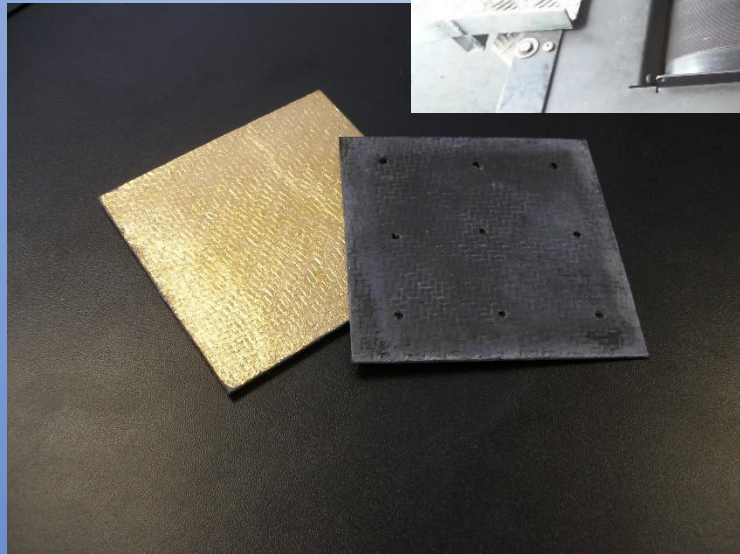


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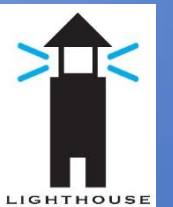
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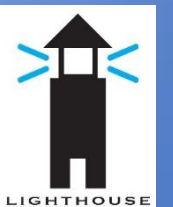


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Heat Resistant Materials

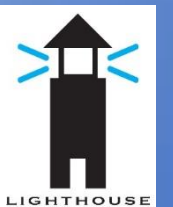
- Heat shielding
 - High temperature (up to 750°C) in moldable sheet material
 - Lightweight – densities as low as 0.98 Kg/m²
 - Complex shapes achievable using same techniques as conventional CFRP
 - Low temperature cure
 - In pilot production
- Lightweight and compact Exhaust Ducting
 - Exhaust piping at 0.88 Kg/m compared with 3.88 Kg/m
 - Bulky additional heat-shield not required to protect bodywork
 - Motorcycle silencers in prototype production



Lightweight Brake Disc Materials

- Low cost and targetted at mass market

- Aluminium based Brake Discs
 - Similar weight saving to Carbon-Ceramic discs but at much lower cost
 - Coated with a hard wearing ceramic
 - Low temperature cure
 - Undergoing vehicle and dynamometer tests
- Carbon based Brake Discs
 - Energy efficient and low cost production method
 - Weighs less than Carbon-Ceramic materials
 - Based on proven Carbon fibre/Alumina brake disc materials
 - Production method under development



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Lightweight materials for Automotive Applications

Contact Martin Murphy or John White at the Materials Innovation Showcase

