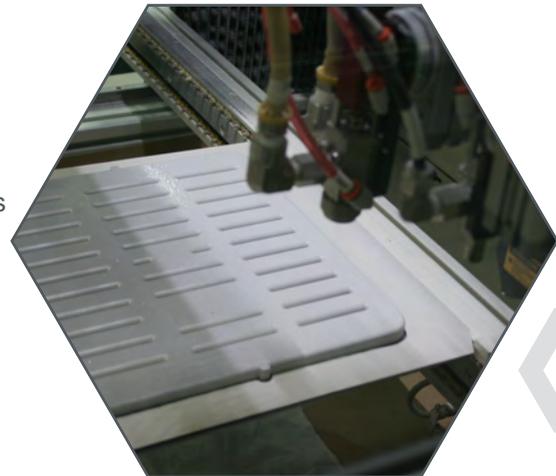


# Advanced **Coatings** for your Products or Applications

At Datec, we have an excellent track record of delivering and developing a wide-range of formulations to create coatings with unique and desirable properties including: dielectric, resistive, conductive, thermal barrier, thermal conductive, wear resistant, corrosion resistant, and non-stick properties for high performance applications.

## Partnerships

Datec's team of engineers, PhDs and application specialists has the experience and knowledge to develop coating solutions for your applications. We have collaborated with many Fortune 500 companies in the consumer goods, medical, industrial processing, automotive and aerospace industries.



## Unique process delivering superior results

Our low firing process allows our sol-gel and engineered coatings to be compatible with a variety of substrate materials such as aluminum, stainless steel, quartz, ceramic and tempered glass. The advantage of the unique application method gives chemical inert, corrosion resistant, UV stability and heat resistant properties to substrates which cannot be achieved with conventional coatings.

## Developing more than Coatings

Through our experience working with various coating applications, we recognized a need in the marketplace for superior thermal components. Datec decided to combine our unique coating formulations, thick-film heating materials and various substrates to design and develop two revolutionary heating components - IntegrAL® our aluminum-based heating element and mica-TF® our mica-based heater. At Datec, we are continually making significant technological advancements through expanding our proprietary processes, manufacturing ability and investment in R&D in order to develop coating and heating technologies to meet the changing needs of our customers.

## Standard Coatings Offering

Datec produces standard off-the-shelf high performance, high temperature, engineered polymer and ceramic coatings that fit into a variety of applications.

Polymer Coatings		Relevant Properties
High Performance, High Temperature, Engineered Polymers.	PEEK Coating	very good mechanical properties to 200C <sup>0</sup>
		excellent abrasion resistance
		very good chemical resistance
		very good dielectric strength   UL rated to 240C <sup>0</sup>
	Polymer Ceramic Composite Coating	very good mechanical properties to 200C <sup>0</sup>
		excellent dielectric strength   UL rated to 240C <sup>0</sup>
		excellent thermal conductivity
		excellent abrasion resistance
	PTFE Coating	excellent chemical resistance
		excellent dielectric strength
low abrasion resistance		
low mechanical properties at 200C <sup>0</sup>		
		excellent chemical resistance

Ceramic Coatings		Relevant Properties
High Performance, High Temperature, Engineered Ceramic Coatings	Alumina Dielectric Coating	high temperature stability to 600C <sup>0</sup>
		superior hardness
		excellent dielectric strength
		low processing temperature
		can be applied to many substrates including Al alloys
	Silica/Zirconia Corrosion Resistant Coating Composite Coating	high temperature stability >800C <sup>0</sup>
		excellent chemical resistance
		high temperature corrosion resistance to 800C <sup>0</sup>
		superior hardness; high compressive strength
		low processing temperature
	Zirconia Thermal Barrier Coating	can be applied to many substrates including Al alloys
		temperature stability to >1000C <sup>0</sup>
		very low thermal conductivity
		low processing temperature
	Non-Stick Tungsten Carbide Coating	can be applied to many substrates including Al alloys
		thermal stability to 250C <sup>0</sup>
high lubricity and low coefficient of friction		
tough and wear resistant		
		low processing temperature
		can be applied to many substrates including Al alloys

## Custom Coatings

If your application requires a custom coating, Datec has the solution. Our experienced team has both the knowledge and expertise to develop a coating to help advance your product or project. Whether it is a standard or custom coating, Datec is the ideal partner to deliver the technology you require for your specific application.

For more information on our coatings, please contact Datec today!

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