## **Overview of coating solutions**

Coating property	Can be applied to these materials	Examples of use	Benefits
Easy release / repellent	<ul> <li>Metals</li> <li>Many types of plastic</li> </ul>	<ul> <li>Process equipment</li> <li>Heat exchangers</li> <li>Tubes</li> <li>Pumps</li> </ul>	<ul> <li>Minimizes cleaning in processes where deposition and clogging is a challenge</li> <li>Treatment of heat exchangers for antifouling provides longer, safer and more stable use</li> </ul>
Hydrophobic / oliophobic	<ul> <li>Metals</li> <li>Many types of plastic</li> </ul>	<ul> <li>Process equipment</li> <li>Heat exchangers</li> <li>Tubes</li> <li>Pumps</li> <li>Food contact surfaces</li> </ul>	<ul> <li>Efficient oil / water separation in sperators</li> <li>Minimizes cleaning in processes where deposition and clogging is a challenge</li> </ul>
Anti-ice	<ul><li>Metals</li><li>Some types of plastic</li></ul>	<ul> <li>Air conditioning systems</li> <li>Refrigeration units</li> <li>Crystallizers</li> </ul>	<ul> <li>Minimizes the need for defrosting</li> <li>Ultra-low adhesion of ice on surfaces</li> <li>Keeps heat exchangers free of ice</li> </ul>
Flame retardent	<ul><li>Fabric materials</li><li>Fiber materials</li></ul>	<ul> <li>Consumer products</li> <li>Products exposed to open flame or risk of sparks</li> </ul>	<ul><li>Minimizes the likelihood of fire</li><li>Withstands high temperatures</li></ul>
Electrically insulating	<ul><li>Metals</li><li>Some types of plastic</li></ul>	<ul> <li>Engines</li> <li>Conveyor belts</li> <li>Printed circuit boards</li> </ul>	<ul> <li>Prevents electric shock</li> <li>Prevents the build-up of static electricity</li> </ul>
Fluoropolymer replacement	<ul><li>Metals</li><li>Some types of plastic</li><li>Fiber materials</li></ul>	<ul> <li>Process equipment</li> <li>Tubes</li> <li>Pumps</li> <li>Consumer products</li> </ul>	<ul> <li>Has the same repellent properties and good adhesion as fluorine-containing products - without the use of harmful substances</li> </ul>
Scratch resistant	<ul> <li>Metals</li> <li>Most types of plastic</li> <li>Glass and transparent plastic</li> </ul>	<ul><li>Process equipment</li><li>Consumer products</li></ul>	<ul> <li>Reduces scratches</li> <li>Protects the surface</li> <li>Extends lifespan</li> </ul>

The above coatings are our 'standard range' that we can adapt to your needs. If you need properties that are not listed here, you are welcome to contact us - and we will see if we can find a solution.

## Jens Røberg Frandsen

Senior Project Manager Mail: jrf@teknologisk.dk Phone: +45 72 20 11 13



DANISH TECHNOLOGICAL INSTITUTE