

Decoding coatings, with Giardina

WoodNews recently visited the new Experience Centre of Giardina Finishing. Excerpts from a conversation with Vinit Bhatia, CEO of Giardina India and Vinpack Systems:



The 42,000-square-foot Experience Centre in Bengaluru has spray lines, roller coating lines, complete finishing solutions and logistics systems, for customers to see and experience.

Wood is a highly versatile and renewable material that has been used for centuries in a wide variety of applications. From furniture to flooring, from construction to decorative objects, wood offers a natural and aesthetic appeal that cannot be matched by other materials.

However, wood is also susceptible to degradation due to exposure to various environmental factors such as moisture, sunlight and temperature fluctuations. To mitigate these effects, wood

coatings have been developed that not only protect the wood but also enhance its appearance and durability.

PU paint

Polyurethane (PU) paint is a type of coating used in a variety of applications, including automobiles, furniture and industrial equipment. PU paint is known for its durability, chemical resistance, and ability to provide a glossy, smooth finish.

The process of applying PU paint typically involves several steps, including surface preparation, mixing and application of the paint, and curing.

The process of applying PU paint involves several critical steps, including surface preparation, mixing and application of the paint, and curing. Proper surface preparation is essential for ensuring proper adhesion of the paint and a smooth, even finish.

Mixing and application of the paint must be done carefully to ensure proper coverage and adhesion, and the paint must be allowed to cure properly for maximum hardness and durability.

By following these steps, it is possible to achieve a high-quality finish with PU paint that will provide long-lasting protection and enhance the appearance of the painted object.

Water-based coatings

Unlike traditional solvent-based coatings, water-based coatings are formulated with water as the primary solvent, making them a more environment-friendly option. Water-based wood coatings are a type of coating that is designed to protect and enhance the appearance of wooden surfaces.

Water-based coatings are available in a variety of formulations, including lacquers, varnishes, stains and paints. They are commonly used for finishing furniture, flooring, cabinetry and other wooden surfaces in both residential and commercial settings.

One of the main advantages of

The finishing lines for assembled frames are developed to finish doors, windows and modules hanging from an overhead conveyor. They can be designed with manual spray stations, automatic spray stations with reciprocators or vertical robots, flow coating and hot air drying systems, selected microwave ovens according to the characteristics of the product and the items to be processed.



water-based coatings is their low VOC (volatile organic compounds) content. VOCs are harmful chemicals that are released into the air as the coating dries, which can be harmful to both human health and the environment.

By using water as the primary solvent, water-based coatings significantly reduce the amount of VOCs released into the air during the coating process. They also have a lower odour, making them a more pleasant option for indoor applications.

Water-based coatings also offer excellent adhesion and durability, making them suitable for use in high-traffic areas. They are resistant to scratches, stains and other types of damage, which helps to prolong the life of the coated surface.

Water-based coatings also offer excellent ultra-violet (UV) ray resistance, which helps to prevent fading and discolouration over time.

Acrylic-based coatings

Acrylic-based wood coatings are available in a variety of formulations, including paints, stains and clear coatings. They are commonly used for finishing furniture, flooring, cabinetry and other wooden surfaces in both residential and commercial settings.

One of the main advantages of acrylic wood-based coatings is their excellent adhesion and durability. Acrylic resins have a strong affinity for wood surfaces, which allows them to form a strong bond and provides excellent protection against scratches, stains and other types of damage.

They also have excellent resistance to UV light, which helps to prevent fading and discolouration over time.

Acrylic-based wood coatings also offer several other advantages over traditional solvent-based coatings. They have a low VOC (volatile organic compounds) content, which makes them a more environment-friendly option. They also

have a lower odour than solvent-based coatings, which makes them a more pleasant option for indoor applications.

UV-based coatings

UV-based wood coatings are a type of coating that is cured using ultra-violet light. These coatings are designed to protect and enhance the appearance of wooden surfaces, while also providing excellent durability and resistance to scratches, stains and other types of damage.

One of the main advantages of UV-based wood coatings is their quick curing time. Unlike traditional solvent-based coatings, which may require several hours or even days to cure, UV-based coatings can be cured in a matter of minutes. This reduces the amount of time required for the coating process and allows for faster production times.

UV-based coatings also offer excellent adhesion and durability, making them suitable for use in high-traffic areas. They are resistant to scratches, stains and other



Giardina Finishing is often referred to as 'the Ferrari' of coating, alluding to its ability to come up with tailored-made solutions, specific for each customer.

– Vinit Bhatia, CEO, Giardina India