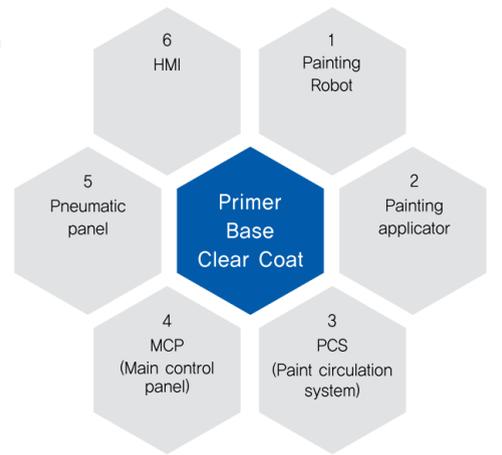


Doolim Painting Robot System

System Composition



Automobile Painting

Exterior Painting This process is the last affecting the aesthetics of the automobiles, such as colors, gloss, smoothness, and hatch and maintains durability by protecting the colors from external conditions, including ultraviolet rays, oxygen, water, and heat.

Through three step process of primer coat, base coat and clear coat, we deliver the most beautiful color and the best quality painting for the automobile body.

- Primer Coat : The primer coat is the first coat of paint applied. It protects the bumper surface and enhances the properties of the base coat.
- Base Coat : The base coat is applied over the primer coat and determines the visual properties of the automobile, such as color.
- Clear Coat : The clear coat is a layer of clear paint applied over the base coat to protect the paint and create a glossy, transparent coating.

Interior Painting This is the process by which the robot applies paint to several areas of inside automobile bodies, including the inside door, hood, engine, tailgate, and trunk.

Inside panel painting requires an opener robot to open doors and the hood and tailgate as well as Tracking Rail and painting robot

Automobile Parts Painting

Automobile parts painting including bumper, rearview mirror, garnish, inside panel and wheels.

Like automobile painting, through three step process of primer coat, base coat and clear coat, we deliver the best quality painting for the automobile parts. In particular, we apply flame plasma treatment, the pre-treatment process, to improve adhesive performance for plastic painting.

Home Appliances and General Industrial Products

Our painting system is optimized to realize the best colors and gloss for industrial products and home appliances including forklifts, elevators, motorcycles, televisions, air conditioners and smart phones.



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Color Your Dream

Doolim Robotics is always dreaming of something greater.
 With our own unique and unrivaled identity,
 we hope to bring more hope and happiness to the daily lives of as many people as possible.
 This is why we are making such great effort to become the "best".
 People and products, people and people, and time and space
 The dream of Doolim Robotics is to become the world's top company in our field by breaking through boundaries,
 and you are at the heart of our dream to make our lives more joyful and prosperous.

Painting Robot System
 Doolim painting robot system that dreams to be the World's best beyond Korea with more than twenty years of experiences and know-how. We will improve customer values through the best quality technology and facility.



Painting Robot System

Doolim Painting Robot System

Painting robot system is applied not only for the automotive industry but also various areas including bumpers and home appliances, and can be used for substrate protection, exterior improvement and special function processing. Since regulations on the emission of volatile organic compounds have been strengthened, the demand for water-based primer has increased considerably. Therefore, Doolim Robotics established a water-based painting system in 2005, the first of its kind in Korea, and now possesses top-notch expertise and solutions regarding both water-borne and solvent-borne painting.

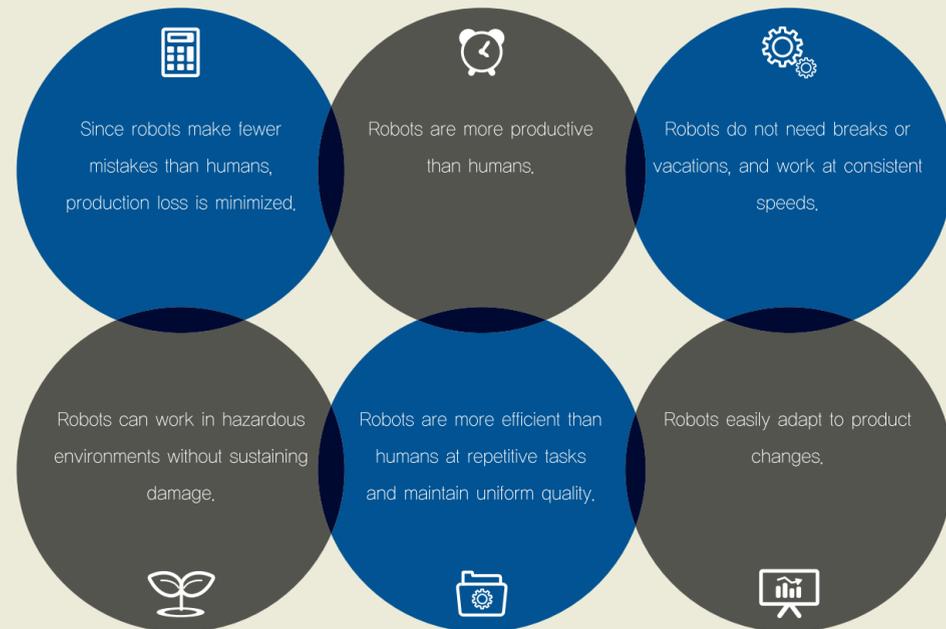
Exterior Painting



Interior Painting



Advantages of the Robotic Painting System



Why should it be Doolim's robotic painting system?

Painting Robot Doolim's Painting robotic system can be integrated to automated system to reduce operating costs dramatically. Wall mounting types can utilize workspace efficiently to secure wide range of painting, and floor fixed types can be installed very quickly and guarantee stable operation. Since both can be installed to Tracking Rail and operated with seven axis, they can configure various painting processes to meet customers' production methods.

Painting Applicator Painting quality is heavily dependent on painting applicators. Doolim Robotics is equipped with painting applicators of various sizes and functions suited for the characteristics of the paint and the objects. Therefore, we can provide ideal production process with low production costs and high quality products.

Paint Circulation System Doolim Robotics has the technology to integrate painting applicators and robots with its own paint circulation solution. With the technology and experiences accumulated from the period of painting automation company, we can build more sophisticated paint circulation system by providing constant amount feed device and position adjustment device.

Tracking Rail Painting process requires explosion-proof equipment. That is because volatile paint and dust might cause fire when contacted to the flames from the internal machinery. Doolim Robotics is the only company in Korea who can design explosion-proof Tracking Rail on its own and provide it with robots. Doolim Robotics can change the design of explosion-proof Tracking Rail according to the customer's request for the length and width adjustment. In addition, it is designed to keep the productivity with fewer robots through smooth synchronization with robots.



Point 1.

Korea's only painting test lab facility

The dedicated robot test lab is equipped with various robotics painting equipments along with automated guided vehicle and opener robot. Therefore, the quality of painting can be tested in an environment which is extremely similar to the actual painting environment of the customer. Moreover, it's equipped with unique bell test unit, being able to distinguish the difference in painting quality per atomizer

Point 2.

Achievement of 90 Percent of Surface Tension Value through Flame Plasma Treatment System

Doolim Robotics' flame plasma treatment, which is applied to the pre-treatment step of bumper painting, improves the quality of Primer & Top coats by altering the surface properties of plastic parts for automobiles, such as bumpers and garnish. Doolim Robotics has the capability to perfectly control four main factors in flame plasma treatment system in order to create the surface tension customers want. Four main factors are an oxygen analysis device that accurately measures the air to gas ratio of the burning flame, maintenance of a constant distance between the flame and the product at all times, achievement of 90 percent of the desired surface tension through plasma treatment time, and control of the mixed gas combustion speed and the flame size.

Point 3.

Three Coat to Achieve Painting Perfection

Since the regulations on the emission of volatile organic compounds have been strengthened, the demand for water-based primer coat has increased considerably. Therefore, Doolim Robotics built a water-based painting system in 2005, the first of its kind in Korea, and now possesses top level expertise and solutions regarding both water-and oil-based painting. Through this, Doolim Robotics has accumulated the necessary solutions for the base coat that has the greatest impact on the esthetic aspect, and also has the best clear coat technology throughout its years of experience and numerous tests to ensure durability of the finished products.