2-WHEELER PAINTING
COMPLETE SOLUTIONS FROM A SINGLE SOURCE
Well-operating paint shops are increasingly relying on improved connectivity and big data analytics. digital@DÜRR bundles all our initiatives and developments in Industrial IoT (IIoT). Production Intelligence based on smart products, smart processes, and smart services ultimately results in smart factories.

With a focus on efficiency in the painting process, Dürr delivers plants from planning to implementation for all degrees of automation. Professional project management ensures successful implementation on site, on budget, and on scope.

Our portfolio covers equipment for all production stages of a complete paint line:
» Pretreatment and electrocoating
» Paint supply
» Spray booths
» Paint robots and application technology
» Ovens
» Conveyors
» Air pollution control systems
» MES and production intelligence
» etc.
Quality products are only one stone in the complex mosaic of a paint shop. At Dürr, our focus lies on improving the efficiency over the entire process chain and plant. Apart from leading-edge products and smart IIoT developments, savings in paint, energy, space or material are achieved through professional layouts which take into account all major considerations and more in-depth hypotheses right from the beginning.

During the planning and engineering phase, customer-oriented solutions can be developed to answer individual requirements and to consider different ways of implementation to ultimately define the best one.

Well-structured project execution addresses all aspects of infrastructure, logistics, legal regulations, or customs to ensure successful implementation anywhere in the world.
2-WHEELER PAINTING

Pretreatment and electrocoating
The process begins with the surface clean-up from upstream manufacturing processes and continues with etching. This prepares the surface for a chrome-free chemical conversion and leads together with the electrocoating process to extremely high corrosion resistance. To specially protect the conveyor chains and tracks from aggressive vapors, Dürr provides gooseneck-shaped hooks as standard for water sealing.

Paint mix room
In the paint mix room – specifically for solvent-borne, waterborne and corrosion protection paint – the paints are optimally prepared for the application of various layers. From simple manual processing to fully automatic systems for homogeneous mixing ratios and simple handling – Dürr offers paint supply systems for high runner colors as well as special color supply systems (EcoSupply P). For all these purposes we utilize our own product range of pumps, color changers and regulators.

Robots and control
The 2-wheeler industry has seen a growing need for fully automated paint systems. For paint application, Dürr offers robots developed and produced in-house. All process controls and safety devices for Dürr painting stations are supplied by modular switch cabinets. The modular construction enables optimal configuration of the EcoRP 10 R1100 robot and the bigger equivalent EcoRP L033 for respective application processes. Dürr control systems stand for maximum customer utility and set the standard worldwide.

Application technology
The painting process requires an extremely precise coat thickness and repeated accuracy. Dürr has developed a large and innovative range of equipment to guarantee perfect painting solutions. Dürr delivers application technology for solvent- and water-based one- and two-component paints. The systems also include the matching metering pumps, pressure regulators, and color changers. The painting systems can be equipped with automatic spray guns from the EcoGun series or with electrostatic high-speed rotary atomizers from the EcoBell series.
Overspray separation
With EcoVertijet and EcoDry X Dürr offers both wet and dry separation of overspray. EcoVertijet is extremely compact and requires limited excavation, while EcoDry X is the leading-edge technology for an energy-efficient process. Both systems allow a perfect process observation with full-face glass housing.

Ovens
Dürr uses welded oven panels which avoid any condensation leakage and allow easier cleaning. Heater boxes with indirect heating and double filtration lead to a higher-quality paint surface as they avoid yellowing and contamination. The heater boxes are easily accessed and maintained through independent platforms.

Conveyors
Dürr offers the entire range of floor and overhead conveyors according to regional and customer-specific preferences. In order to avoid overspray paint deposits, the conveyor system is split into separate loops. The transfer between each conveyor and the process downstream is performed by manipulators, i.e. robots or cranes fitted with multiple grippers.

Air pollution control systems
Exhaust air from 2-wheeler paint and drying processes is cleaned efficiently with Dürr’s Ecopure® technologies and systems. In the recuperative thermal oxidation (TAR) and regenerative thermal oxidation (RTO), the organic substances in exhaust gases are oxidized at high temperatures. For reducing spray booth exhaust flows, it is recommended to add the Ecopure® KPR, a VOC concentrator to the process.

COMPLETE SOLUTIONS FROM A SINGLE SOURCE
AUTOMATED PAINTING SOLUTIONS

With our innovative application technology, we help to make painting processes more efficient while increasing quality at the same time. Our systems perfectly fit the requirements of painting processes in general industries.

Perfectly coordinated: Automated painting sets

The EcoRP L033 is used for painting scopes at a body in the interior and exterior areas. This application is valid for all paint materials and application procedures, as for solvent-borne paints, water-based paints and powder paints currently known and under development. With its modular design and the combination of various arm concepts, the robot can be adjusted to the respective task and/or customer requirement.

» Complete application equipment and hose guiding integrated in the robot ensures minimum paint and solvent losses, short purging times and low soiling.
» Reduced complexity e.g. through simple sensor system.
» Worldwide solution concerning drive technology, controller as well as HMI.
» Degrade Mode for interior and exterior painting.

Our portfolio ranges from control units (EcoAUC), horizontal and vertical pumps (EcoHP, EcoVP), pressure sensors, pressure regulators (EcoFlow), and pressure valves through color changers (EcoMCC) and metering systems (EcoPump) to spray guns (EcoGun) and electrostatic paint atomizers (EcoBell). The components are available as single products or can be pre-configured for your painting task.

Homogenous and easy handling: Paint supply systems

With the increasing need for more numbers of paints in the 2-wheeler industry, the flexibility of piggable special color systems is indispensable.

Depending on the color consumption of individual paint colors, EcoSupply P is the best substitute to standard ring pipe systems. Using pigging technology, the paint is pushed by a pig through hoses without leaving any residue.

EcoSupply P – The efficient and flexible special paint system:
» Fully or semi automatic systems
» From 25 liter drums up to 500 liter units
» Only a few Paint Circulation Systems (ring pipe systems) necessary for high runner colors
» Less turn over in Paint Circulation Systems (ring pipe systems)
» No drawing off of low runner colors
» Less paint loss
» Less paint usage
» Less consumption of rinsing medium
» Shortest color change times
THE MOST EFFICIENT AIR POLLUTION CONTROL SYSTEMS

Painting processes can produce exhaust gases and odors that can harm the environment if not treated properly. These gases and odors must be removed from the exhaust stream before they are released into the atmosphere. Dürr offers the latest system technologies for air pollution control systems for 2-wheeler painting.

The Ecopure® TAR and Ecopure® RTO are based on the process of thermal oxidation and thereby offer the most efficient air purification process for the disposal of combustible organic pollutants. With these technologies, organic substances in process exhaust gases are oxidized at high temperatures to convert them into carbon dioxide and water vapor. The produced thermal energy can be used for other processes.

To make the treatment of large-volume and weakly laden waste airstreams economical, Dürr offers the Ecopure® KPR concentrator. This system is a continuous adsorption process with a downstream oxidation stage, either thermal or catalytic. The adsorption is a physical process for accretion of gaseous pollutant molecules on an active surface, such as zeolites or activated carbon.

SERVICES & SOLUTIONS

Dürr’s customer service offers support around the world.

With 65 service sites in 28 countries, Dürr is always on-site to help to reduce production costs, increase plant availability and guarantee rapid technical support. Whether you are dealing with an emergency or planning or implementing a revamp project – we are available.

Our service at your demand

» Ramp-up and launch management
» Modifications and upgrades
» Engineering with experience
» Spare parts service
» Inspection and maintenance
» Service locations all over the world
Dürr – Leading in Production Efficiency

Five divisions, one goal: maximum production efficiency for our customers

» **Paint and Final Assembly Systems:** paint shops and final assembly systems for the automotive industry
» **Application Technology:** robot technologies for the automatic application of paint as well as sealants and adhesives
» **Clean Technology Systems:** exhaust-air purification systems and energy-efficiency technology
» **Measuring and Process Systems:** balancing systems as well as assembly, testing and filling technology
» **Woodworking Machinery and Systems:** machinery and systems for the woodworking industry