

Ecopaint WetSystem

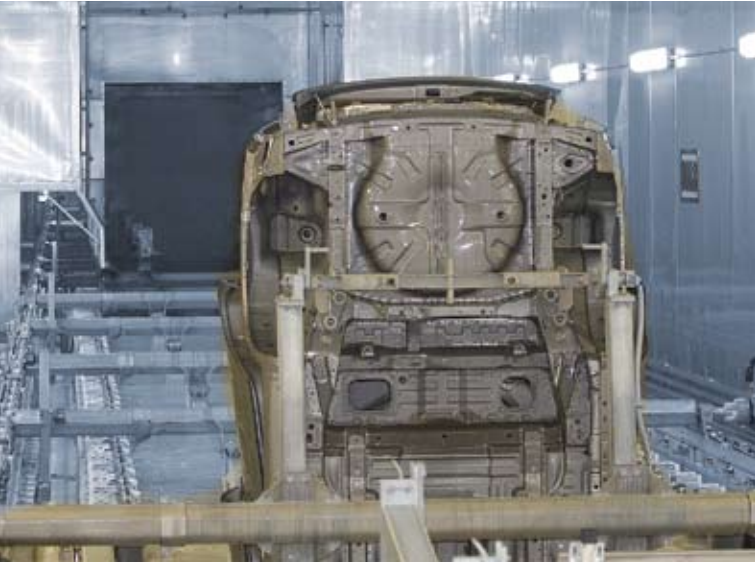


Optimal vehicle preparation for value



Technologies · Systems · Solutions

Ecopaint WetSystem



Optimal preparation of your vehicle body

We are living in the age of the surface: increasingly durable finishes, finer paints, value retentive and corrosion protected surfaces are wrapped around products and vehicles protecting them and lending them status and appeal.

Surface quality is indicative of the quality of the product as a whole enhancing the interior and adding value. It becomes synonymous with value, with value in and of itself. It defines the market and opens up markets, ever larger markets. ■■■■■■

Dürr delivers the key to surface quality:

We plan, deliver and install turnkey paint shops. At the same time we work our way deep into your complex process environment to implement an individual solution. The **Ecopaint** brand name carried by our products and plants stands for innovation and maximum customer value. Dürr guarantees highest quality and lowest costs per unit throughout the entire process: from pretreatment and curing right through to painting. ■■■■■■

We are committed to ensuring your body-in-white is excellently pretreated:

Ecopaint WetSystem is the modular wet treatment system, ideally uniting all components and modules, via integrative interfaces, to form complete systems that assure:

- highest quality
- minimum costs per unit and
- resource conserving and energy saving operation

By using this product you gain much more than the product alone. As a leading technology developer we offer you:

- in-depth process know-how
- many years of experience and
- a global presence

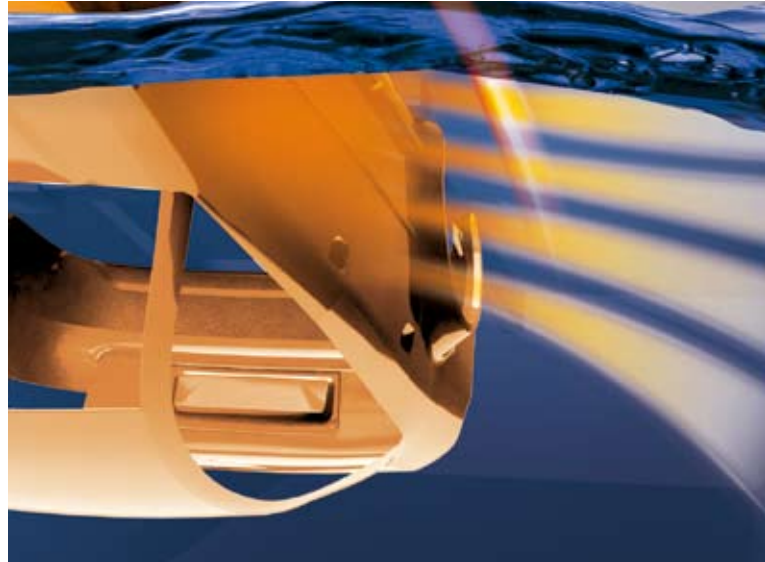


System and Process Competence

Dürr plans, implements and modernizes complete painting systems. **EcopaintWetSystem** is our modular wet treatment system to provide perfect corrosion protection for your vehicle body – so that your product is recognized for its quality and value.

Our extensive know-how of processes and methods equips your installation with continually enhanced systems, and thus secures the technological edge you require. From pump systems and conveyors right through to paint plant technology we integrate your requirements and prerequisites within a complete system. With our equipment for cleaning, pretreatment and cathodic dip coating we respond quickly with customized systems to suit your requirements in terms of cost per unit, capacity and quality.

And we take this even further: as our products are easy to maintain, offer high uptime reliability and reduce the amount of paint repair work required, you are able to hit your targets faster. You save energy, water, chemicals and ED paint thanks to integrated recycling systems that conserve resources and are environmentally compatible.



Throughout the entire cleaning, pretreatment and ED process we make sure that all components combine to form a well-harmonized system. We have the knowledge and expertise to handle interfaces and our processes are absolutely reliable thanks to standardized components and parts that we design, integrate and implement ourselves.

These components include:

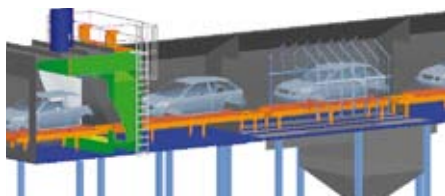
- Dip tanks and spray system tanks
- Modular tunnel segments with integrated spray systems
- Filter systems for bath management
- Pump, filter and heat exchanger assemblies
- Ultra filtration plants for paint and oil as well as
- Standardized dialysis cells;

and all of these, and the conveyor systems, are perfectly coordinated to suit capacity requirements.

Quality that creates value

Quality from the start – *Ecopaint Bodywasher*

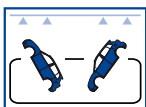
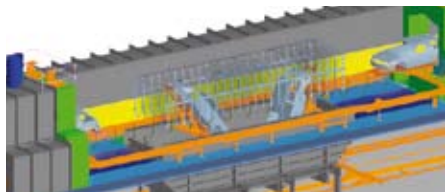
In the body shop the **Ecopaint Bodywasher** is utilized to clean all surfaces and cavities of each vehicle body, thus ensuring the high quality of the whole of the subsequent process: ingress of dirt into the pretreatment process is almost completely prevented. During the audit procedure that follows, it is then possible to recognize and correct body-in-white flaws at an early stage. ■■■■■■



Straight

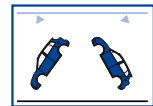
Our product portfolio in detail:

EcoStraightWash, convinces because of its straight-forward design and ensures that external surfaces are thoroughly cleaned.



360° rotation

The **EcoPowerWash** system is equipped with our RoDip technology which during its 360° rotation ensures the vehicle body is completely flooded and thus achieves maximum cleaning efficiency. The nozzle system can be flexibly adjusted to meet the requirements of specific models.




Tilt

EcoTiltWash comes with integrated conveyor technology on a roller bed basis and tilts the car bodies during cleaning. Body drainage is optimized and special nozzles reinforce cavity cleaning efficiency.



Chemical pretreatment – for optimum paint application

EcopaintWetSystem offers customized dip or spray processes tailored to your pretreatment requirements. The result – a clean surface free from residual dirt and grease – is the best possible basis for the following stages in the coating process.

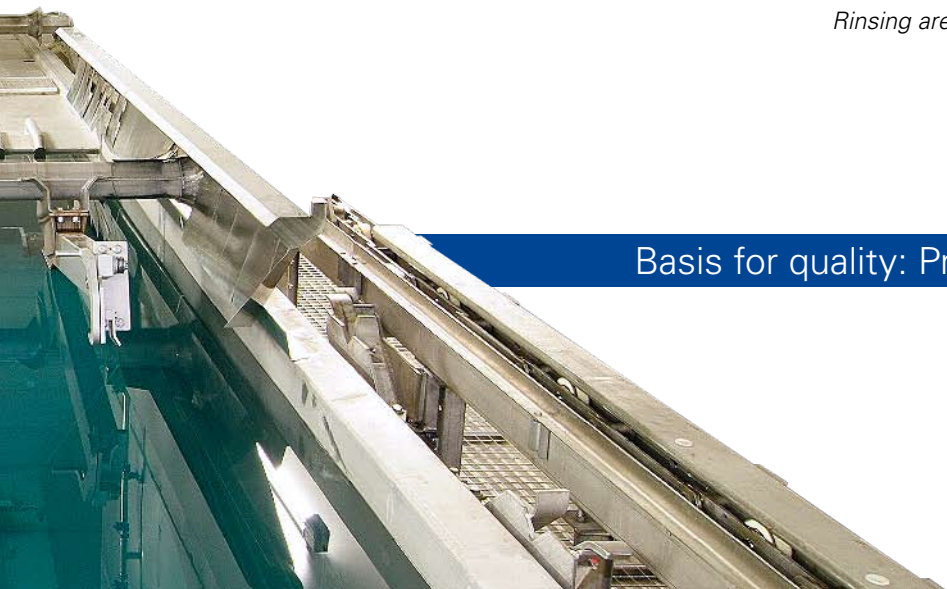
Through a chemical process – phosphate coating – a uniform microcrystalline coating is built up on the surfaces, with partially differing characteristics, of the body-in-white. This process forms an important part of corrosion protection. The vehicle body passes through various rinse zones in between the individual stages of the pretreatment process, before being passivated at the end of the pretreatment line. 



Pretreatment inlet gateway

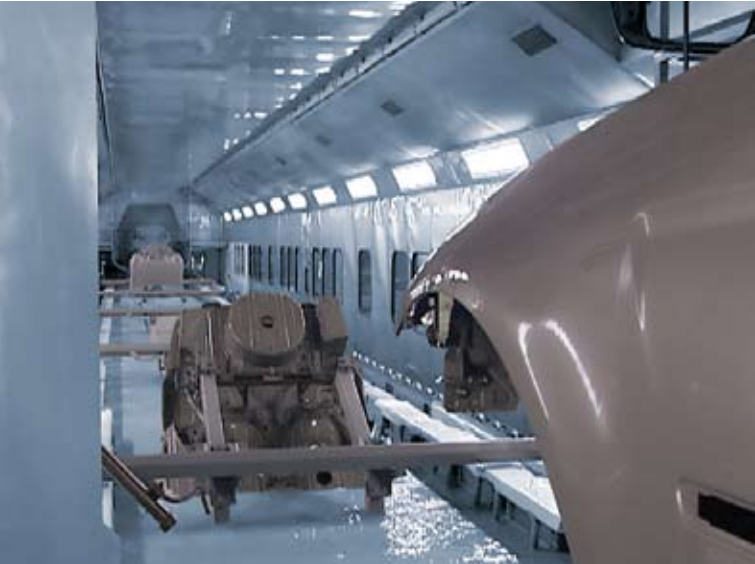


Rinsing area with spray rings

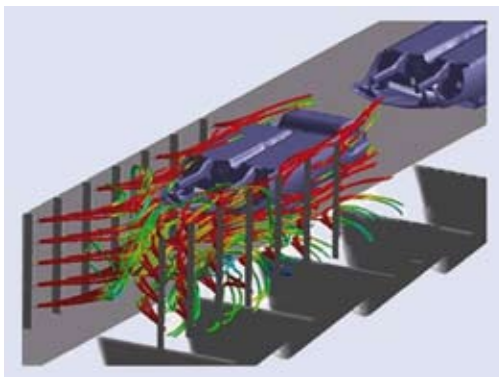


Basis for quality: Pretreatment & Electro Coating

Cathodic Dip Coating – for perfect corrosion protection




A look in the RoDip tunnel



All surfaces must be evenly primer painted, this is the only way in which your vehicle body will receive long lasting corrosion protection and be able to retain its value. With cathodic dip coating, where the vehicle body is fully submerged in cathodic dip coating paint, **Ecopaint WetSystem** establishes the basis for the quality of your products.

In this process step, the coating is applied via electrophoresis. Afterwards, as the vehicle body leaves the tank, loosely adhering material is washed away with filtrate recovered from the cathodic dip coating paint. This closed loop system is environmentally sound and reuses resources

Our expert knowledge that flows into our plants and products for you means the simulation tests are carried out at an early stage, optimum bath flow patterns, and the full coverage achieved in cavity coating. 



Fast Transport

Only perfect interplay between plant and conveyor systems can ensure that the demanding requirements of process technology are met. In addition to conventional conveyor technology, Dürr offers three innovative and standardized conveyor systems, which are part of our ongoing product development and improvement program.

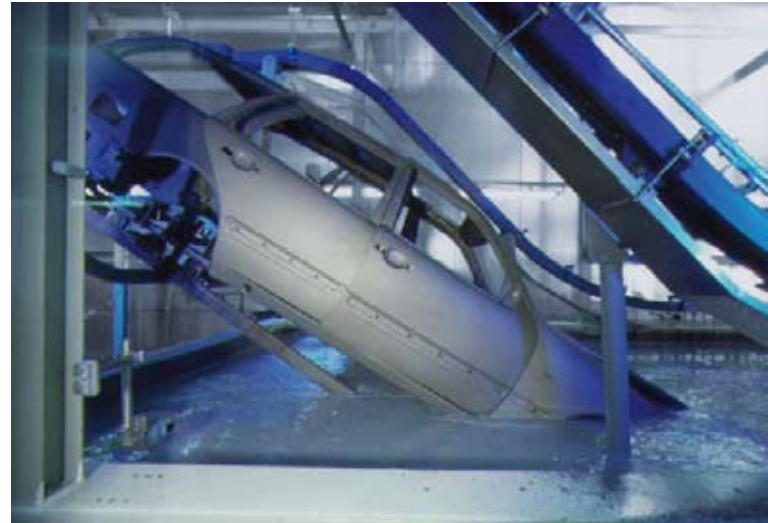
Quality through rotation: this is what **RoDip**, our rotational dip method, represents. The modular build concept offers the largest possible degree of freedom in layout design and thus a high level of flexibility in adapting arrangements to overcome existing structural constraints. This rotational process ensures an even and high-quality coating of your vehicle body and you save on paint, chemicals and water at the same time.

Dürr's well proven **pendulum conveyor technology** is persuasive because of its low maintenance requirements and a high level of uptime reliability. As only a few moving conveyor elements are installed in the tank, the amount of dirt carried into it is significantly reduced.

AirBiDip is a well tried variant of the pendulum system that ensures high production rates for continuous operation plants, even where building height is restricted or large vehicle bodies are involved.



Integrated RoDip conveyor technology for a high level of corrosion protection



Proven pendulum conveyor technology

Process assurance with structure

Ecopaint WetSystem

Your competitive edge with Dürr:

- Plant and systems competence for flexible layouts and short concept-to-completion times
- Quality with interface and process expertise
- Resource conserving technology for environmental compatibility
- Well thought through processes with integrated conveyor technology
- Technological edge thanks to innovative processes and equipment

With each and every unit produced you save on cost per unit!

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