The full automotive sized oven (here the entrance) in the test center is configurable to simulate radiant and convection heating processes.

**Painting processes optimized before the start of production**

Dürr introduces largest Paint Test Center in North America

*In seven test and training centers on four continents, Dürr customers can pretest and optimize painting, sealing and glueing processes. In addition, their employees can be trained in how to handle and service the technology. In a new feature, we are introducing Dürr’s test and training centers, e.g. the one in Shanghai. First stop: Southfield, Michigan, at Dürr Systems, Inc.*

Dürr is the only paint systems supplier in North America to have full scale lab testing and CFD simulation capabilities. Highlights are fully automated robotic painting, high viscosity dosing and application, the new generation oven and paint overspray filtration system. Since its opening in early 2016, the state-of-the-art Test and Training Center in Southfield has been booked to capacity almost every month. The training courses have also been very well received – leading to a constant addition of course offerings.

**Unique selling point in North America**

The Ecopaint Oven at the Test Center is the only oven of its kind in North America. It’s a full automotive sized oven, configurable to simulate radiant and convection heating processes. The oven has two zones, each with a direct fired heater, and features a large cross section. Each zone is independently controlled for both temperature and volume of air, giving Dürr the ability to simulate any type of oven zone or style, and experiment with different configurations.
Diagnostics are run with a prototype body without disrupting customer production. Determining the correct heating and curing processes in Dürr’s lab enables a smooth product launch at the customer’s facility.

If a physical car is not available, Dürr’s patented CFD modeling can be completed based on customers’ vehicle CAD data to optimize curing processes.

The Test Center contains two 7-axis EcoRPL133 paint robots on rails and one 6-axis EcoRPL033 housed in two spray booths. These robots allow for flexible and performance based testing of multiple processes, and are equipped with high speed rotation atomizers (EcoBell3), bell cleaners (EcoBell Cleaner), color changers and dosing pumps.

One paint booth is dedicated to small parts and painting color standards, the other booth is for developing robotic paint processes for full car bodies. Both units are equipped with dry filters and designed to be fully customized with climate control to replicate any production situation. Water-base and solvent-based paints can be tested.

The Test Center allows for valuable benefits, including paint quality and process improvements, color development, reduced paint and solvent consumption as well as paint thickness. All tests can be conducted on exterior, interior or plastics.

Another feature is the sealing testing area for underbody coating, rocker panel application, seam sealing, and liquid applied sound dampening, as well as customer requested procedures. The Test Center is equipped with Dürr’s EcoRS16 and EcoRS30 robots, the latest application technology (EcoGun2 3D) and electric EcoShot Meter piston dosing units. A further area is for fully automatic gluing in body construction and final assembly.

The Test Center also includes an EcoDry X test stand. This high-capacity paint overspray filtration system uses disposable paper filters which are installed within mobile trolleys to allow for easy, quick filter exchanges even during production. The EcoDry X test stand assists Dürr in evaluating system performance with individual customer paint types.

More than 50 customizable training courses

In response to customer demand for off-site training options, Dürr offers interactive courses on electronic documentation, basic paint and sealer procedures, atomizers, path programming, and robot electrical and mechanical maintenance. There are over 50 customizable courses available which can be attended by OEMs, suppliers, distributors, employees, university students, and others.

The training course catalog and registration form are available here.
The Dürr Systems Campus in Southfield contains the state-of-the-art Test and Training Center.

Welcome to the training center at the Dürr Systems Campus. Spray guns and atomizers amongst others are presented here.

Interactive training courses e.g. on basic paint and sealer procedures and robot electrical and mechanical maintenance are offered in the training center.
View of the paint and sealing test center

The tunnel between paint booth and oven
In the area of paint application one booth is dedicated to small parts like a fascia.

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