The winds of energy saving are blowing –
Farewell to Infradryers!
Meet the impressive OptiDry family.
OptiDry Profile™
Sending infrared dryers into retirement!

OptiDry Profile is the First Air Dryer Ever With Moisture Profiling Function

Reduce energy consumption and maintenance work by replacing your old infrared dryers with Valmet’s newest innovation: a moisture profiling air dryer.

OptiDry Profile is designed to replace profiling infrared dryers in a coating machine. In normal dryer length OptiDry Profile has the same profiling effect as 2 rows of electrical infrared dryer. With OptiDry Profile you get two dryers in one; air dryer and profiling dryer. At the same time you get all the good qualities of OptiDry air dryers: low energy consumption and maintenance costs, excellent runnability and end product quality, high drying capacity, better working conditions and safety.

Interested? Good! In Valmet’s web pages you can read more about OptiDry Profile: See valmet.com.
Meet the OptiDry Air Dryer Family

Different needs – different dryers. On the following pages you can find more information on each dryer and their main features.

OptiDry Curl
Energy-efficient curl control for single-felted dryer section

OptiDry Twin
High-efficiency drying with improved draw control and bulk increase

OptiDry Vertical
The rebuild dryer – increased production and drying capacity without major changes

OptiDry Impingement Dryers

OptiDry Coating Dryers

OptiDry Profile
The first air dryer ever with moisture profiling

OptiDry Turn
Effective non-contact web cooling

OptiDry Chill
Simultaneous web drying and turning

OptiDry Coat
The coating dryer

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The coating dryer
OptiDry Twin

The revolutionary OptiDry Twin represents impingement drying technology that provides superior drying efficiency. As a result both machine runnability and end product quality improve with possibility for draw control and bulk increase.

One of the OptiDry Twin’s most obvious benefits is its compact size. Compared to conventional cylinder drying OptiDry Twin brings shorter machine and machine room and lower investment costs.

"OptiDry Twin is the pearl of the machine"

“We are very proud to have this world class paper machine, fastest in the world. The OptiDry Twin impingement dryer is the pearl of the machine. Without OptiDry the new world record speed (UWF 1808 m/min) would have not been possible.”

Mr. Jia Huadong, PM Deputy General Manager of Zhanjiang Chenming

In front of the record machine from left: Mr. Jerome Liu, Valmet, Mechanical Mill Manager Mr. Wang Zongzhou, Mr. Risto Penttinen, Valmet, PM Deputy General Manager Mr. Jia Huadong, Mr. Hannu Korhonen, Valmet, and Automation Mill Manager Mr. Sang Jiandong

"OptiDry Twin represents impingement drying technology that provides superior drying efficiency. As a result both machine runnability and end product quality improve with possibility for draw control and bulk increase. One of the OptiDry Twin’s most obvious benefits is its compact size. Compared to conventional cylinder drying OptiDry Twin brings shorter machine and machine room and lower investment costs."
OptiDry Vertical

OptiDry Vertical is an impingement dryer, which increases drying capacity without adding machine length. It is built under the existing dryer section. OptiDry Vertical suits all paper and board grades and can be used with any dryer section layouts.

The average machine production capacity increase is 15%, which leads to a payback time estimate of 12 to 18 months. Its benefits include short installation time due to minimal modifications required to existing machine structures.
OptiDry Curl is Valmet’s newest solution for curl control. It is based on single-sided impingement drying. Compared to traditional double-felted configuration or moisturizing with water, OptiDry Curl is an energy-efficient solution with excellent runnability. It is suitable for all paper and board grades.
OptiDry Coat

OptiDry Coat* is a standard solution in all Valmet’s new machine installations. Aided by the innovative nozzle design it gives remarkable benefits compared to IR dryers: excellent runnability, high drying capacity, better end product quality and both low energy and maintenance costs. Energy savings compared to old infradryers are over 50%.

The OptiDry Coat is suitable for all coated paper and board grades. It can be used for new machines and rebuilds.

"Valmet impressed us with this exceptional dryer, OptiDry Coat"

"When we replaced gas-heated infrared dryer with OptiDry Coat, we got it all: 50% gas savings, better paper quality, better working conditions and smaller maintenance costs. We were also impressed with Valmet’s professionalism and technical knowhow."

Mr. Antonio Di Blas
Mill Production Manager, Cartiere del Garda

*Valmet’s famous air dryers PowerDry, PowerDry Compact and PowerDry Plus are now available under the renewed OptiDry Coat name.
OptiDry Chill

Excessively high web temperatures often cause problems. Valmet’s OptiDry Chill* is a proven solution for web cooling needs.

User friendly OptiDry Chill provides effective and contactless web cooling with innovative nozzle technology. That results in optimized runnability and end product quality.

* OptiDry Chill was formerly known under the name PowerChill.

OptiDry Turn

OptiDry Turn* air dryer simultaneously turns and dries the web during coating/sizing drying. It uses only half of the energy compared with IR dryers for the same evaporation task.

Benefits of the OptiDry Turn concept include low heat and humidity loads to machine hall, due to drying air recirculation. There are less free draws between the drying elements. OptiDry Turn has shown its excellence in numerous references in both paper and board making.

* TurnDry, TurnDry Plus and TurnDry Compact are now available under the renewed OptiDry Turn name.

Simultaneous Web Turning and Drying

Non-Contact Web Cooling
Valmet* is the leading solution provider for the pulp, board and paper industries as well as for the bio-energy industry.

Do you want to know more about OptiDry drying solutions? Please use the contact form at: valmet.com

* Demerged from Metso at the beginning of 2014.