



Spraying Systems Co.
Experts in Spray Technology



AUTOJET®

WATER KILN COOLING SYSTEM

SPRAY SOLUTION FOR CEMENT MILLS



www.spray.com

INDUSTRIAL · CHEMICAL · ENERGY · FOOD · PAPER · PHARMA · STEEL · AUTOMOTIVE · **BUILDING MATERIALS** · CHEMICAL · ENERGY
COOLING · COATING · DRYING · DUST CONTROL · FIRE PROTECTION · HUMIDIFICATION · LUBRICATION · MINING · TANK CLEANING
· TANK CLEANING · SPRAY CONTROL · AUTOMATED · DISINFECTION · **SPRAY LANCES** · ACCESSORIES · **NOZZLES** · SPRAY GUNS



Spraying Systems Co.
Experts in Spray Technology

WATER KILN COOLER SYSTEM

IR-CONTROLLED KILN SHELL COOLING

Rotary kilns are essential in the cement manufacturing process, but they need to be cooled to extend the life cycle of the refractory and to protect the kiln shell from overheating. Overheating could significantly reduce the kiln lifespan and efficiency.

Our IR-Controlled Kiln Shell Cooling system offers an innovative solution to this challenge, ensuring optimal performance and durability for your kilns.



INTELLIGENT TEMPERATURE MANAGEMENT SYSTEM //

Our system utilizes state-of-the-art IR-pyrometers to continuously monitor the kiln shell's temperature. These sensors provide real-time data, identifying hot spots that require immediate cooling. They can be cooled down fast but carefully, avoiding shrinkage. After cooling, the shell temperature is kept on its nominal value. This proactive approach helps in maintaining the integrity of the kiln shell and preventing costly damage.

By cooling the shell but not the tire itself the mechanical expansion of the kiln tire section is reduced. This secures more space for the floating tire.

PULSAJET® NOZZLES FOR PRECISION COOLING //

Equipped with individually controlled PulsaJet® nozzles, our cooling solution delivers precise, targeted cooling. Managed by the intelligent AutoJet® control unit, these nozzles spray cooling fluid only when necessary, based on the temperature data from the IR-pyrometers. This ensures efficient use of resources and avoids unnecessary cooling, which can lead to mechanical stress.



BENEFITS



- Better method than cooling by fan
- Energy savings - very low energy consumption
- Fast and careful cool down
- Minimal noise emission
- Reduced mechanical tension
- Longer operation time of the kiln
- Effective cooling on the spot
- Fast and easy positioning along the kiln
- Local and remote control available
- Precise IR-pyrometers measurement of surface
- Elimination of ineffective, loud large cooling fans with high energy consumption

SMART CONTROL WITH AUTOJET® TECHNOLOGY //

The AutoJet® control unit is the heart of our cooling system. It processes data from the IR-pyrometers and activates the PulsaJet® nozzles with pinpoint accuracy. By controlling the dosing valves, it ensures that cooling occurs only when a hot spot is detected, maintaining the shell temperature at its optimal level and preventing overheating.

ASSEMBLED AND TESTED BY OUR ENGINEERS //

Spraying Systems' IR-Controlled Kiln Shell Cooling system is designed to enhance the efficiency and lifespan of your rotary kilns. With advanced temperature monitoring and precise cooling, you can protect your equipment, reduce maintenance costs, and ensure uninterrupted production. Experience the benefits of intelligent kiln cooling and take your cement manufacturing process to the next level.



Spraying Systems Co.®
Experts in Spray Technology

WHY CHOOSE SPRAYING SYSTEMS CO®?

Selecting Spraying Systems Co.® means partnering with a leader in spray technology. With over 85 years of expertise, we are committed to delivering a high-quality solution that meets the evolving needs of the cement industry.

Our dedicated team of experts is here to provide support and solutions that are aligned with your specific requirements.



CONTACT US

Find out more about our spraying solutions by going to our website: spray.com/en-eu/

Do you have any questions or do you want more information? Get in touch with one of our spray experts. They will provide you with the right information.



LANGUAGE SUPPORT

 info.uk@spray.com +44 1252 727200 //  info.de@spray.com +49 40 766 001 0 //  info.fr@spray.com +33 1 46 20 96 40

 info.es@spray.com +34 91 357 40 20 //  info.it@spray.com +39 02 38 34 181 //  info@spray.ae +971 4 326 7770

 We also offer support in Polish / Portuguese / Dutch / Swedish / Finnish / Romanian / Czech / Greek / Hungarian / Ukrainian
Local representatives on www.spray.com or contact Info.EU@spray.com

Bulletin Nr. E3049 (10/2024) // © 2024 Spraying Systems Co.
Subject to technical changes // Duplication and reproduction – even in part – is prohibited

www.spray.com // Info.EU@spray.com

FIND MORE REFERENCES
AND CASE STUDIES AT
WWW.SPRAY.COM/RESULTS