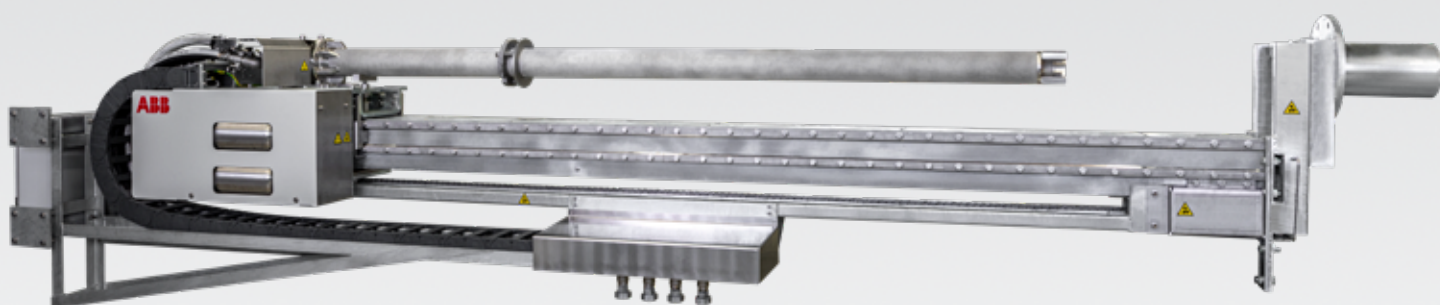


ABB MEASUREMENT & ANALYTICS

ProKiln – the gas sampling system

The next generation is powerful!



“ Powerful cleaning by air blasters is a well-known cleaning method in the cement industry. Using it in gas analysis probes significantly reduces the risk and complexity of time-consuming maintenance activities compared to other cleaning methods. ”

“ The high-powered air blaster in combination with a sample filter in the tip of the probe optimizes the availability of the gas analysis system. ”

PROCESS ENGINEER, MAJOR
CEMENT PRODUCER

ProKiln

The next generation is powerful!

Powerful Cleaning

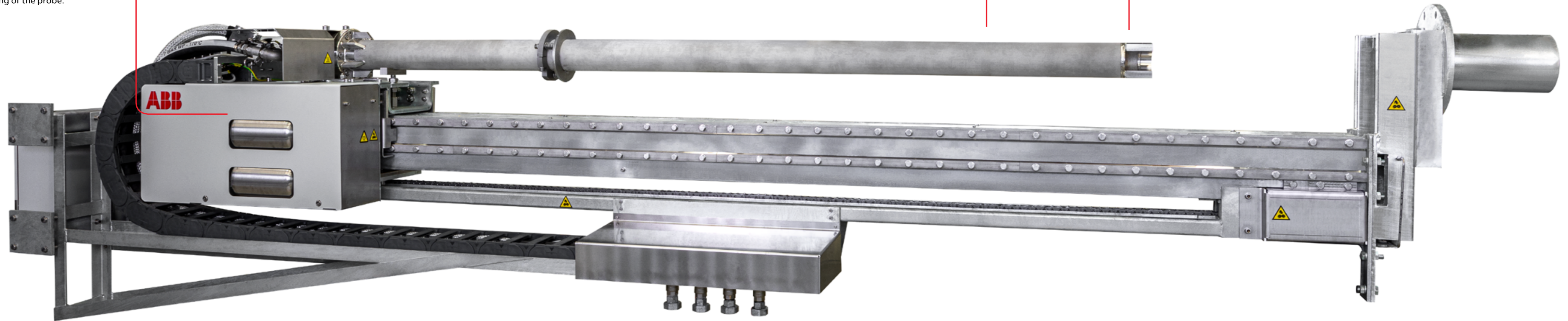
Two air blasters with a pressure of 6 bar ensure a powerful air cleaning of the probe.

Eliminate probe blockages

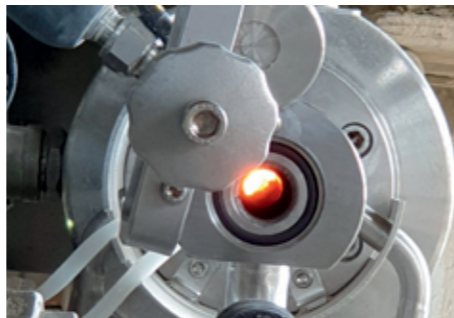
Clever nozzle design directs maximum air pressure to clear blockages.

Reliable gas sampling

No mix of sample and dust through a double layer filter in the tip of the probe.



ProKiln is the 4th generation kiln inlet solution from ABB with an innovative probe concept that ensures an availability of more than 95 % at cement plants with an increased use of alternative fuels.



Easy maintenance

Center pipe allows easy manual cleaning and it is based on known technologies.



User-friendly touch panel

Control unit serves as power supply for ProKiln and allows monitoring and operating the functions of the system.



Water-cooling

Non pressurized cooling system including an air-water heat exchanger.

Double probe option

Unique solution to maximize availability

Two identical water-cooled probes with independent, electrically operated insertion devices. Each probe will alternate between sampling and cleaning but are both designed to stay in the process during normal operation and only periodically be retracted in order to remove material building upon the probe. The second probe will be inserted into the process before the first probe is extracted to ensure no sampling interruption.

As the only supplier of a double probe retraction system, ABB proves to be the premium partner for customers on their journey to 100 % availability.



Increasing use of alternative fuels

Next generation probe solution to overcome current challenges at the kiln inlet

According to the European Cement Association it is possible to use up to 95% alternative fuels. This presents new challenges for the critical measurements at the kiln inlet, i.e. probe blockages, increased maintenance efforts and low availability.

—
01 Cement plant using waste fuel

Cement production is highly energy intensive and worldwide producers are continuously seeking ways to increase their use of alternative fuels to reduce the impact on the environment and increase process efficiency.

To meet the changing process conditions, ABB and FLO2R have combined more than 60 years of experience in order to develop a premium product supporting cement plants in achieving their objectives: The 4th generation kiln inlet solution from ABB.

ProKiln can be combined with various analyzers, but the full potential is realized with the AO2000 System produced in ABB's center of excellence in Frankfurt, Germany.

ProKiln has proven its merit though a trial at a major global cement producer. The selected plant has a substitution rate of more than 80% alternative fuels and by using ABB's solution maintenance efforts were reduced by 85% and the availability increased to more than 95% (from previous 9%), convincing them to replace their current installation with ProKiln.

ABB is once again helping the cement industry on the journey to maximize throughput, increase cement quality, reduce downtime and operational costs while reducing environmental impact.



ABB Measurement & Analytics

For your local ABB contact, visit:
abb.com/contacts

For more product information, visit:
abb.com/analytical