

BONNENBERG
+ DRESCHER



**TECHNOLOGY LEADER
IN DEMANDING NICHES**





FOR INDUSTRIES WITH HIGHEST DEMANDS

Since our foundation in 1971 we have been working for industries which place highest demands on quality and processes. Starting with engineering services for nuclear technology, we continued in finding solutions for waste incinerators and power plants as well as for the manufacturing of iron and steel, using our pioneering spirit and high demands on quality.

IMPROVED WASTE INCINERATION SINCE 1986

High and partly increasing environmental standards and considerably fluctuating fuel qualities – in this area of conflict operators of waste incinerators must run their plants efficiently. Since 1986 our engineers have been working on continuously optimizing the combustion in waste incineration.

UPGRADING POWER PLANT FURNACES FOR THE DEMANDS OF TOMORROW

With more than 30 years of experience in the power plant industry, we know that every furnace is individual. That's why we do not offer products "off the shelf", but we are always looking for the best solution for each facility.

PRECISE TEMPERATURES FOR GREATER PROCESS CONTROL IN THE BLAST FURNACE

In the field of iron and steel, we offer the acoustic measurement technology together with our partner TMT under the name TMT SOMA. We develop innovative solutions to increase the efficiency of the process and to save resources.

NUCLEAR ENGINEERING FROM THE BEGINNING

Since our foundation in 1971 we have gathered extensive references for nuclear plants in the area of planning and services. Since more than 40 years we deliver the industrial standard in the measurement of Tritium and C14.

IF YOU CANNOT FEEL, LISTEN!

Where extreme temperatures prevail, their measurement by conventional methods becomes difficult. With our acoustic gas temperature measurement system *agam* temperatures can be measured even in adverse conditions without drift, wear and measurement errors due to thermal radiation. This is the best prerequisite for effective Prozess Optimization.

COMBUSTION CONTROL

Fast Measurement – Direct Control. Higher efficiency, reduced emissions, more effective denitrification as well as less slagging and corrosion: A steadier development of the temperature in the combustion chamber has many advantages. Our acoustic gas temperature measurement system *agam* lets you identify deviations faster and react earlier.

DENITRIFICATION

The true gas temperature is the crucial parameter for the process of the chemical reaction during denitrification. Thermal radiation is, however, irrelevant for the reaction. Here our acoustic gas temperature measurement *agam* shows its advantages: Fast, precisely, two-dimensionally and free from radiation effects, it determines the gas temperature and thus provides the main control parameters for the accurate injection of the reacting agents.

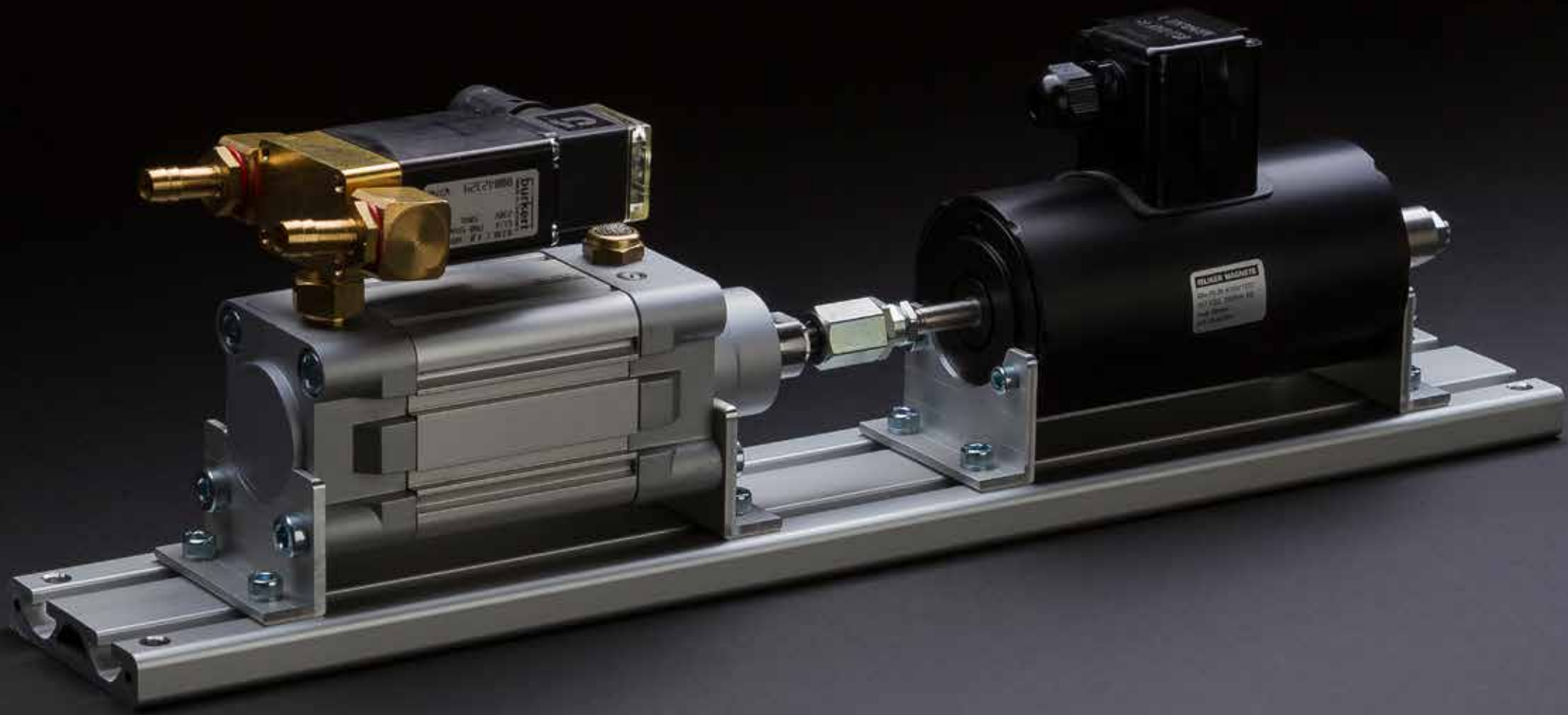
ACTIVE BALANCING CONTROL

Our acoustic gas temperature measurement system *agam* provides precise and reliable values regarding the distribution of the gas temperature above the furnace. *agam* shows a two-dimensional image of the gas temperature and thus diagnoses imbalances in the combustion chamber. Fast and accurately so that countermeasures can be taken early in time to balance the temperatures accordingly.

PROCESS DATA MANAGEMENT

Optimizations based on isolated applications tend to local optima rather than to the best parameters for the entire system. Therefore, for the process data management one needs to have a partner who is ready and able to integrate exotic data formats, too. Since the early 80s our solution INDAS merges data from a wide range of different sources in currently more than 400 (partly highly complex) plants.





INDIVIDUAL SOLUTIONS FOR CHALLENGING TASKS

During the past decades we, Bonnenberg & Drescher, have solved a variety of challenging tasks for our customers. We have further developed some of these solutions to products which we now – often adapted individually – offer on the market.

AGAM: MEASURING GAS TEMPERATURES UP TO 2000 °C WITHOUT RADIATION ERRORS

agam measures gas temperatures by means of the speed of sound. Contact-free, without errors caused by thermal radiation and without drift. The system is nearly maintenance-free and delivers tomographic 2D temperature distributions in waste incineration plants, power plants and blast furnaces.

INDAS: MONITORING, ANALYZING, CONTROLLING

INDAS combines process data regardless of source and format – because only full integration allows true transparency. More than 400 individual installations are running reliably for many years.

MEASURING ³H AND ¹⁴C EASILY, SAFELY AND RELIABLY

Our H3/C14 collector provides a simple, safe and procedurally approved method for monitoring the air on the radioactive isotopes ³H and ¹⁴C. Thanks to its closed adsorber cartridge and the easy cartridge exchange its handling is very safe.

HOK ADSORBER: HIGHLY EFFICIENT DIOXIN AND MERCURY DEPOSITION

Our hearth furnace coke adsorber cleans exhaust gases in wet operation. Because of this it works without exhaust gas heating and minimum throughput. Inertisation, CO measurement as well as equipment for fire detection and fire prevention are not necessary.

TECHNICAL CONSULTANCY: EXPERIENCE AND KNOW-HOW ON DEMAND

With our engineering services we focus on optimizing processes in the combustion chamber. Combustion Control, Active Balancing Control, increase in efficiency and SNCR integration are areas in which we achieve improvements for our customers.

OUR SELF-IMAGE

We are convinced: Our self-image is the basis for our success.

WITH CURIOSITY AND PIONEERING SPIRIT TO FURTHER SUCCESS IN THE NICHE

Someone who walks through the world with open eyes, recognizes many unsolved problems. With the determination to tackle them, we have developed technical solutions for different industries since our foundation. Mostly in niches where the paths were not yet worn out and pioneering spirit was required.

SOLUTIONS FOR INDIVIDUAL PROBLEMS

Our customers' requirements are always individual. That's why we offer individual solutions which fulfil these requirements. We integrate our solutions also into unusual system landscapes and adapt them to system-specific requirements.

PERSEVERANCE, HARD WORK AND BITE

For new and challenging tasks know-how solely is not enough. In these cases, our team has the strong will to meet the challenge. We will not stop until we have found a good solution for our customer.

WITH THE CHANGING WORLD AND YET A FIXED CONSTANT

We welcome the change and are not fixed to our old solutions. But we are aware of their importance for our customers. That's why we take responsibility and continue to maintain these solutions even if we have further developed the technology. Our customers come from industries where plants are operated over a long period of time. They appreciate our combination of flexibility, innovation and the reliability to get support for our products even after many years.

FINDING THE BEST SOLUTION AGAIN AND AGAIN

We firmly believe to find a better solution again and again. This conviction gives us the motivation to put our results into question and to find new, better solutions. Thomas Edison with his claim "There's a way to do it better – find it." would have fit into our team very well.

DIVERSITY INSTEAD OF CONFORMITY

Since our employees develop their individual personalities freely, the whole is more than the sum of its parts. Different perspectives are mutually beneficial and lead to exceptional solutions.

FREEDOM, PERSONAL RESPONSIBILITY AND FLAT HIERARCHIES

Where people have the freedom to make their own decisions, they take responsibility. This conviction is rooted in our corporate culture since our foundation. That's why we don't have rigid hierarchies or bureaucratic processes, but employees who are reliable partners for our customers and care for an issue until it's done.

STRICT IN THE MATTER, FAIR IN DEALING

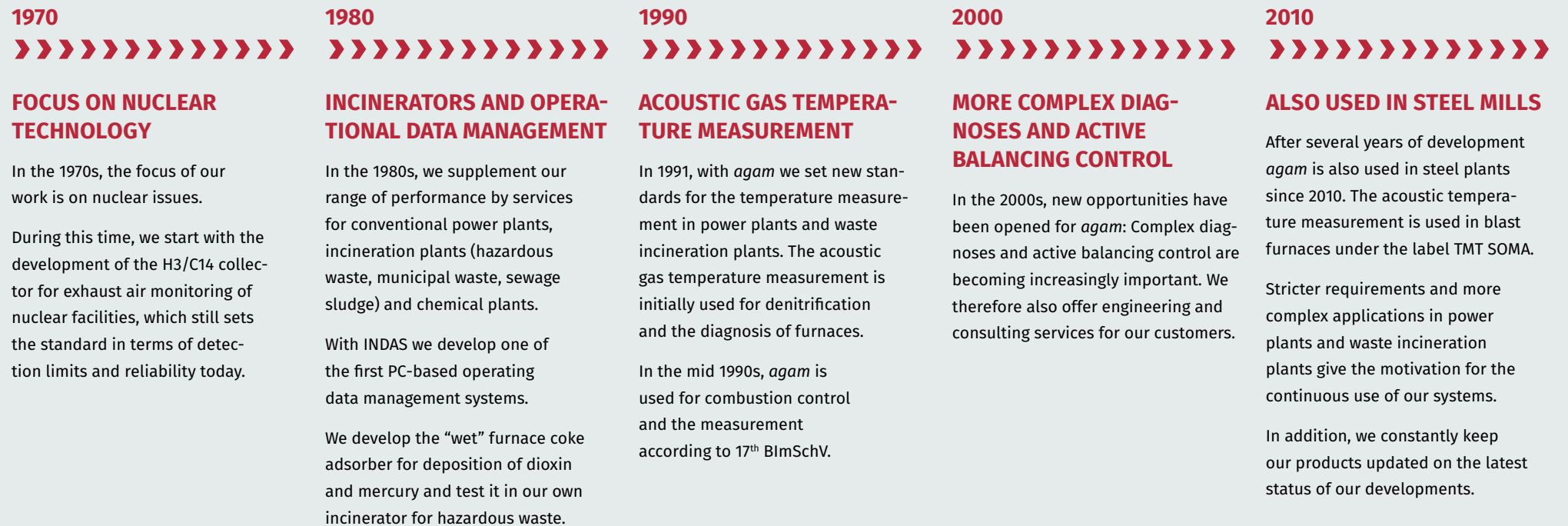
Success is the result of hard work and tireless efforts. For permanent success all must join together. That's why fairness plays a big role for us – in the team as well as in the relationship with our customers, partners and suppliers.



Grube Emil Mayrisch
1938  1992

WITH PIONEERING SPIRIT TO SUPERIOR SOLUTIONS SINCE 1971

Since 1971, we are continuously working with pioneering spirit on finding superior solutions.



IN USE ALL OVER THE WORLD

We are proud of having satisfied customers all over the world over years and decades.



Schwarze Pumpe, Germany



Handan, China



TKCSA, Brazil



ZNPP, Ukraine



NSSMC Wakayama, Japan



Moerdijk, Netherlands



Koradi, India



Belchatow, Poland

At www.budi.de/en/references.html you will find a detailed list of our references.



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