



## Using energy intelligently

### Dear technology experts, customers and partners

We are pleased to present you with the first issue of the newly designed *Sulzer Technical Review (STR)*. Its publication coincides with the 175th anniversary of our company. As you read on, you will find that while the appearance of the *STR* has changed, the nature of the articles, including their high level of technical detail, remains the same. Several new elements have been added to the *STR*. For example, the "Sulzer Analogy" article focuses on parallels between nature and Sulzer. Milestones in our corporate history and an interview with the President of Sulzer Innotec are also featured.

Efficiency is key to the sustainable use of energy resources. It is imperative that we actively strive to meet the climate change targets defined in the Kyoto Protocol. Each one of us has a responsibility to ensure that non-renewable resources are preserved for future generations.

The articles written by our experts provide insights into the solutions developed by Sulzer for its clients and partners to address this need. For example, Sulzer Chemtech has developed a highly efficient process to produce EPS insulation material, which is used in large quantities globally. The coatings for key components of vehicle transmissions created by Sulzer Metco, in consultation with the automotive industry, play an important role in reducing fuel consumption.

The retrofit projects in thermal power stations successfully completed by Sulzer as well as our new silicon carbide coatings for turbine blades, show that our solutions are not only technically appealing but also reliable and financially attractive. The solutions presented by Sulzer Pumps, Sulzer Turbo Services, Sulzer Metco, Sulzer Chemtech and Sulzer Innotec underscore our innovative strength and proximity to the market.

I hope you enjoy reading this issue of the *STR*.

Ton Büchner  
Fellow engineer and CEO Sulzer

## Sulzer today

The Sulzer brothers laid the foundations of today's company 175 year ago in Winterthur, Switzerland. Sulzer is active in the fields of machinery, plant construction and surface technology in more than 120 locations around the world. Its divisions are global leaders in their respective markets, including the oil and gas sector, the hydrocarbon processing industry, power generation, pulp and paper, aviation and the automotive industry. Sulzer employs a total of 12,500 professionals who develop innovative new technical solutions. These products and services enable Sulzer's customers to achieve sustained improvements in their competitive positions.

[www.sulzer.com](http://www.sulzer.com)

### Sulzer Pumps

Sulzer Pumps offers a variety of centrifugal pumps, ranging from custom-built models to standardized series. The division's market-leading position reflects its research and development activities relating to process-oriented materials as well as its reliable service. It serves customers in the oil and gas, hydrocarbon processing, pulp and paper, power generation, water distribution and treatment sectors as well as other specialized areas.

[www.sulzerpumps.com](http://www.sulzerpumps.com)

### Sulzer Metco

Sulzer Metco specializes in thermal spray and thin film processes for surface technology applications. The division coats and enhances surfaces, produces materials and equipment, and develops machining processes for special components. Its customers are active in the aviation and automotive industries, the power generation segment, and other specialized markets.

[www.sulzermetco.com](http://www.sulzermetco.com)

### Sulzer Chemtech

Sulzer Chemtech is the market leader in the fields of separation columns, static mixing, and cartridge technologies. The division has sales, engineering, production, and customer service facilities throughout the world that enable it to meet the needs of its customers in the oil and gas, petrochemical, chemical and plastics industries.

[www.sulzerchemtech.com](http://www.sulzerchemtech.com)

### Sulzer Turbo Services

Sulzer Turbo Services is the largest independent provider of repair and maintenance services for thermal turbomachinery and other rotating equipment. The division also manufactures and sells replacement parts for gas and steam turbines and compressors. Its customers operate in the oil and gas, power generation, and other specialized industrial sectors.

[www.sulzerts.com](http://www.sulzerts.com)

### Sulzer Innotec

The research and development unit supports the development projects of Sulzer's own divisions as well as projects of industrial companies around the world by providing contract research and special technical services. Sulzer Innotec has considerable expertise in materials engineering, surface engineering, fluid technology and medical technology as well as in the field of mechanics. Its core competencies in the area of contract research also focus on these traditional disciplines.

[www.sulzerinnotec.com](http://www.sulzerinnotec.com)

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**On the cover:**

The fuel consumption and service life of the jet engine is influenced by sprayed coatings, which improve insulation and protect against hot gas corrosion and wear on rotating components. This is made possible with sophisticated coatings from Sulzer Metco. Location: SR Technics aircraft maintenance hangar, Zurich Airport, Switzerland. Photographer: Peter Tillessen.