

## Business portfolio evolution in the era of digital and sustainability

HAW Annual General Meeting – May 11, 2021



### **SULZER**

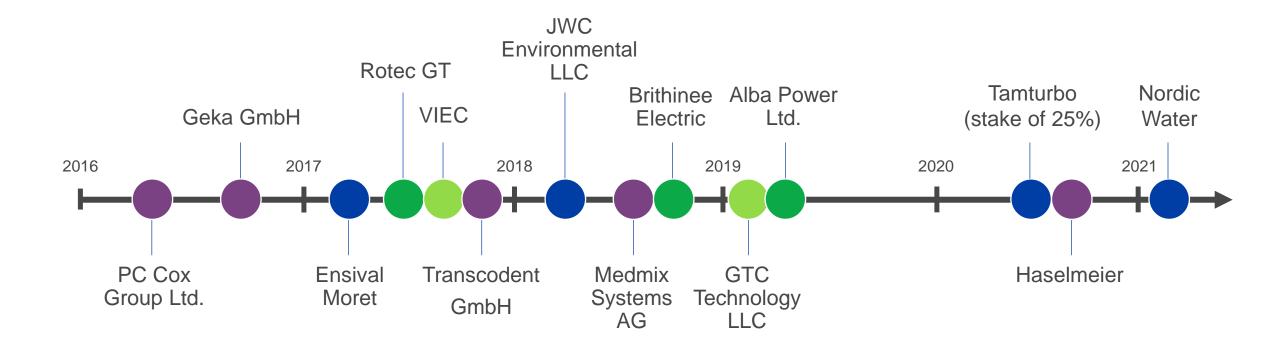
## Technology incubator since 1834

	Air Condition 1841 – 2001						
Thermal ene	ergy systems 1841 – 1997						
	Steam engines 1854 – 1952						
	Shipbuilding 1867 –	· 1934					
	Rock drillir	ng machine / Tunneling 18	376 – 1905				
	Refrigera	tion systems 1877 – 2001					
	Recipro	ocating compressors 1878	i – 2002				
		Diesel engi	nes 1898 – 1989				
			Water turbines 19	11 – 1999			
			Locomotives 191		ine and engines since 1939,	only service since 200	1
				Inc	Incinerators 1941 – 1994 Jet engines 1945 – 1999		
					Textile machinery 19	52 – 2002	
					Chemical proces	ss engineering since 1	957
					Madiaalta	chnology 1962 – 2001	
					Medical te	0,	
						cs 1963 – 1999	
					Electronic		
					Electronic	cs 1963 – 1999 machinery 1966 – 2006	nishing 1985 – 2013



## **Recent acquisitions**

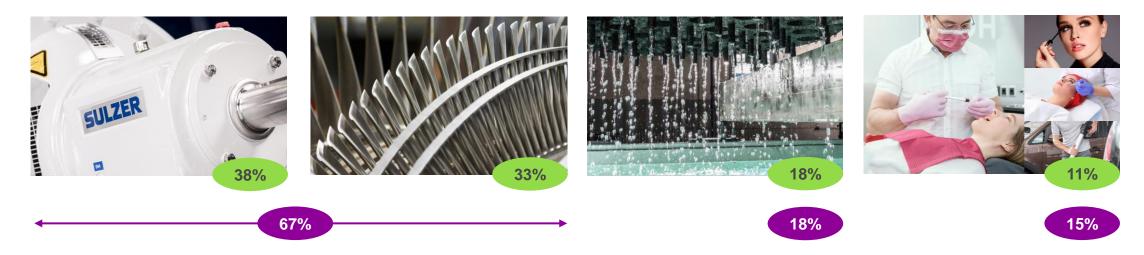
## Strengthening our product portfolio in key areas





## Sulzer today

Sulzer offers products, services and know-how for a wide range of **fluid engineering** applications in many different markets



#### **Pumps Equipment**

From standard pumps to highly engineered pumps, covering Water, Oil & Gas, Power, Mining, Pulp & Paper, etc.

### Rotating Equipment Services

Parts, service and refurbishment for pumps, turbines, compressors, motors & drives, etc.

#### Chemtech

Separation technology and associated services for the chemical processing and refining industries

#### **Applicator Systems**

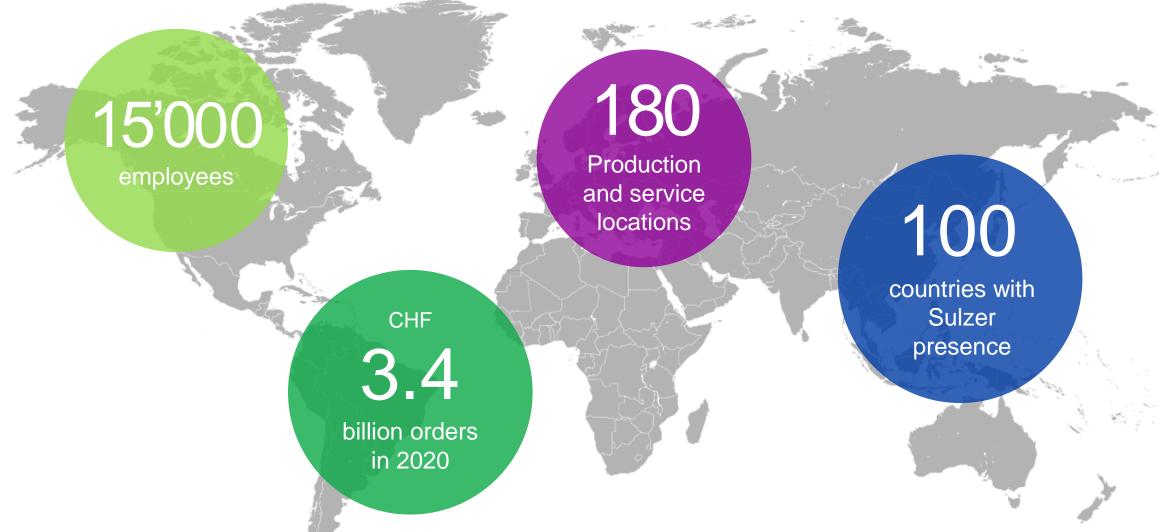
Specialized fluid applicators for dental, healthcare, beauty, construction, adhesives, etc.





## Global and agile

We combine reach with responsiveness





## **Our leadership team**

Armand Sohet Chief Human Resources Officer

Daniel Bischofberger Division President Rotating Equipment Services Jill Lee CFO Greg Poux-Guillaume CEO

Torsten Wintergerste Division President Chemtech **Frédéric Lalanne** Division President Pumps Equipment **Girts Cimermans** Division President Applicator Systems

## Sustainability at Sulzer

## A three-pillar approach

M S ESC		_	NGS		A	4
CCC	В	BB	BBB	Α	AA	AAA

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LAST UPDATE: February 12, 2021

## Minimize

our carbon footprint

We operate in a sustainable way

## Enable

a low carbon society

We contribute to a circular economy

Engage

our employees and communities

We make life better for those around us





Water

# Water largest market for pumps in 2021

Sulzer offers broadest product portfolio in wastewater treatment



With the acquisitions of **JWC** in 2018 and **Nordic Water in** 2021 Sulzer has now the broadest product portfolio for wastewater treatment.

The wastewater treatment market is expected to grow **4-6% a year**.



### Wastewater product portfolio

- Pumps
- Mixers
- Blowers
- Grinders
- Screens
- Sedimentation
- Filtration
- Also used in Freshwater treatment



Wastewater treatment

# Most energy efficient wastewater treatment

Sulzer's compressors for aeration minimize environmental impact

Due to its innovative design, the small-footprint HST turbocompressor has no wearing parts nor lubricants, thus requiring **minimal maintenance.** 



The unique drive technology enables reliable operation and top efficiency at the lowest cost while **minimized energy consumption**.

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Desalination

# Fighting water shortage and supplying freshwater

In a world where roughly 2 billion people have no access to clean water fighting water shortage and supplying freshwater is crucial.

Seawater desalination is an important means of providing a sustainable supply of freshwater.

Sulzer's pumps for seawater desalination are market leaders in terms of efficiency.

Our equipment is used in installations around the globe supplying more than 3 million m<sup>3</sup> of freshwater per day.



Freshwater

## Water for the Sahara desert

Transporting millions of liters over hundreds of kilometers

A local government contacted Sulzer with the challenge of supplying water to a remote location in the Sahara desert.

What is the best way to transport 100 million liters per day over a distance of 740km?

Sulzer engineered 18 pumps to efficiently and costeffectively transport water through a pipeline into the city. The pumps are especially easy to operate and maintain.



## Sulzer is digital

BlueBox<sup>™</sup>, Sulzer's advanced data analytics platform for flow control, wins the 2018 Digital Economy Gold Award

Sulzer designed BLUE BOX to be implemented with a minimal impact on a customer's site. It analyzes their existing data, utilizing machine learning. It enables customers to apply proactive asset management strategies, resulting in improved equipment efficiency and optimized plant uptime.

Sulzer is implementing BLUE BOX globally on critical pump assets across industries including; Water, Oil & Gas, Power generation, and Mining.

BLUE BOX is the foundation for Sulzer's IoT and analytics strategy across its extensive portfolio of products, services and operations.

#sulzerdigital, #sulzerbluebox



HIGHEST DIGITAL QUALITY

DIGITAL ECONOM AWARD

NDUSTR 4.0 GOLD

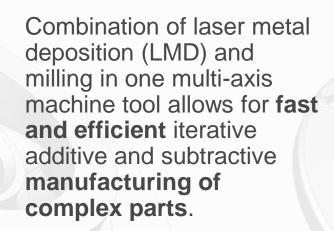




Next generation parts

## Hybrid manufacturing

Innovation for faster parts delivery





### **Benefits:**

- Fast, big part additive manufacturing
- High degree of design freedom
- Milled surface for better quality and tolerances
- Superior properties (vs. cast material)

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**Biopolymers** 

# Leading technology for bio based plastics

Fostering a circular economy

Every year, millions of tons of plastic waste end up in the environment.

**Polylactic acid (PLA)** is a sustainable alternative to oil-based plastic: It can be used to produce plastics that are **biodegradable and 100% recyclable** to their original form. Sulzer delivers process know-how, technologies and key equipment for the production of PLA. We have played an active role in optimizing the PLA process for industrial use over the last 25 years.







Process plants

## Recycling plastic waste into fuel

Sulzer supports Quantafuel's sustainable downstream plant

Common plastics take a very long time to degrade or do not degrade at all.

Sulzer's cutting-edge separation technologies and manufacturing capabilities supported Quantafuel in its ambitious project to turn plastic waste into fuel.



Its facility can **recycle** 60 metric tons of previously unrecyclable plastics per day, generating 48 metric tons of hydrocarbon feed.



Waste to energy

## Steelanol – waste to energy

Turning steel industry's carbon emissions into biofuels

While the steel industry is one of the biggest sources of carbon emissions, the world's leading integrated steel and mining company **ArcelorMittal** is actively engaged in the **Steelanol** project to turn its sites into smart carbon plants.



For this project, Sulzer designed a first-of-its-kind solution that simplifies the process and the equipment necessary, whilst creating closed loops that can re-use key resources and dramatically reduce energy usage.

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Fast retail has led to shorter life cycle for garments, with millions of tons of fabrics going to landfill and incineration. Today, **less than 1% is recycled** to new textiles.

Textiles are rather complex systems containing various types of fibers, dyes, fillers and additives, making them difficult to recycle.



Sulzer and H&M together control the UK-based company Worn Again. The teams are working on a unique textile recycling process to convert textiles at their end of use back into virgin-like raw materials.



Enabling the textile circular economy

## Worn Again

Sulzer is investor and strategic technology partner in Worn Again



Beauty

## Beauty goes green



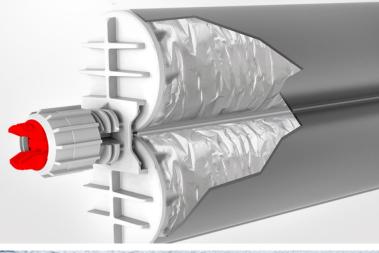
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Sustainable mascara fibers for the beauty industry

Beauty customers require sustainable solutions without compromising quality, functionality or aesthetics.

Sulzer's greenLINE fiber is a bio-based fiber made of 100% renewable raw material. It is ideal for mascara and eyebrow brushes and enables excellent lash definition and lengthening.





Adhesives

## ecopaCC<sup>™</sup> wins Packaging Europe Sustainability Award 2019

Collapsible primary packaging for adhesives and sealants

Sulzer has won the world's **most prestigious packaging innovation competition** in the "Resource efficiency" category with ecopaCC<sup>™</sup>, a collapsible primary packaging for adhesives and sealants. The revolutionary design slashes costs, resources and waste, with significant savings potential across the value chain from transportation to disposal.

The collapsible cartridge reduces waste by 80%.



Ints



In a world constantly in motion, our lives depend on reliable fluid handling and separation. Sulzer harnesses the power of flow control and fluid application to make life safer, smarter and more sustainable.

## Sulzer. Because life is fluid.