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# Sulzer (manufacturer)

**Sulzer Ltd.** is a Swiss industrial engineering and manufacturing firm, founded by Salomon Sulzer-Bernet in 1775 and established as **Sulzer Brothers Ltd.** (**Gebrüder Sulzer**) in 1834 in Winterthur, Switzerland. Today it is a publicly traded company with international subsidiaries. The company's shares are listed on the Swiss Stock Exchange.

Sulzer's core strengths are flow control and applicators. The company specializes in pumping, separation, mixing and application technology.

Sulzer Brothers helped develop shuttleless weaving, and their core business was loom manufacture. Rudolf Diesel worked for Sulzer in  $1879,^{[2]}$  and in 1893 Sulzer bought certain rights to diesel engines. Sulzer built their first diesel engine in 1898.

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# Organization

The company is organized into four divisions:

- Pumps Equipment: <u>Pump</u> technology and solutions It produces centrifugal pumps and agitators/mixers for the oil and gas, hydrocarbon, paper, power generation, water, food, metals and fertiliser industries.
- Rotating Equipment Services: Service and repair solutions for rotating equipment such as <u>turbines</u>, <u>pumps</u>, <u>compressors</u>, <u>motors</u>, and <u>generators</u>.



Sulzer headquarters in Winterthur, Switzerland

Type	Public (SIX: SUN (h ttps://www.six-grou p.com/exchanges/s hares/security_info _en.html?id=SUN)) CH0038388911
Industry	Industrial engineering and manufacturing
Founded	1834
Headquarters	Winterthur, Switzerland
Key people	Gregory Poux- Guillaume ( <u>CEO</u> ) Pete Loescher ( <u>Chairman</u> )
Products	Pumps, plant engineering, applicators, rotating equipment service
Revenue	3.05 Billion <sup>[1]</sup> CHF (2017)
Operating income	CHF 282 million
Number of employees	14,732 (end of 2017)
Website	www.sulzer.com (ht tps://www.sulzer.co

 Chemtech: Components and services for separation columns and static mixing

 Applicator Systems (new division as of 2017): Systems for liquid applications (mixing and dispensing systems for adhesives and dental markets, <u>mascara</u> production, one- and two-component applications systems for healthcare markets.

The Sulzer Ltd shares are registered at the SIX Swiss Exchange. As of April 11, 2018, <u>Renova Group</u> held a total of 48.83% of Sulzer's share capital.<sup>[3]</sup>

### History

#### Formation and growth

The company "Gebrüder Sulzer, Foundry in Winterthur" was founded in 1834 by Johann Jacob Sulzer. His sons, Johann Jakob and Solomon produced cast iron, built fire extinguishers, pumps, and apparatus for the textile industry; later they also started installing heaters. In 1836 the workforce grew to around forty journeymen, subworkers and apprentices. In 1839 a foundry was added, a mechanical workshop was set up and the first steam engine was built in Winterthur. In 1859, the first "partnership agreement" between the Sulzer brothers was signed. New products were introduced, first steam engines, later also ships, new organization, and production methods. Around 1860 Sulzer opened his first foreign sales office in Turin, and in 1867 the company participated in the world exhibition in Paris. The workforce had grown to more than 1,000 workers.

From 1880, steam engines, in particular, contributed to the growth to around 2,000 employees. In 1881 a branch was founded in Ludwigshafen am Rhein. In 1898, the first Sulzer diesel engine was developed in cooperation with Rudolf Diesel. Around 1900 the company had over 3,000 employees and sales offices in Milan, Paris, Cairo, London, Moscow and Bucharest, from 1914 also in the Japanese Kobe.

As a family business, the company had grown over the years in the form of a general partnership, and in June 1914 it was converted into two stock corporations with registered offices in Winterthur and Ludwigshafen am Rhein, both of which were renamed Gebrüder Sulzer Aktiengesellschaft. In 1917, both companies were bundled in a holding structure under the name Sulzer-Unternehmungen AG and subsequently the foreign sales offices were also transferred to independent companies. During the 1930s, production fell by two thirds as a result of the global economic crisis, and personnel was massively reduced.

#### World War II

Out of political and personal considerations, Sulzer decided to sell its subsidiaries in Germany by the beginning of the war. [4]

Sulzer was blacklisted by the Allies during World War II due to an increase in trade with Axis countries. Sulzer refused to sign an agreement to limit the future sale of marine diesel engines to the Axis countries, and was blacklisted by the Allies as a result.

#### Postwar period

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From 1945, a growth phase began with a flourishing economy and strong expansion of foreign activities. In the 1950s, increasing production was carried out by guest workers, mainly from southern Europe. New divisions for energy, plant engineering and textile machinery were created, accompanied by better working conditions, expansion of social benefits, women's work for "lighter factory work" and housing subsidies in surrounding communities.

During the second heyday after the Second World War, the Sulzer Tower was built in the early 1960s - the company's new headquarters, a landmark of Winterthur and the tallest building in Switzerland at the time.

In 1961, Swiss Locomotive and Machine Works (SLM) in Winterthur was acquired, and the large diesel engine became Sulzer's flagship product worldwide. In 1966, Sulzer acquired a 53 percent stake in Escher Wyss & Cie. in Zurich, reaching an all-time high of over 30,000 employees. In 1969, Escher Wyss AG was taken over in full.

#### Crisis in the 1970s and 1980s

In the 1970s, the oil crisis announced a new orientation towards the technology group and the development of materials technologies. Sulzer reacted to the global decline in capital goods in the 1970s after losses in the second half of the 1980s. In 1982, the weaving machine business was expanded.

In 1984, Sulzer recorded losses and underwent massive restructuring.

Medical technology was expanded by the purchase of the American Intermedics Group for one billion Swiss francs. The Winterthur machine factory was closed in 1990 and the founding site in Winterthur was vacated. For the first time, Sulzer employed more people abroad than in Switzerland. On May 14, 1993, Gebrüder Sulzer, Aktiengesellschaft was renamed Sulzer Ltd. In 1996, a technology centre was built in the Oberwinterthur Industrial Park.

In 2000, Sulzer acquired the Finnish company Ahlstrom Pumps. In the middle of the year, the steam locomotive and machine factory DLM became independent, the remains of the former SLM became Winpro AG in 2001 through a management buyout.

#### A new start

The time since 2003 is called a new beginning. Since then, the Group has been smaller but more profitable and has recorded strong growth. Sulzer increased operating income and net income by more than 50 percent.

In 2005, a Swiss-government sponsored historical study revealed that Sulzer provided fissile material in the 1970s for the South African nuclear weapons program. [5]

In 2010, the British Dowding & Mills, a leading provider of maintenance and repair services for generators and engines, was



Sulzer in Gillette, Wyoming

acquired. This strengthened the Sulzer Turbo Services division and expanded its field of activity. This step also served to strengthen the service business, away from the cyclical new business.

In spring 2011, Sulzer announced the acquisition of the Cardo Flow Solutions pump division of the Swedish company Assa Abloy for CHF 858 million, thus strengthening the Sulzer Pumps division in the promising water and wastewater market. The deal added the ABS and Scanpumps brands to Sulzer's workforce with 1,800 new employees.

Sulzer added a fourth division to its reporting structure at the beginning of 2017. Since then, the Sulzer Mixpac Systems unit, which has been manufacturing applicators for industrial adhesives since 2006, has formed the new Applicator Systems Division together with the businesses acquired from Geka and PC Cox in 2016.

Sulzer belongs on also on the "List of companies involved in the Holocaust" Hitler's advocate brand.

# **Rail traction**



First Romanian Railways CFR Class 60 locomotive built in Switzerland

Sulzer developed a series of rail traction engines in the 1930s and 1940s which were used extensively in diesel locomotives in the UK, Europe and South America. A small number were used in locomotives in Africa and Australia.<sup>[6]</sup> The Sulzer LDA (prefixed by the number of cylinders, and with a suffix related to the cylinder bore) engine was widely used by British Rail and Romanian Railways. Many were built under licence by Vickers-Armstrong at Barrow as six-, eight- and twelve-cylinder form, and in Romania, by Reşita works for Electroputere Craiova. The twelve-cylinder engine was used in the British Rail Class 47, Romanian Railways Class  $\frac{60}{62}$ , Polish Railways Class ST43, China Railways ND2, and several others. The 12LDA28 engine was a double bank engine

having, in effect, two six-cylinder engines side by side, rather than a V-type as favoured by many other manufacturers. Sulzer V-type engines for rail use bore the type number LVA (with a 50-degree angle between the banks).<sup>[6]</sup>

In the late 1970s, locomotive rebuilder Morrison Knudsen installed a series of Sulzer power units into several existing locomotives. The first applications were of the marine based 6ASL25/30 & 8ASL25/30 series used in a Morrison-Knudsen demonstrator and four M-K TE70-4S units for the Southern Pacific. This was merely reworking of an existing design into a new application<sup>[7]</sup>

Ten 16 ASV25/30 3,600 hp (2,700 kW) power units were installed into locomotives belonging to the Atchison, Topeka & Santa Fe and the Union Pacific. Teething problems plagued these machines and their operation in revenue earning service was brief. Research into correcting their problems continued but was eventually curtailed by Morrison Knudsen late in 1982. These power units were descendants of the LVA range.<sup>[7]</sup>

# New Sulzer Diesel

In 1990, Sulzer spun off the diesel engine division into a separate company named "New Sulzer Diesel" (NSD) and sold most of the shares in it, retaining only a minority ownership. In 1997, NSD was absorbed by Wärtsilä, creating *Wärtsilä NSD*. Wärtsilä NSD makes the world's largest diesel engine, the <u>Wärtsilä-Sulzer RTA96-C</u>. They are also one of the few companies that create a camshaftless <u>intelligent diesel</u> main propulsion engine.

# References

- 1. [1] (https://report.sulzer.com/ar17/en/our-key-figures/)
- 2. 125 years Diesel engine (https://blogs.ethz.ch/digital-collections/en/2018/02/23/dieselmotor/)
- 3. https://www.sulzer.com/en/shared/news/2018/04/12/03/58/sulzer-free-from-us-sanctions
- Switzerland, National Socialism and the Second World War: Final Report. Contributed to by Jean-François Bergier. Berghahn Books. 2003. ISBN 9783858426031.
- How the Swiss helped apartheid South Africa to build the bomb' (https://www.telegraph.co.uk/news/w orldnews/europe/switzerland/1501773/How-the-Swiss-helped-apartheid-South-Africa-to-build-the-bo mb.html) The Telegraph, 29 Oct 2005
- 6. Webb, Brian (1978). Sulzer Diesel Locomotives of British Rail. David & Charles. ISBN 0715375148.
- 7. The Sulzer engine in diesel traction. A potted and incomplete history 1912-1990 (http://www.derbysul zers.com/sulzerengine.html) accessed 17 April 2011

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