

# Self-assessment of Aerosan AG



## Our service goal

Aerosan AG is one of four production companies in the Frike Group. It covers the aerosol and spray system area of applications.

Our goal is: thanks to our comprehensive outsourcing system, customers can largely dispense with the development, inspection, manufacture, packaging, warehousing and logistics of their products themselves. Duplication is eliminated.

Our clear target is to relieve customers of the majority of process-related working stages. This enables customers to focus on their core business to a greater degree.



## Location

Aerosan is located at Obererlen 16, 8752 Näfels in the canton of Glarus. Motorway exit: Näfels on the A3 motorway from Zurich to Chur.

Access to the company is good. The company's premises are approximately 4 kilometres from the motorway. Covering a total area of 3,500 m<sup>2</sup>, the company premises consist of approximately 3,000 m<sup>2</sup> of usable surface area of which around 250 m<sup>2</sup> is occupied by offices and the laboratory. The company was purchased in mid-1976 by Fritz Keller AG and has been continuously expanded and upgraded. The property is owned by Aerosan AG.

A company of the FRIKE group



## Organization / Personnel

Founded in 1976, Aerosan AG is a joint stock company that has developed over the years into a profitable undertaking. The shares are owned by the Fritz Keller AG.

As Fritz Keller AG continues to handle certain central administrative duties, such as, for example, human resources, bookkeeping, sales and marketing etc., a very flat hierarchy was chosen for Aerosan AG. This provides customers with short and efficient clarification routes, which results in speedy reaction times. The company is headed by the works manager and vigorously supported by internal sales staff, the laboratory as well as the technical service staff.



With a network of computer systems specially designed for QA and production, all companies have rapid access to central data.

The high level of mobility of individual senior managers ensures that this can be accessed at any time even on customers' premises. Problems can thus be efficiently solved and information on details can be given immediately.

## Environmental situation

Production stages and processes are precisely monitored and improved on a continuous basis. This aspect receives particular attention in the case of new developments to ensure full compliance with Switzerland's strict environmental laws. There are no other emissions.

The company is subject to the Hazardous Incident Ordinance and is thus permanently monitored by the Federal authorities as well.



## Purchasing / Logistics

We maintain international contacts with suppliers of raw materials and packaging. This allows our customers to leave selection and procurement to us. Alongside our wide range of raw materials and packaging, solutions can also be found for special requests. We purchase quantities ranging from minor amounts through to entire tank trains. Coordination within the Fritz Keller Group allows the company to purchase top-quality raw materials and packaging at appropriate market prices.

## Quality assurance / Laboratory

The company has process-oriented certification to ISO 9001. The flow of raw materials and packaging is controlled by barcode, assuring complete traceability to the relevant delivery. This means that the corresponding batches can be identified and traced just by pushing a button on our sophisticated QA computer system. All QA data is stored specifically for each article and is immediately accessible for most members of staff should customers have any queries. If any discrepancies arise, this helps us not only to provide data and facts immediately and without any complications but also to take the corresponding measures. The quality assurance laboratory is headed by the laboratory manager and not by the works manager, which ensures that quality control meets the requirement for the separation of powers. The laboratory is equipped so that all analyses and data required can be produced on the spot. The laboratory at Fritz Keller AG is available for special instrumental analyses. This has all the important instruments that are standard in our branch of business. (HPLC, IR, UV, GC, etc.). When highly specific analyses are required, there is a wide range of contacts with different service laboratories.

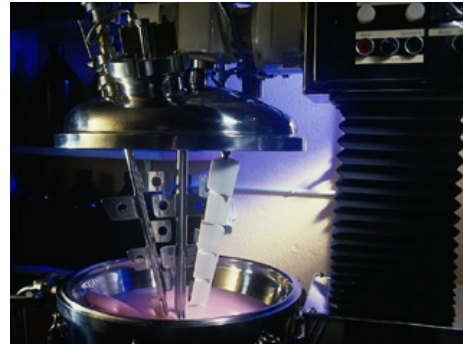


## Production plant

Batches range in size from 200 kg to 2000 kg. The machinery is made of V4A-grade steel and suited to GMP production. Some of the equipment can be heated or cooled. When complex or large production volumes are needed, Cosmina AG or Fritz Keller AG are called in to assist (cf. the self-assessment of Cosmina AG and Fritz Keller AG).

Production capacities in the liquid sector are currently running at 5 - 10 tons per day/shift. This figure is dependent on the product, the process and, to some degree, on filling capacity, etc.

Of course, capacities can also be boosted at short notice by the use of additional members of staff and extended shifts.



## Filling plant

The filling facilities are designed to package anything from small series (>1,000 units) through to medium-sized series (>100,000 units.). The plant has been designed for high mobility, i.e. we put a production line together to suit almost all orders. The plant is designed to handle both labelled and printed cans as well as special shapes. We also have machines for boxing, cellophane wrapping and shrinking.



## Aerosol fillers

Multipurpose fillers for aerosols and liquids	35 units/min.	10 ml – 1000 ml
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Macromat rotary filler	45 cans/min.	20 ml – 1000 ml
Macromat rotary filler (undercup)	45 cans/min.	20 ml – 1000 ml

Various manual fillers for small series

Aluminium, tinplate, glass and twin-chamber aerosols can be filled. The twin-chamber aerosols are filled using undercup filling.

## Propellants

All standard propellants are processed at Aerosan AG. However, these are mainly propane/ butane, CO<sub>2</sub> and N<sub>2</sub>O. The gases - oxygen, nitrogen, DME, 134a and 152a - are usually in stock and can also be obtained at short notice.

## Storage tanks, storage areas and warehousing

We have storage tanks for raw materials with a storage capacity of 2 x 20 m<sup>3</sup> as well as 1 x 14 m<sup>3</sup> per tank. Naturally, we also have many intermediate storage tanks for semi-finished products or customer products.

The area occupied by warehousing and handling amounts to approximately 1,500 m<sup>2</sup>, part of which uses a pallet-rack system. For larger warehousing requirements, we use our central warehouse at Cosmina AG (cf. self-assessment for Cosmina AG).



For some customers, we also look after the logistics.

I.e. we have a direct link to our customers' computer systems and use this to handle incoming and outgoing goods. As and when required, deliveries are inspected and approved in our laboratory. As almost every customer works with a different software application, our staff are used to working with different systems.

The orders concerned (the orders placed with our customers) are collected in our offices and printed out. This order is put together by our staff within the agreed time (sometimes within 24 hours) and prepared for despatch. The road haulage companies concerned are informed or collect the goods from us on a regular schedule. This additional service results in tremendous savings where transport, warehousing and handling are concerned.

## Final remarks

All of the above-mentioned possibilities allow us to offer each customer an individually tailored package. All of these possibilities can be fitted together on a modular basis to meet customers' specific requirements. The system can also be changed and modified in the shortest possible time with maximum benefits for the customers.

Aerosan AG, 14 April 2002, André Keller