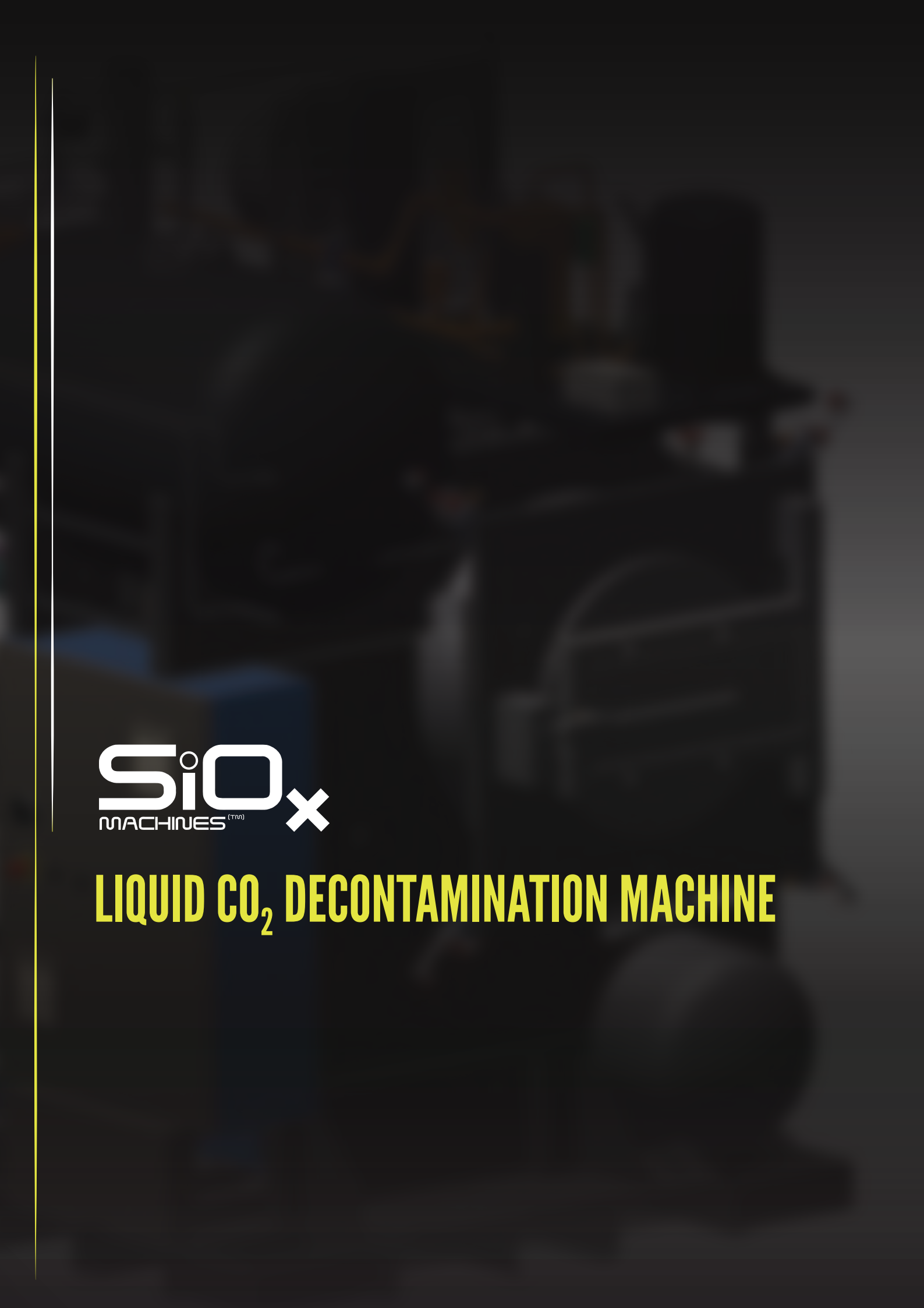


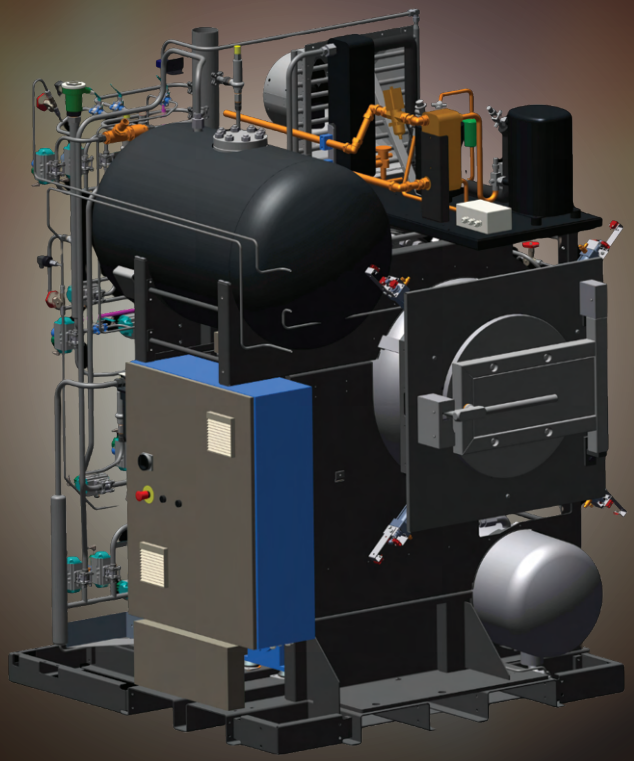
SiOx MACHINES™

LIQUID CO_2 DECONTAMINATION MACHINE

STATE OF THE ART DECONTAMINATION OF FIREFIGHTING PPE

LIQUID CO_2 DECONTAMINATION

Firefighter suits and other PPE require adequate cleaning procedures to remove normal as well as hazardous contaminations. Water wash is established and removes, enabled by special detergents, enzymes and other additives, contaminations such as polar stains, bodily fluids, particles, salt and similar materials. Water wash, however, is not sufficient for removing polyaromatic compounds, typically found in protective clothing of firefighters and chimney sweepers. This is where CO_2 cleaning can be applied. Liquid CO_2 dissolves and removes oil, fat and non-polar contaminations.
Therefore, the future laundry will comprise CO_2-and water-based washing machines, together with other equipment such as for reconditioning and drying.



THE ORIGINAL MACHINE

CO_2 cleaning machines were developed by Electrolux about 20 years ago. Today, some 30 machines are in operation in different segments such as decontamination of fire fighter suits, traditional dry cleaning and industrial applications. The technology has won numerous awards, including “Blauer Engel” and “Nordic Swan” in Germany and Sweden, respectively.

EU'S LEADING PROVIDER OF LCO_2 DECONTAMINATION MACHINES

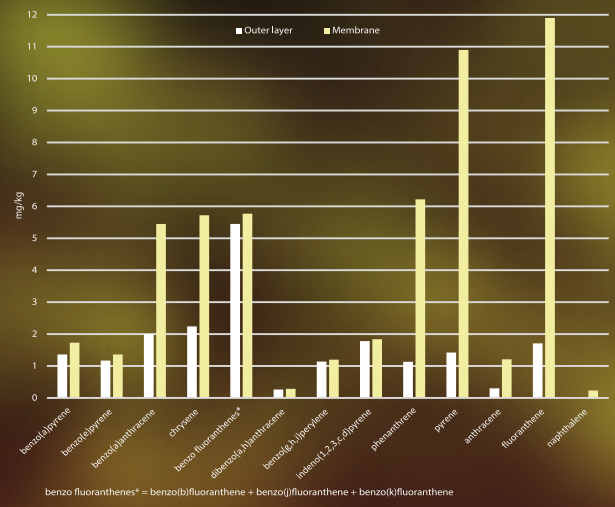
Today, SiOx Machines AB, has taken over liquid CO_2 operations from Electrolux. Our machines are in operation in Belgium, Germany, Austria, France, Slovenia and other countries.

UNPARALLELED EFFICIENCY

Firefighters run a sharply increased risk of cancer. They are exposed to toxic substances more frequently than anyone is. Despite it is a well-known topic, firefighters are still as vulnerable to toxic substances as they were in the past due to an inefficient gear decontamination.

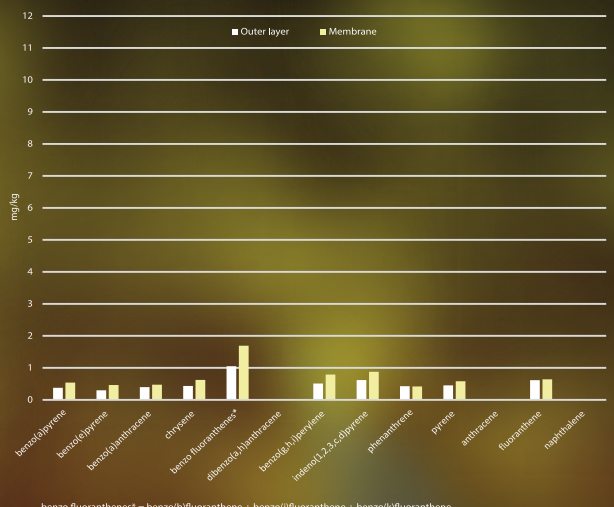
Liquid CO_2 washer lets CO_2 penetrate into the deepest internal membrane pores and fibres of the exposed textiles, removing the most harmful and toxic substances. It is also extremely efficient in removing oils and fats.

BEFORE DECONTAMINATION



benzo fluoranthenes* = benzo(b)fluoranthene + benzo(j)fluoranthene + benzo(k)fluoranthene

AFTER DECONTAMINATION



benzo fluoranthenes* = benzo(b)fluoranthene + benzo(j)fluoranthene + benzo(k)fluoranthene

TEXTILE & LEATHER PRODUCTS DECONTAMINATION

One of the major issues in comprehensive firefighter's PPE decontamination are leather products such as gloves, boots or inner parts of the helmets.

Due to leather's sensitivity to the water it's not possible to efficiently clean those products with conventional methods. Using our LCO_2 decontamination machine this problem can finally be overcome. LCO_2 effectively removes PAH without damaging the leather.

FEATURES AND BENEFITS

- Environmentally safe drycleaning process
- Suitable for all types of garments, including leather products
- There is no residual solvent left in the garments.
- No dangerous emissions to ambient air Odorless process

ECONOMIC SOLUTION

- Fast process. Process time is less than 30 minutes from dry to dry.
- Cleaning cost per garment is lower or equal to other solvent processes.
- No extra taxes or charges on the solvent.
- Energy consumption is lower compared to other solutions.

MAIN SPECIFICATIONS

General specifications

Max. load	17 kg *
Inner drum volume	250 l
Inner drum diameter	700 mm

Dimensions

Width	1850 mm
Depth	2000 mm
Height	2610 mm

Consumption data

Electricity consumption	5,5 kWh
CO_2 consumption / wash	~ 2 kg

Electrical connections

Voltage 3 x 400 V 50 Hz	15 (32) kW(A)
Conductive area, min.	4 x 10 mm2

*sutiable for 4x jacket and 4x trousers EN 469, level 2

VISIT OUR DEMO SETUP

CODEX Technologies is setting global standards in maintaining and cleaning firefighter's personal protective equipment.

We invite you to contact us to arrange a visit to the most comprehensive firefighting PPE maintenance center, located in Slovenia.

PRODUCED IN SWEDEN

Siox Machines production facility is located in Ljungby in southern Sweden. In a modern facility, product development, production and testing are carried out by experienced engineers and technicians.

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