



A5009
CONFORM TO THE QUALITY
SYSTEM STANDARD AQAP 2110
and ISO 9001:2008



CERTIFICATE
N° 36758

FD 311

CRISTANINI CBRN DECONTAMINATION SYSTEMS



**ONLY ONE PERSON
ONLY ONE MACHINE
ONLY ONE PRODUCT**

SIMPLY

THE BEST SOLUTION FOR
CBRN DECONTAMINATION
AND DETOXIFICATION



SANIJET C.921

SANIJETGUN

BX24



SANIJET C. 921

Code 800020030

NATO Standard Number 4230-15-157-5553

With standard accessories that can be custom made.

CBRN decontamination/detoxification system.

The heart of Cristanini's decontamination system the Sanijet C. 921 with its frame made of stainless steel, can be heli-borne, carried on trucks or light vehicles or smoothly handled on the ground when equipped with tires.

Can be used Decon/Detox operations powder, liquid and two liquids simultaneously in different %.

It is also a generator and work in altitude environment

Diesel engine: 10 hp air-cooled

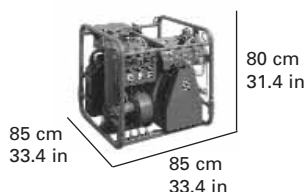
Water suction pump: from 5 m of altitude

Thermal group: Kcal/h 78.000 (309.500 Btu)

Fuel: diesel or kerosene or JP8

Alternator: (integrated) 2000 W, 230 V AC

Ignition battery: 12 V charged by the diesel motor



Technical characteristics

- Cold water at 3 bar (45 psi) - 3000 l/h (793 gph)
- Hot water at 3 bar (45 psi) - 3000 l/h (793 gph) - 34°C (93,2°F)
- Hot water at 90 bar (1300 psi) - 1020 l/h (270 gph) - 80÷90°C (175÷194°F)
- Steam at 20 bar (290 psi) - 368 l/h (97 gph) - 180÷210°C (356÷392°F)
- Weight: 180-230 kg (396-507 lb)

THE SYSTEM, EQUIPPED WITH DEDICATED ACCESSORIES PERFORMS THE DECONTAMINATION/DETOXIFICATION OF VEHICLES, PERSONNEL AND MATERIALS, ETC.



SANIJET C. 921 EL

Code 800020200

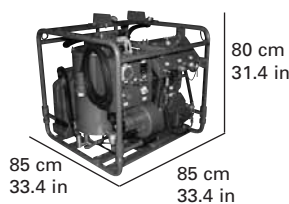
NATO Standard Number 4230-15-157-5553

With standard accessories that can be custom made.

CBRN decontamination/detoxification system,
low noise.

The heart of Cristanini's decontamination system the Sanijet C. 921 with its frame made of stainless steel, can be heli-borne, carried on trucks or light vehicles or smoothly handled on the ground when equipped with tires.

Can be used Decon/Detox operations
powder, liquid and two liquids
simultaneously in different %.
It is also a generator and work
in altitude environment



Electric motor: 3 kW 3~400V 50÷60Hz

Water suction pump: from 5 m of altitude

Thermal group: Kcal/h 78.000 (309.500 Btu)

Burner: diesel or kerosene or JP8

Technical characteristics

- Cold water at 3 bar (45 psi) - 3000 l/h (793 gph)
- Hot water at 3 bar (45 psi) - 3000 l/h (793 gph) - 34°C (93,2°F)
- Hot water at 90 bar (1300 psi) - 1020 l/h (270 gph) - 80÷90°C (175÷194°F)
- Steam at 20 bar (290 psi) - 368 l/h (97 gph) - 180÷210°C (356÷392°F)
- Weight: 180-230 kg (396-507 lb)

THE SYSTEM, EQUIPPED WITH DEDICATED ACCESSORIES PERFORMS THE DECONTAMINATION/DETOXIFICATION OF VEHICLES, PERSONNEL AND MATERIALS, ETC.





SANIJET C. 1126 HR

(SANIJETONE)

Code 800020120

NATO Standard Number 4230-15-147-7440

CBRN high power low-noise decontamination system for 2 operators.

Diesel engine: 16 hp water-cooled

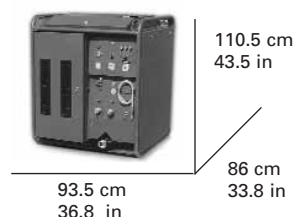
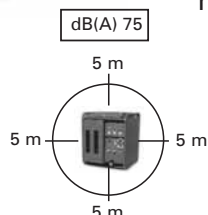
Water suction pump: from 5 m of altitude

Thermal group: Kcal/h 100.000 (396.800 Btu)

Fuel: diesel or kerosene or JP8

Alternator: (integrated) 2200 W, 230 V AC

Ignition battery: 12 V charged by the diesel motor



Technical characteristics

- Cold water at 3 bar (45 psi) - 5000 l/h (1321 gph)
- Hot water at 3 bar (45 psi) - 5000 l/h (1321 gph) - 30÷34°C (86÷93.2°F)
- Hot water at 110 bar (1595 psi) 1560 l/h (412 gph) - 80÷90°C (175÷194°F)
- Steam at 20 bar (290 psi) - 510 l/h (135 gph) - 180÷200°C (356÷392°F)
- Weight: 420 kg (925 lb)

THE SYSTEM, EQUIPPED WITH DEDICATED ACCESSORIES PERFORMS THE DECONTAMINATION/DETOXIFICATION OF VEHICLES, PERSONNEL AND MATERIALS, ETC.



SANIJET C. 1526

Code 800020040

CBRN decontamination unit

Diesel engine: 16 hp air-cooled

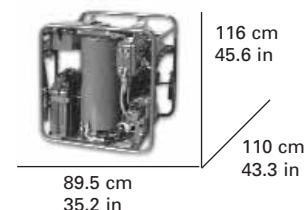
Water suction pump: from 5 m of altitude

Thermal group: Kcal/h 100.000 (396.800 Btu)

Fuel: diesel or kerosene or JP8

Alternator: (integrated) 2000 W, 230 V AC

Ignition battery: 12 V charged by the diesel motor



Technical characteristics

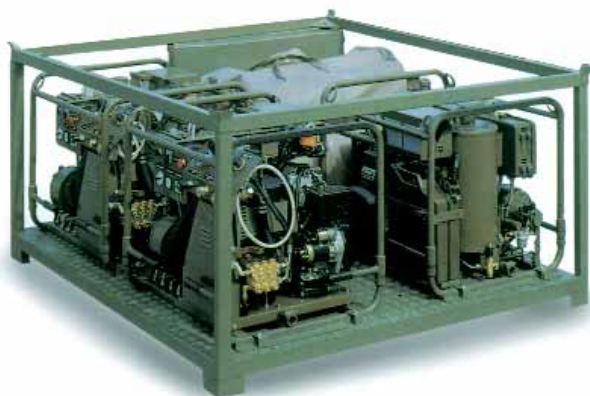
- Cold water at 3 bar (45 psi) - 5000 l/h (1321 gph)
- Hot water at 3 bar (45 psi) - 3600 l/h (951 gph) - 30÷34°C (86÷93.2°F)
- Hot water at 150 bar (2175 psi) 1560 l/h (412 gph) - 80÷90°C (175÷194°F)
- Steam at 20 bar (290 psi) - 526 l/h (138 gph) - 180÷200°C (356÷392°F)
- Weight: 320 kg (617 lb)

THE SYSTEM, EQUIPPED WITH DEDICATED ACCESSORIES PERFORMS THE DECONTAMINATION/DETOXIFICATION OF VEHICLES, PERSONNEL AND MATERIALS, ETC.

SANIJET C. 921 ASP/3 MIL

Code 800020250

NATO Standard Number 4230-15-157-5553



The large capacity field station for continuous and simultaneous decontamination/detoxification of vehicles, personnel, equipment and for fire fighting and ground decontamination.

Diesel engine: 10 hp air-cooled

Water suction pump: from 5 m of altitude

Thermal group: Kcal/h 234000 (928.512 Btu)

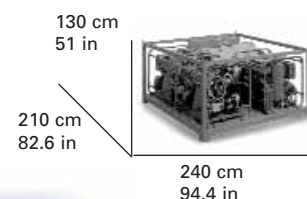
Fuel: diesel or kerosene or JP8

Alternator: (integrated) 2000 W, x 3 - 230 V AC

Ignition battery: 12 V charged by the diesel motor

Technical characteristics

- Cold water at 3 bar (45 psi) - 9000 l/h (2380 gph)
- Hot water at 3 bar (45 psi) - 9000 l/h (2380 gph) 30÷34°C (86÷93.2°F)
- Hot water at 90 bar (1305 psi) - 3060 l/h (810 gph) - 80÷90°C (175÷194°F)
- Steam at 20 bar (290 psi) - 1104 l/h (291 gph) - 180÷200°C (356÷392°F)
- Weight: 1100 kg (2425 lb) without battery and diesel tank.



SANIJETGUN

Code 240289

NATO Standard Number 4230-15-116-6386



Special lance that contains the decontaminating/detoxifying product (BX 24 powder) inside the lance and with only one operator, one machine with high pressure hot or cold water, carrying out all three operations:

- a) pre-washing;
- b) decontamination/detoxification;
- c) rinse

at the same time and is commanded directly from the lance.

Could be used with powder and liquid decon/detox products.



5.20 kg
11.4 lb



34 cm
13.3 in

96 cm
37.7 in

12 cm
4.7 in

**ONE PERSON COMPLETE
ONE MACHINE = DECON/DETOX
ONE PRODUCT MISSION**



RI/NBCR TRAILER

Code 11200885

NATO Standard Number 4230-15-157-8915

Rapid deployment unit for decontamination and detoxification.



SKID/NBCR

Code 11200872

NATO Standard Number 4230-15-157-8916

CAPABILITIES WITH INCLUDED STANDARD ACCESSORIES:

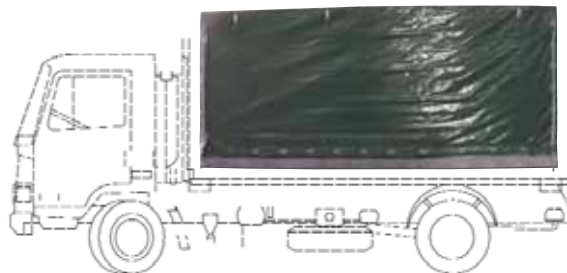
CAPABILITY A: Decontamination of persons: 60 persons/h

CAPABILITY B: Decontamination/detoxification of vehicles: 15 vehicles/h

CAPABILITY C: Decontamination/detoxification of equipment and materials: max 368 l/h (97,22 gph) of steam at 180-200°C (356-392°F)

CAPABILITY D: Decontamination/detoxification of terrain: 10-20.000 m²/h (210.000 sq.ft/h)

CAPABILITY E: Fire-fighting: water jet length 20 m. (65 ft).





SHELTER CBRN/2

THROUGHT DECON STATION

Code 800010040

Self contained large capacity mobile field station for continuous and simultaneous decontamination/ detoxification of persons, materials and vehicles, for ground decontamination and fire-fighting.

CAPABILITIES WITH STANDARD ACCESSORIES:

CAPABILITY A: Continuous and simultaneous

decontamination/detoxification of persons, materials and vehicles:
180 persons/h - 15 vehicles/h - materials
with 380 l/h (100,39 gph) of steam at 180-200°C (352-396°F)

Operating not in simultaneous

CAPABILITY B: Personnel decontamination:
360 persons/h

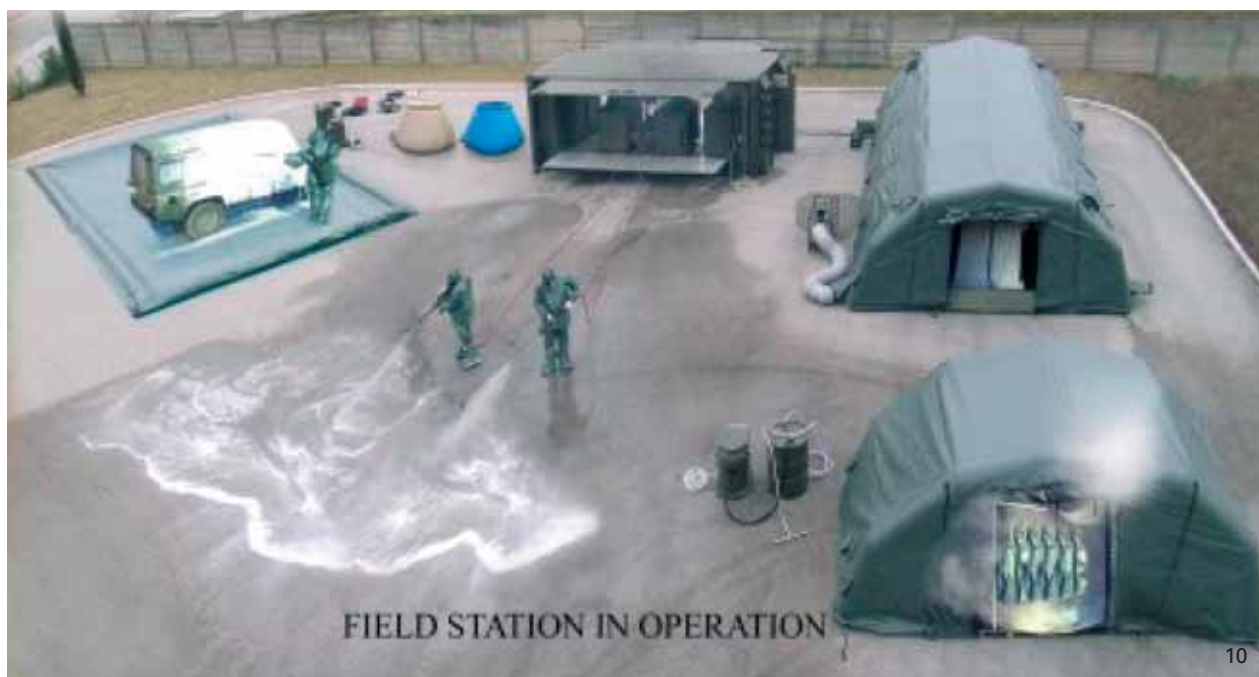
CAPABILITY C: Decontamination/detoxification of materials: max 760 l/h (200,79gph) of steam at 180-200°C (352-396°F)

CAPABILITY D: Decontamination/detoxification of vehicles: 30 vehicles/h

CAPABILITY E: Decontamination/detoxification of terrain: 20.000 m²/h (215,200 sq.ft/h)

CAPABILITY F: Fire-fighting: water jet length 20 m. (65 ft)

CAPABILITY G: Decontamination of sensitive material and equipment: 100 m²/h (1,76 sq.ft/h).



FIELD STATION IN OPERATION



SHELTER B-LAB/1104

DEPLOYABLE BIO LABORATORY

Code 800010070

Independent Biological Sheltered Field Laboratory

PCL3 (ex BL3) (STANAG 4632).

Realization based on class 1C ISO 668 - 20".

To be used in contaminated area in extreme climatic conditions (A1 and C1 STANAG 4370)



Frontal view with samples entrance



View of "technical room" zone



Partial view of internal part



SX34 system for sensitive equipment Decon



View of manipulation chamber (glove box)



View of laboratory



View of autoclave, combined refrigerator and freezer

DDMAS

LARGE SCALE

Code 240450

Mobile Autonomous Station thorough CBRNE decontamination/detoxification of personnel, vehicles, materials, sensitive equipment, terrain and with potable water plant. Transported by the customer's truck.

(JOINT SERVICE TRANSPORTABLE DECONTAMINATION SYSTEM
LARGE SCALE - JSTDLS-LS)



TRANSPORTABLE WITH HERCULES CI 30J
using dual rail and innovative key loader
system (5G)



CAPABILITIES WITH STANDARD ACCESSORIES:

CAPABILITY A: Personnel decontamination: 80 persons/h

CAPABILITY B: Decontamination/detoxification of
vehicles: 10-12 vehicles/h

CAPABILITY C: Decontamination/detoxification of
webbing, masks and other combat equipment for 80-100 men/h

CAPABILITY D: Decontamination of sensitive
equipment: 100 m²/h (1,76 sq.ft/h).

CAPABILITY E: Decontamination/detoxification of
terrain: 10-20.000 m²/h (107,600 - 215,200 sq.ft/h)

CAPABILITY F: Fire-fighting: water jet length
20-25 m. (65,6-82 ft)

CAPABILITY G: Degassing/sterilization of tanks: for
tanks containing explosive gases or B contamination.

CAPABILITY H: Drinkable water
production/Desalinization: max 480 l/h (126 gph)



**Special Key loader
system for C.130
Tactical Flight**





VIRE CBRN/PR-ID

Code 240480

Emergency Rapid Identification Vehicle for the detection and the identification of CBRN aggressive agents and TICs.

Provisional Identification Level Capability.



The **VIRE CBRN/PR-ID** carries out the initial detection and identification, rapidly supplying sufficiently precise information allowing immediate reaction from other Units capable of mitigating results of a CBRN event.

Today, there is a steady increase in the Nations to be equipped with these vehicles, due to this type of employment considering the type of threats to be counteracted.

The **VIRE CBRN/PR-ID** has the main characteristics as follows:

- **Highly manoeuvrable, self contained** and flexible when employed.
- **Visibly "low-key"**. The vehicle is not conspicuous unlike other vehicles of the Law Enforcement.
- It is supplied with **portable instruments** that can immediately **detect and identify CBRN threats deriving from toxic substances** resulting from natural disasters, industrial disasters, road accidents or terrorist attacks.
- The **VIRE CBRN/PR-ID** gives a precious first response for successive phases of emergency management. However the primary mission of the **VIRE CBRN/PR-ID**, is not focused on operating in contaminated zones, in case of danger, it can avert with safety (for the operators) from a contaminated zone, thanks for the **COLPRO system installed in the driver's cabin**.



LCD
detection
instrument



Portable biological
handheld test



PSDS/10 MIL -
Portable small
Decon/Detox system



Meteorological
station



RAMAN
chemical
identifier



HAZMAT ID
portable
chemical
identifier



13 SX 34 - System for decontamination
of Sensitive materials



PSDS/1,5 MIL - Portable small
decon/detox system

BX24

Code 240243

NATO Standard Number 6810-15-149-4789



- High capacity of **decontamination/detoxification**
- **Low environmental impact**
- Non-aggressive and easy to store
- One powder product only, ready for instant emulsion
- No additives or solvents required
- To be used with all Cristanini decon/detox systems.
- Storing temperature range: -32°C +49°C
(climatic zone A1-C1 STANAG 4370)

BX 24 has been designed and engineered to chemically decompose the aggressive agents with its oxides with two principles: oxidation and hidrolization. **It is a solution for the sanitification operation in the redeployment phase.**

BX 24 has been also successfully tested by OIE/FAO (World Organization For Animal Health/Food and Agriculture Organization) against H5N1 avian influence virus, zooiatic disease and viruses.

VX detoxification on metal surfaces coated with Alkydic and Polyurethane paint with BX 24 and comparison with calcium hypochlorite (C8)

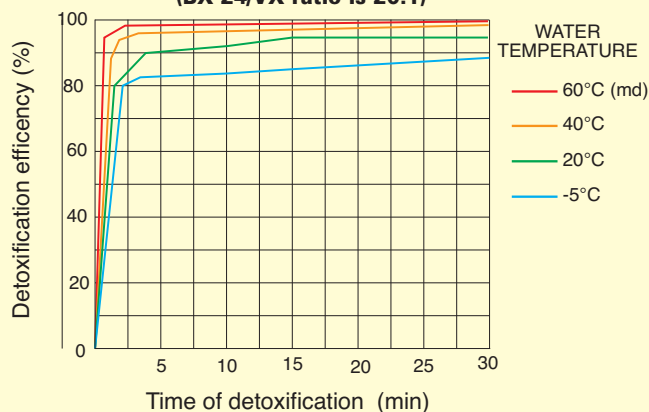
BX 24 102 g/m² water 0.8 l/m²
C8 (German emulsion) 250 g/m² water 2.5 l/m²

SAMPLE	BX24	C8
Alkydic paint	> 99%	43% (± 6%)
Polyurethane paint	> 99%	> 99%

VX contamination: 0.2 g/m²
Contact time surface - VX: 90 min
Contact time contaminated surface - BX24: 20 min
Contact time contaminated surface - C8: 20 min



Detoxification efficiency of BX 24 for VX at various temperatures (BX 24/VX ratio is 20:1)



Ministry of Defence- CEB - Paris - France
Laboratory evaluation of BX24®
Efficiency against Biological Agent

Material	Bacillus antracis			Bacillus atrophaeus		
	Glass	Painted steel	ABS	Glass	Painted steel	ABS
Initial contamination (spores / porte Germe)	1,6 10 ⁶	1,4 10 ⁶	8,4 10 ⁶	0,7 10 ⁶	1,1 10 ⁶	5 10 ⁶
Residual Contamination (spores / porte Germe)	5	3	57	2	0*	11
Material	Yersinia pestis			Escherichia coli		
	Glass	Painted steel	ABS	Glass	Painted steel	ABS
Initial contamination (spores / porte Germe)	0,5 10 ⁶	0,7 10 ⁶	0,3 10 ⁶	0,7 10 ⁶	1,1 10 ⁶	5 10 ⁶
Residual Contamination (spores / porte Germe)	0*	0*	0*	0*	0*	0*

*No viable bacterium has been detected

ALL OUR EQUIPMENT AND PRODUCTS HAVE BEEN TESTED BY INDIPENDENT LABORATORIES AND THEY ARE IN USE IN MANY COUNTRIES (REFERENCES ON REQUEST)

SENSITIVE EQUIPMENT SYSTEM SX34

Code 958090183

NATO Standard Number 6850-15-203-0545

CBRN DECONTAMINATION SYSTEM FOR SENSITIVE EQUIPMENT SUCH AS AIRCRAFT INSTRUMENTS AND PORTABLE DETECTION DEVICE AND ALL OTHERS ELECTRONIC DEVICES.



SX34 Provide thorough and clearance **decontamination of sensitive equipment** and or interiors of platforms:

- Small individual equipment such as masks, guns, aiming systems, helmets or others;
- Sensitive equipment such as electronics, optics, optronics, computers or others;
- The interior of equipment and inside platforms (cockpit)

SX34 is non-corrosive, non-toxic and environmentally safe decontaminant; suitable for a timely clean-up of CBRN agents on all materials and sensitive surfaces.

SX34 acts by removing substances with a wide range of polarity from sensitive surfaces **without damaging them.**

SX34 acts without spreading contamination or carry agents in to gaps.

SX34 is **environmentally friendly** (no components banded or next to be banded, no stratospheric ozone depletion substances). Its action is successful with all CBRN threats.

PSDS 1,5 MIL

PORTABLE SMALL DECON/DETOX SET

Code 240440

NATO Standard Number 4230-15-203-0549

Portable small decontamination/detoxification system for manual use. Capacity 1,5 litres. (0,40 US gal)
Capability: $8 \div 10 \text{ m}^2$ (0,086 \div 0,10 sq/ft)



PSDS/10 MIL

PORTABLE DECON/DETOX SET

Code 240407

NATO Standard Number 4230-15-170-4160

Portable small decontamination/detoxification system for manual use.
Capacity 10 l. (2,64 US gal.)
Capability: 90 m^2 (0,96 sq/ft)



PSDS/10 MIL with accessory

Code 950090189

NATO Standard Number 4230-15-157-5549

Portable small decontamination/detoxification system for manual use.
Capacity 10 l. (2,64 US gal.)
Capability: 120 m^2 (1,29 sq/ft)



PRNDS/12 MIL

Code 950090195

NATO Standard Number 4230-15-199-5663

Portable small decontamination/detoxification system for manual use with BX 40 foam. Capacity 12 litres. (3,17 US gal)
Capability: 400 m^2 (4,30 sq/ft)



SAM 125M

Code 240276

NATO Standard Number 4230-15-170-6525

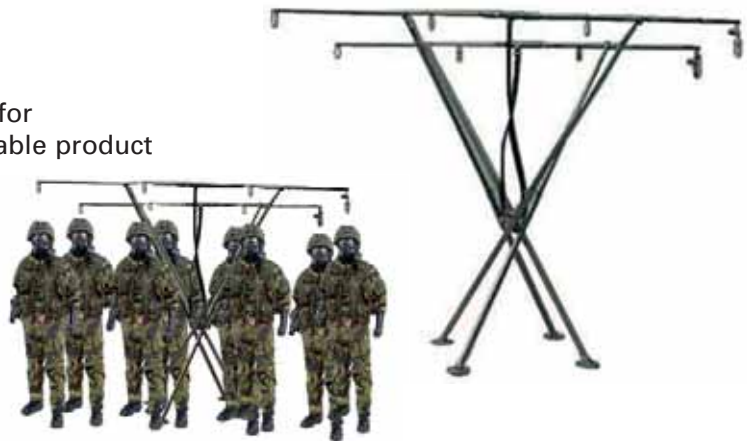
Individual field shower, in stainless steel, with 3 outlets. Automatic adjustable product mixing (decontaminant, shampoo, soapy, liquids, etc.)



SAM 135M

Code 240335

Portable field shower with 8 outlets for simultaneous use. Automatic adjustable product mixing (decontaminant, shampoo, soapy, liquids, etc.) for each outlet.



TUNNEL SHOWER

TACTICAL STEAM DECON MODULE

1200x1200 mm. (47,28 x 47,28 in.)

Code 240266

Automatic adjustable product mixing (decontaminant, shampoo, soap, liquids, etc.), complete with contaminated water collection tray and evacuation pump with maximum protection factor (IP 68).



INFLATABLE SHOWER TENT

Code 800805113

Complete with contaminated water collection tray and evacuation pump with maximum protection factor (IP68).



TUNNEL SHOWER

Code 240262

Automatic adjustable product mixing system (decontaminant, shampoo, soap, liquids, etc.) for each outlet, complete with contaminated water collection tray and evacuation pump with maximum protection factor (IP68).



INFLATABLE TENT

Code 958090152

Complete with 6 shower installation, full illumination 24V, contaminated water collection tray and evacuation pump with maximum protection factor (IP68).

External dimensions: 8400x5700x3000 mm.
(330,7x224,4x118,1 in.)



MULTIPURPOSE INFLATABLE

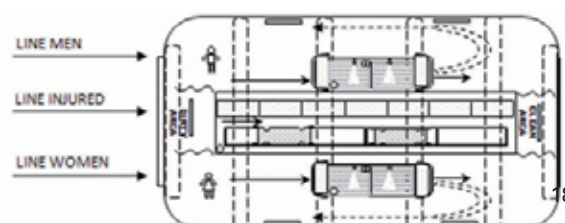
DECONTAMINATION/DETOXIFICATION STATION

Code 958090175

NATO Standard Number 4230-15-189-2026

Complete with 3 different separate pathways for decontamination of MEN, WOMEN AND INJURED PERSONS. Each pathway is separated from each other. Complete with showers for each single pathway, n. 2 stretchers for injured, n. 3 evacuation pump with maximum protection factor (IP68), illumination 24 V.

External dimensions:
8400x5700x3000 mm.
(330,7x224,4x118,1 in.)



INFLATABLE TENT

Code 800805069

NATO Standard Number 8340-15-189-1984

For decontaminating/detoxifying of materials and suits with introduction of steam at 180-200°C (356-392°F)
Complete with water collection tray and evacuation pump with maximum protection factor (IP68).
External dimensions: L 3000xW 5000xH 2850 mm.
(118,1x196,8x112,2 in.)



TSDM - TACTICAL STEAM DECON MODULE

Code 958090351

For the decontamination/detoxification of masks, lightweight weapons, webbing, personnel individual equipment, etc., complete with water collection tray and evacuation pump with maximum protection factor (IP68).
External dimensions: L 1200xW 200xH 2420 mm. (47,28x47,28x95,28 in.)



FAMILY OF DECONTAMINANTS



Contaminating agent on surface



Particles decomposed and neutralized by detoxificant BX 24



BX 24 (powder) Code 240243 - **NATO Standard Number 6810-15-149-4789**

Decontamination/detoxification product for vehicles and different types of materials from CBRN agents.

BX 24 is absolutely the most efficient and the most interesting non-aggressive detoxifying agent available today. It is also tested for preventive Decon/Detox (Sanification) of materials and vehicles in redeployment from mil operations.



CBRN



BX 29 (liquid)

Code 240240 - **NATO Standard Number 6850-15-157-8945**

Decontaminant product for persons.

PERSONNEL DECONTAMINATION



BX 30 (powder)

Code 240256

Training version of BX 24

CBRN TRAINING



BX 40 (liquid)

Code 240257 - **NATO Standard Number 6850-15-157-8946**

Decontaminant product for CBRN decontamination of aircraft, helicopters, etc.

CBRN



SX 34 (aerosol)

Code 240230 - **NATO Standard Number 6850-15-203-0546**

CBRN decontaminant product for **sensitive equipment**.

SENSITIVE EQUIPMENT



BX 60 (liquid)

Code 240350

Biological decontamination product for apparatus:

- 1) CFH (electric applicator for chemical products - aerosol),
- 2) PRT (autonomous portable fogger system) and SANIJET.

**ALL CRISTANINI PRODUCTS HAVE A LOW ENVIRONMENTAL IMPACT.
THE COMPLETE TESTS BOOK IS AVAILABLE ON REQUEST TO CRISTANINI SPA**



**OUR SOLUTIONS
ARE ENVIRONMENTALLY FRIENDLY**



CRISTANINI

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**THE CRISTANINI COMPANY CAN PERSONALISE THE SYSTEM ACCORDING TO
THE REQUIREMENTS OF THE CUSTOMER/USER**

IN THE CONTINUAL PURSUIT OF IMPROVING ITS PRODUCTS AND PROVIDE ALWAYS A BETTER SOLUTION FOR THE
END USER, CRISTANINI COMPANY RESERVES THE RIGHT TO CHANGE TECHNICAL CHARACTERISTICS
AND SPECIFICATIONS WITHOUT PRIOR NOTICE