



DIVISION



HYDROJETTING PROTECTION



Hydrojetting operation is one of the most versatile and efficient industrial maintenance methods on the market, but one of the riskiest ones, since the Ultra High Pressure pressurized jet can cause serious injuries and even fatal accidents.

Safetech Protection was born from the experience of the more

than 30 years in the Waterjetting market, and the need to protect the Hydrojet operator, who is frequently exposed to the risks of High Pressure Jets, with maximum efficiency and comfort.

Safety first

We transmit security not only in our products, but mainly through our positioning. We are a serious and ethical company that values the trust placed in us.

Cutting-edge technology

We are modern, use and seek the best technology in the service of saving lives.

Comfort as a differential

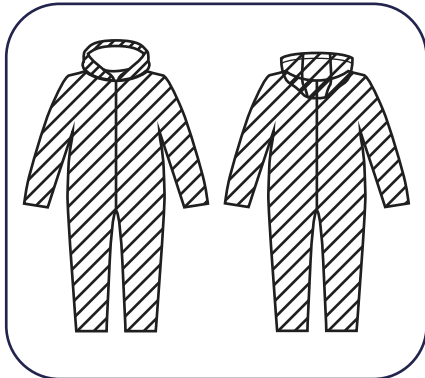
We know that it is often no use to offer a product of technical quality, we seek to mix resistive technology with ergonomics and thermal comfort.

OUR TECHNOLOGY:

- ✓ Manufactured in state-of-the-art PVC Tech fabric specifically developed for Hydrojetting application;
- ✓ Withstands high pressure water jets without crossing over to the opposite side;
- ✓ Ergonomic, allowing all movements of the hydrojetting operation;
- ✓ Available in Overall or Trousers + Jacket or Apron models;
- ✓ Impermeable external cover, preventing water mist from accumulating, causing discomfort and extra weight to the operator;
- ✓ High quality zipper for easy placement;
- ✓ Neck protector and hood are removable for more comfortable operation and without impairing the operator's field of vision depending on the position of the service.
- ✓ Velcro on the sleeves and legs in order to reduce the entry of water into the outfit;
- ✓ Gloves and gaiters;
- ✓ High-resistance hygienic underwear that reduces friction between the suit and the operator's skin (optional);
- ✓ Optional: "Air Comfort" internal cooling system with built-in air purifier and transport cart that reduces the temperature inside the outfit to 18°C, with the capacity to supply up to 3 hydrojet operators simultaneously;



STRIPED AREAS ARE PROTECTED



FRONT

BACK



Model for SAP - Evaporators:

One-piece overalls, ideal for working in sugar mills where hydrojet cleaning is concentrated in juice evaporators.

As it is confined work, it is recommended to use the “Air Comfort” cooling system for better thermal comfort and operational productivity.

Test approved conditions:

Nozzle Type	Pressure	Detailing	Flow	Distance	Speed
“T” Rotating Nozzle	1.000 bar (15 kpsi)	02 Inserts 0,9mm @ 5000 rpm	38 lpm 10 gpm	1mm (0,04”)	0,5m/s
Round Nozzle	500 bar (7,2 kpsi)	1 x 1,0mm	20 lpm 5,17 gpm	100mm (4”)	0,5m/s

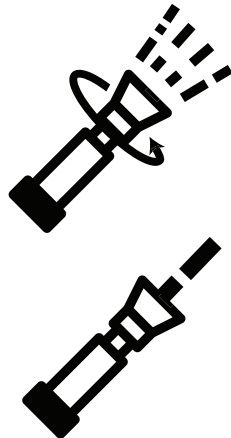
CODE	OVERALLS
HJ-CJ-SAP-PP	OVERALLS for Hydrojetting - SAP mod. - royal blue color - SIZE XS
HJ-CJ-SAP-P	OVERALLS for Hydrojetting - SAP mod. - royal blue color - SIZE S
HJ-CJ-SAP-M	OVERALLS for Hydrojetting - SAP mod. - royal blue color - SIZE M
HJ-CJ-SAP-G	OVERALLS for Hydrojetting - SAP mod. - royal blue color - SIZE L
HJ-CJ-SAP-GG	OVERALLS for Hydrojetting - SAP mod. - royal blue color - SIZE XL



Autonomous Ventilation System

Model UAP - 2.800 bar (40 kpsi)

Test approved conditions:



Nozzle Type	Pressure	Detailing	Flow	Distance	Speed
Rotating Nozzle	2.800 bar (40 kpsi)	04 x 0,014" @ 2500 rpm	12 lpm 3,17 gpm	100 mm (4")	1,0 m/s

Round Nozzle	1.000 bar (15 kpsi)	1 x 0,9mm	20 lpm 5,28 gpm	100 mm (4")	1,0 m/s
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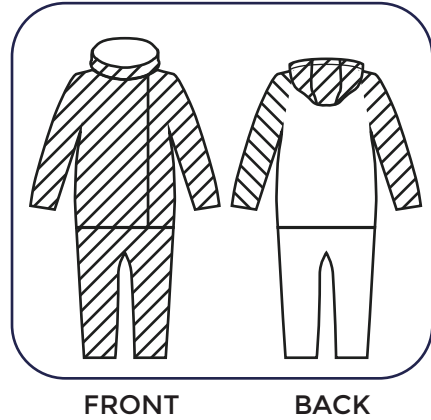
CODE	FAN
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HJ-VE-CJ

- Ventilation system for UAP jacket composed of:
- 02 x High efficiency fans;
 - 01 x Cable with on/off control and ventilation intensity (low / medium / high);
 - 01 x 10,000 mAh Power bank battery with capacity for 08 hours of operation.



STRIPED AREAS ARE PROTECTED



CODE

- HJ-JQ-UAP-PP
- HJ-JQ-UAP-P
- HJ-JQ-UAP-M
- HJ-JQ-UAP-G
- HJ-JQ-UAP-GG

CODE

- HJ-CA-UAP-PP
- HJ-CA-UAP-P
- HJ-CA-UAP-M
- HJ-CA-UAP-G
- HJ-CA-UAP-GG

CODE

- HJ-LV-UAP-UN

CODE

- HJ-SB-UAP-UN

CODE

- HJ-CJ-UAP-PP
- HJ-CJ-UAP-P
- HJ-CJ-UAP-M
- HJ-CJ-UAP-G
- HJ-CJ-UAP-GG

JACKET

- JACKET for Hydrojetting - UAP mod. - royal blue color - SIZE XS
- JACKET for Hydrojetting - UAP mod. - royal blue color - SIZE S
- JACKET for Hydrojetting - UAP mod. - royal blue color - SIZE M
- JACKET for Hydrojetting - UAP mod. - royal blue color - SIZE L
- JACKET for Hydrojetting - UAP mod. - royal blue color - SIZE XL

PANTS

- TROUSERS for Hydrojetting - UAP mod. - royal blue color - SIZE XS
- TROUSERS for Hydrojetting - UAP mod. - royal blue color - SIZE S
- TROUSERS for Hydrojetting - UAP mod. - royal blue color - SIZE M
- TROUSERS for Hydrojetting - UAP mod. - royal blue color - SIZE L
- TROUSERS for Hydrojetting - UAP mod. - royal blue color - SIZE XL

GLOVES

- GLOVES for Hydrojetting - UAP mod. royal blue color - ONE SIZE FITS ALL

GAITERS

- GAITERS (OVERBOOTS) for Hydrojetting - UAP mod. royal blue color - ONE SIZE FITS ALL

OVERALL

- OVERALLS for Hydrojetting - UAP mod. - royal blue color - SIZE XS
- OVERALLS for Hydrojetting - UAP mod. - royal blue color - SIZE S
- OVERALLS for Hydrojetting - UAP mod. - royal blue color - SIZE M
- OVERALLS for Hydrojetting - UAP mod. - royal blue color - SIZE L
- OVERALLS for Hydrojetting - UAP mod. - royal blue color - SIZE XL

CODE

HJ-AV-UAP-UN

FABRIC APPROVAL CONDITIONS:

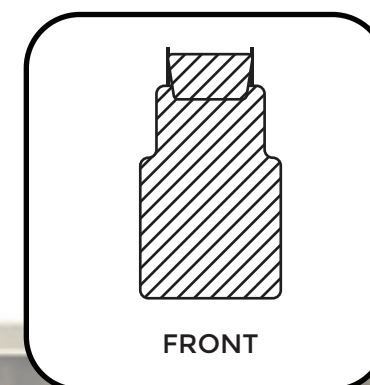


2.800 bar



1.000 bar

STRIPED AREAS ARE PROTECTED



FRONT

APRON for Hydrojetting - UAP mod. - royal blue color - ONE SIZE FITS ALL



“AIR COMFORT” SYSTEM

- Air cooling system for operator providing excellent thermal comfort and greater productivity, reducing the temperature inside the outfit to 18°C (64,4°F);
- Capacity for up to 03 (three) simultaneous hydrojet operators;
- Integrated air purification system;
- 03 hoses with 12mts long thermal insulation;
- Practical trolley for transportation inside the plant;
- Power supply: 220v - single phase;
- Minimum air flow required: 60 pcm @ 5.0 bar (75 psi);
- Weight: 65 kg (143 lb);
- Code: HJ-AC-220V



PROTECTIVE COVER FOR HOSES:

Hydrojetting hoses can pose an additional risk to the hydrojet operator. The hose cover has the function of absorbing the impact of the energy released in the event of a rupture “muffling” the water jet and also the “whipping” resulting from this energy.

Note: Its use does not dispense with the use of whipchecks or whipsocks.

CODE	HOSE COVER
HJ-CM-UAP-1	Protective cover for Hydrojetting hose - UAP mod. - 1 meter long
HJ-CM-UAP-3	Protective cover for Hydrojetting hose - UAP mod. - 3 meters long
HJ-CM-UAP-5	Protective cover for Hydrojetting hose - UAP mod. - 5 meters long





IMPERMEABLE OVERALLS WATERPROOF MODEL:

Made of high mechanical and abrasion resistant fabric with front closure with zipper and hood.

Important: material not resistant to high pressure jets.

CODE	OVERALLS WATERPROOF
HJ-WP-PP	Impermeable OVERALLS Waterproof mod. - royal blue color - SIZE XS
HJ-WP-P	Impermeable OVERALLS Waterproof mod. - royal blue color - SIZE S
HJ-WP-M	Impermeable OVERALLS Waterproof mod. - royal blue color - SIZE M
HJ-WP-G	Impermeable OVERALLS Waterproof mod. - royal blue color - SIZE L
HJ-WP-GG	Impermeable OVERALLS Waterproof mod. - royal blue color - SIZE XL

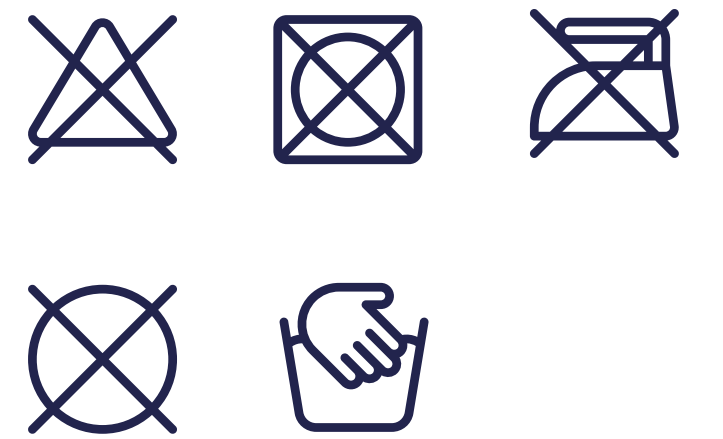


GARMENT	SIZES (metric)				
	Size	Height	Chest	Waist	Weight Kg.
Overall SAP	XS	1,38	1,18	1,08	1,90
	S	1,45	1,26	1,12	2,40
	M	1,54	1,50	1,46	2,60
	L	1,65	1,55	1,50	2,80
	XL	1,70	1,66	1,60	2,90
Jacket UAP	S	0,73	1,30	x	2,50
	M	0,77	1,42	x	3,40
	L	0,80	1,46	x	3,80
	XL	0,81	1,54	x	4,30
Thoursers	S	1,09	x	1,14	1,80
	M	1,14	x	1,20	2,10
	L	1,16	x	1,28	2,40
	XL	1,16	x	1,32	2,60
Overall UAP	XS	1,38	1,18	1,08	3,90
	S	1,45	1,26	1,12	4,30
	M	1,54	1,50	1,46	5,50
	L	1,65	1,55	1,50	6,20
	XL	1,70	1,66	1,60	6,90

Size	Operator Height (m)
XS	<1,60
S	1,65-1,70
M	1,70-1,75
L	1,80-1,90
XL	>1,90

CARE AND WASH INSTRUCTIONS

Zipppers ans hook & loops are sensitive for dirt and shall always be kept clean. Clothes can be hand washed with brush or a soap solution. Allow to dry in a well ventilated area. Do not expose the garments to diesel or other solvents. Store the garments dry and not in direct sunlight.



Hand wash.
Water temperature not above 40°C or 105°F

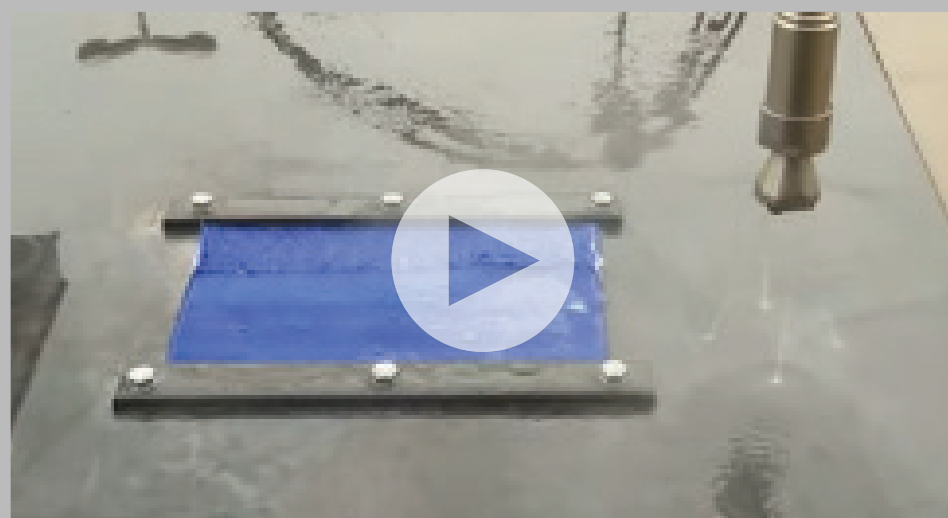




RESISTANCE TEST VIDEOS:
Click on the YouTube icon to watch



SAP TEST
EVAPORATORS (PLANTS)



UAP TEST
2.800 BAR (40.000 PSI)

MEDICAL ALERT / INFORMATIVE

This patient may be suffering from water jetting injury. The evaluation and treatment should be similar to that used with injuries caused by firearms. The external manifestations of the injury cannot be used to predict the extent of internal damage. The initial treatment should include stabilization and a thorough neurovascular examination. X-ray can be used to evaluate foreign matter and air in subcutaneous space distant from the place of the injury. Injuries on extremities may involve extensive neuronal, vascular and muscular damage and can cause a distal compartment syndrome. Injuries on the torso may involve damage to internal organs. A surgical examination must be performed. Aggressive irrigation and debridement are recommended. A decompression and surgical exploration may also be necessary. Angiographic studies are recommended in the pre-operative period if arterial injury is a possibility; Bandages with a hygroscopic solution (MgSO₄) and hyperbaric oxygen therapy have been used as an aid to reduce pain, edema and subcutaneous emphysema. There are reports of atypical infections with unusual organism in immunocompetent patients - the source of water is important in deciding the initial empiric antibiotic treatment; broad spectrum intravenous antibiotics should be administered. Cultures should be formed.

WARNING!!!

AN INJURY CAUSED BY HIGH PRESSURE WATER JETTING CAN BE SERIOUS!
IN THE EVENT OF ANY WATER JET INJURY.

- Seek immediate medical attention. Do not postpone!
- Tell the doctor about the cause of injury.
- Show this card to the doctor.
- Tell the doctor what type of water jetting work you were doing at the moment of the accident.
- Inform the origin of the water used.

MEDICAL INFORMATION

READ THIS CARD AND KEEP IT IN YOUR WALLET.
IN THE EVENT OF ANY WATER INJURY, SHOW THIS CARD TO YOUR DOCTOR.

Source: Waterjet Technology Association - WJTA - wjta@wjta.org
Distributed by: DIROJET GmbH - GERMANY - info@dirojet.de



IMPORTANT NOTES:

IMPORTANT:

- 1) Personal protective equipment is the operator's last resort, that is, it minimizes damage in the event of an accident.
- 2) All safety instructions must be followed to the letter.
- 3) Different parameters such as Pressure, Flow, Nozzle Type, Distance and Speed can generate different protection results and consequent water penetration in the outfit.

Safetech Protection reserves the right to discontinue models and designs without prior notice.



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