Save time and money using the

NITRO Xpress

TESTIMONIAL

Background

During the 2004 winter Turoa Ski Area had a massive class 4 avalanche cascade down through the middle ski area. Although the avalanche was an explosive controlled event it highlighted various safety concerns for the customers and staff, these concerns needed addressing as to mitigate the risk in future events. Several new technological options were explored, however given the weather and snow-pack environment that exists at Turoa it was evident that using Avalauncher would be the preferred method to effectively control the upper mountain slopes. Once exploring this option is was evident that Avalauncher technology was still not yet developed to its full potential, what currently existed on the market needed to be taken into the 21 century to achieve greater accuracy and efficiency.

Snowtek Systems Ltd Endorsement

Through using a combination of the Snowtek Systems Ltd Nitro Xpress Avalauncher and the ACE Avalauncher Round, we have effectively addressed the mitigation safety issues of avalanche hazard on our upper mountain slopes. The following points outline why this system currently leads the market:

1. Snowtek has effectively consulted with the New Zealand snow industry and developed the Nitro Xpress to a point where it exceeds the capabilities of any other product on the international market.
2. The Nitro Xpress has the capability to lob larger charges further with more accuracy than any other product internationally. This is the main reason why I believe that the Nitro Xpress will become a market leader internationally.
3. Attention to detail, the continual development and improvement of the Nitro Xpress that has transpired over the last two years will be a major factor in their success.

In summary the Turoa Snow Safety team has been very impressed with the performance, safety and accuracy of the Nitro Xpress. I personally believe the Nitro Xpress has the potential to bring Avalauncher systems back into mainstream use again. There are several other operations nationally and internationally that are in need of the effectiveness that we have found with the Nitro Xpress.

Mt RUAPEHU
WHAKAPAPA & TUROA
NEW ZEALAND

Chris Emmett
Safety Services Manager
Turoa Ski Area

www.snowteksystems.com

the NITRO Xpress
is the **WAY** to
manage potential
avalanche **threats**
in the most **COST EFFECTIVE** way

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SNOW TEK
Systems

NITRO Xpress

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MAIN FEATURES

Firing Mechanism:
This is the heart of the Nitro Xpress, specially developed to maximise gas delivery using modular construction and industry standard seals for maintenance ease.
Main valve components made by a Computerised CNC machining centre make the components modular and interchangable.

Elevation Control:
A positive locking linear actuator giving precision increments, measured on a digital elevation meter resulting in accurate and repeatable precision firing.

Windage Control:
Made up of two parts:
1. A precision gearbox, making the avalaunchers side-ways movement positive and easy.
2. A radial locking mechanism ensuring a solid firing platform.

Barrel:
Specially extruded custom designed aluminium avalauncher barrel.
1. Increases strength.
2. Eliminates whip.
3. Locks in position.
4. Sets the standard for barrel rigidity and strength.

Breech Mechanism:
Patented Tri-Camlock Captive Breech.
1. Captive mounted breech plug making breech plug location smooth.
2. Visual breech locking indication.
3. Secondary Safety feature prevents discharge with an open breech.

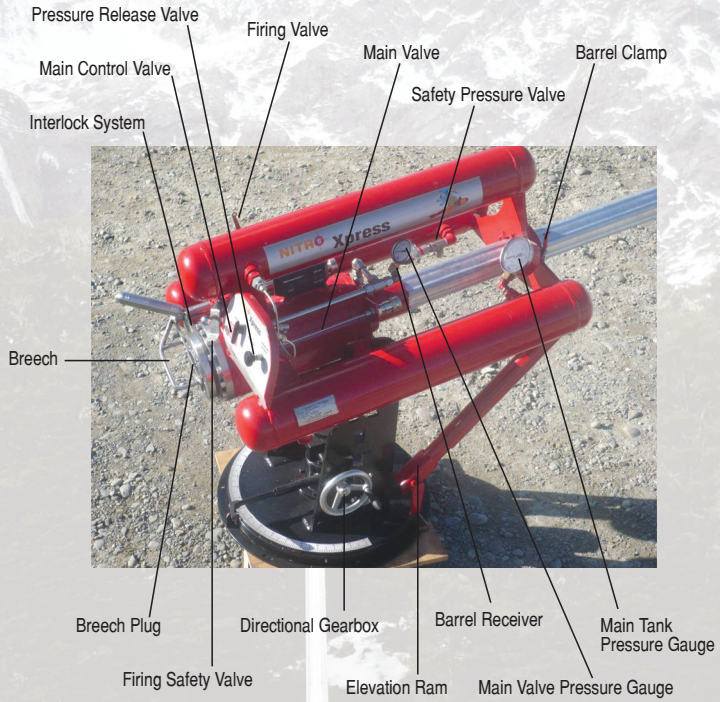
Pressure Vessels:
45 litre tank system certified to ASME8/AS1210 standard.

Mounting:
Mounted on a 650mm Industrial slew ring bearing giving a stable foot print.

Training:
Full gun crew training provided to certified explosives handlers upon delivery.

Documentation:
Full manufacture certificates and approved operational manuals provided on delivery.

NITRO Xpress
TECHNICAL DATA



Central Control:
The Nitro Xpress allows remote effective avalanche control from a central position.

Versatility:
The Nitro Xpress can be Pad Mounted or Mobile Platform Mounted to suit your requirements.

Safety:
1. The Nitro Xpress is a remote avalanche control system which allows staff to eliminate a potential threat without compromising their personal safety.
2. The Nitro Xpress has been specificaly designed incorporating three safety features to prevent accidental discharge.

All Weather:
The Nitro Xpress is an all weather control system.

Cost Effective:
Fields can be opened faster using the Nitro Xpress creating increased Revenue.

Performance*

Pressure	@45° Elevation
690Kpa (100psi)	1300m (4265')
2070Kpa(300psi)	2700m (8858')
3450Kpa (500psi)**	4000m+ (13123'+)

* Note: testing carried out using an ACE ROUND & 6 blade tail Fin @ 1013 mbs at sea level, temp. 20C, no wind, performance improves with altitude
** Note: Maximum working pressure of the standard ACE Round is 350psi. Test carried out with a high pressure round.

Nitro Xpress height at 0°(minus barrel)	1040mm (40.9")
Nitro Xpress height at 65°(minus barrel)	1375mm (54.1")
Barrel length	4000mm (9.8')
Barrel Internal diameter's	ID82.3mm (3.24")
Barrel Outside diameter's	OD99.88mm (3.93")
Round diameter's	80mm - 82mm (3.14" - 3.22")
Overall length	4585mm (180.5")
Turntable diameter	650mm (25.5")
Footprint (minus barrel)	1455mm x 710mm (57.2" x 27.9")
Propellant/Gas:	Dry Nitrogen
Design Pressure:	4136KPa (600psi)
Working Pressure	200 – 3450KPa(29 – 500psi)
Design Temperature	-25°C to 50°C (-13°F to 122°F)
Tank Capacity	45 litres
Weight (excluding barrel)	235kg (518lbs)
Barrel Weight	16kg (35lbs)