

Wyssen Mini Avalanche Tower LS6-5



Safety through **innovation**

WYSSSEN *avalanche*
switzerland **control**

Set up and function

- Operation is being done via the Wyssen Avalanche Control Center WAC.3®
- The tower is placed in the avalanche starting zone
- Up to 6 charges can be loaded at 4-5kg (9-11 lbs) of explosive each
- Reloading is being carried out manually over the ladder on the mast
- Power supply is provided by batteries supplied by solar panels
- For the deployment a charge is being dropped out of the deployment box
- During the free fall of the charge a double ignition is activated
- The charge detonates hanging on a cord above the snow cover after a time delay
- The charge height is adjustable when the charges are prepared and loaded

Advantages

- Air blast with a big charge (effective range of up to 260 m (850 ft) in diameter)
- Simple and low priced alternative to the Wyssen Avalanche Tower LS12-5 and LS24-5
- Operation via WAC.3® just as the Wyssen Avalanche Tower LS12-5, LS24-5 and other systems
- Remote control permits rapid and weather-independent release
- No personnel in danger area



Deployment Box

The deployment box is fixed on the tower. Solar panels are installed at the deployment box as well as the antenna. Inside the box sealed from the elements is the deployment mechanism, electronic control and the prepared explosive charges. Thanks to the smart concept highest reliability is guaranteed.

Charge Container

The explosive charge consists of two orange half-shells with pre-mounted pull activated percussion igniters with slow fuse, which are assembled with 4-5 kg (9-11 lbs) of explosives. The charges are assembled by the operator on-site. We deliver the charge containers and the canvas bag for the retaining rope (6.5m / 21 ft). Explosives and other pyrotechnical elements are purchased directly by customers from the appropriate suppliers

Safety regulations

In order to load and operate Wyssen systems, personnel must have attended a certified course by the company and possess a valid certificate for the artificial release of avalanches with explosives.

Approval for storing explosives: for each tower location authorization must be requested by the customer from the responsible authorities for storing explosives in the avalanche tower deployment boxes during the period of operation.



Effectiveness

Practitioners have found that the greatest degree of success for controlled release of avalanches is achieved by a remote-controlled detonation of an effective explosive at the right time and in the right place.

From the avalanche operator's point of view, a blasting installation must be extremely reliable and effective as well as simple to operate and maintain. The installation in the terrain must be straightforward and the interference of the installation must have minimal impact on sensitive mountain environments. Wyssen avalanche towers are ideal for fulfilling these requirements.

Smallest residual risk thanks to the largest effective range

- Blasting above the snow with bigger charges (4-5kg / 9-11lbs) gives the maximum effective range up to 260m in diameter (850 ft in diameter)
- Explosives with high detonation speeds produce N-shaped pressure waves which have been proven to cause the best release effect, particularly at a greater distance from the detonation point
- Positioning a tower on a prominent terrain feature and including a 12m (39 ft) tower instead of 10m (33 ft) enables the effect to be reached in locations of pressure shadow (in couloirs, behind terrain ribs)
- Releasing smaller quantities of snow in increments, decreasing possibility for larger avalanches
- Very good stability test for assessment of the local avalanche danger

Highest reliability

- No critical or moving parts are exposed to the weather
- Solar power supply or wind generator avoids the necessity of vulnerable supply lines in the terrain
- Annual maintenance ensure maximum reliability

Reduced closure times thanks to rapid release, around the clock and in all weathers

- Remote-controlled installations allow operation around the clock
- Very rapid operation possible
- Short closure times
- Clearing away avalanche snow is usually dispensed with, since the avalanche run-outs are short due to the release of smaller portions

Highest cost-effectiveness

- Low investment and operating cost in comparison with permanent protective measures (snow sheds, bridets, tunnels)
- Lowest operational costs thanks to its ingenious system concept
- Damage to infrastructure is avoided by the release of smaller portions
- Economic benefits thanks to reduced closure times

Highest degree of safety for the operating staff

- No staff in the danger area thanks to remote-controlled release
- Preparation of the charges takes place in protected areas

Environmental stewardship

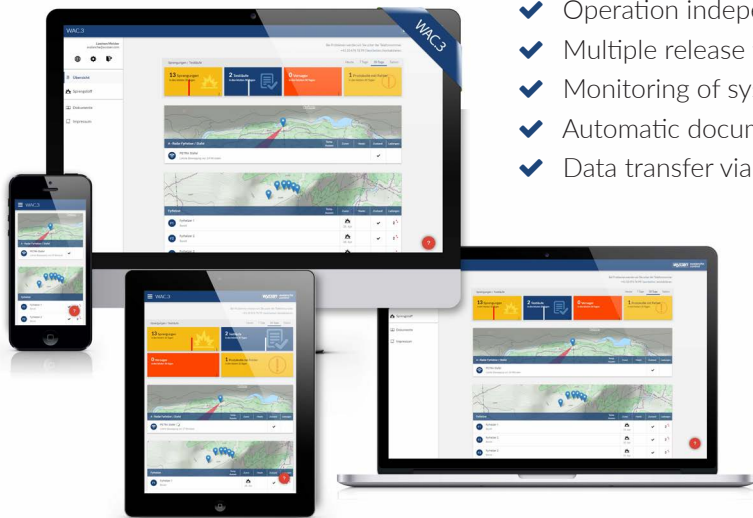
- Foundation Footprint is only 1m²
- Short construction times in the terrain simplify planning and implementation
- Blasting over the ground prevents damage to the vegetation cover
- Dismantling after operating life possible without any problems



All in one online platform Wyszen Avalanche Control Center WAC.3®

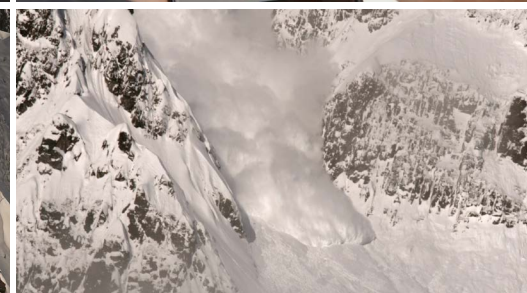
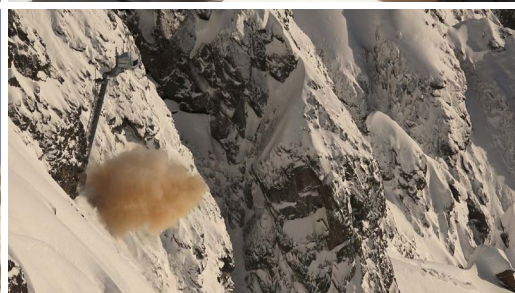
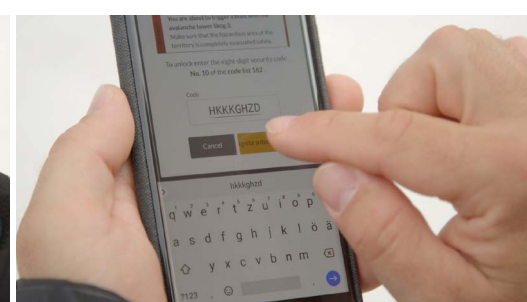
The latest software generation includes new hardware for operating, monitoring and data storage of the well-proven Wyszen Avalanche Towers, detection systems and weather stations.

- ✓ Intuitive web-based operating interface
- ✓ Operable from any web-enabled device (Computer, Tablet, Notebook, Smartphone)
- ✓ Operation independent of location
- ✓ Multiple release from Avalanche Towers possible
- ✓ Monitoring of systems 24/7
- ✓ Automatic documentation and archiving of activities and system data
- ✓ Data transfer via mobile network, radio connection or satellite



Extensive additional features

- ✓ ExploDoc
- ✓ RiskEval
- ✓ ComTool
- ✓ HeliTrack
- ✓ Weather stations etc.
- ✓ 3D snow height measurement via LIA® etc.



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