



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 5 kg 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
- Operation via WAC.3 just as the Wyssen Avalanche Tower LS12-5 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 5 kg (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 (7.5 m / 25 ft). Explosives and other pyrotechnical elements are purchased directly by customers from the appropriate suppliers

Safety regulations

Only those persons are permitted to operate and handle the installation who are in possession of a valid certificate for the artificial release of avalanches with explosives and who have attended a certified course by Wyssen Avalanche Control AG.

Approval for storing explosives: for each tower location authorisation 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

The greatest degree of success for controlled release of avalanches is achieved by a remote-controlled detonation of an efficient explosive at the right time and in the right place.

From the operator's point of view, a blasting installation must be extremely reliable and effective as well as being simple to operate and maintain. The installation in the terrain must be as simple as possible and the interference of the installation must have a low impact on this sensitive environment. The Mini avalanche tower fulfils these requirements ideally.

Smallest residual risk thanks to the largest effective range

- Blasting above the snow with bigger charges (5kg/11lbs) gives the maximum effective range up to 260m in Ø (850 ft in Ø)
- Explosives with high detonation speeds produce N-shaped pressure waves which has been proven to lead to the best release effect, particularly at a greater distance from the detonation point
- The possibility of positioning the installation in higher locations in addition to suspending the charge higher enables the effect to be reached in locations of pressure shadow (in couloirs, behind terrain ribs)
- Release of smallest quantities of snow possible, thanks to the greatest effectiveness
- Very good stability test for assessment of the local avalanche danger

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

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
- Closure times are reduced in the rule to a maximum of 30 minutes
- 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 constructional protective measures
- Lowest operational costs thanks to its ingenious system concept
- Damage to the infrastructure is avoided by the release of smaller portions
- Economic benefits thanks to reduced closure times

Highest reliability

- No critical or moving parts are exposed to the weather, thanks to its intelligent concept
- The solar power supply or wind generator avoids the necessity of vulnerable supply lines in the terrain

The smallest interference in nature is very environmentally friendly

- Foundation only uses 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 Operating Software Wyssen Avalanche Control Center WAC.3

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



- ✓ Intuitive web-based operating interface
- operable from any web-enabled device (PC, Tablet, Notebook, Smartphone)
- ✓ Operation independent of location
- ✓ Multiple release from Avalanche Towers possible
- ✓ Monitoring of systems 24/7
- ✓ Automatic documentation and archiving of activites and system data
- ✔ Data transfer via mobile network or radio connection
- ✓ Extensive additional features (explosive documentation, avalanche documentation, weather station, communication tool, snow height measurement etc.)



