# WAC.3®
# Wyssen Avalanche Control Center

WAC.3®

- Cockpit
- Risk Eval
- Avalanche Tower
- Explo Doc
- Detection systems
  - GINA®
  - IDA®
  - LARA®
  - SARA®
  - PETRA®
- Heli Track
- Add-Ons
  - Webcam
  - Weather station
- Reports
- LIA® Laser Scanner

**Safety** through **innovation**

wyssen switzerland avalanche control

# WAC.3® Modules

| Name | Function |
|---|---|
| **WAC.3® with Cockpit** | Data platform for decision making |
| | Individual synopsis of relevant data from weather stations, forecasts, avalanche danger, detection systems, observations and many more<br>**Installation costs: Integrating the desired data sources, charged on a time basis. |
| **RiskEval** | Risk analysis and course of action planning |
| | Process-based risk assessment and planning of measures taken. A sound up-to-date safety concept developed by an experienced engineering office is required.<br>**Installation costs: Configuring the forms according to the safety concept |
| **HeliTrack** | Documentation of avalanche control |
| | Easy mobile registration of location, time and success of avalanche control<br>**Installation: none required, integration of mapped avalanche paths if desired |
| **ExploDoc** | Inventory of explosives |
| | Simple accounting for incoming and outgoing explosives<br>**Installation costs: Setting up the storage and items on a time basis |
| **RescueDoc** | Documentation for rescue operations |
| | Quick and easy recording of coordinates, pictures, personal data, etc.<br>**Installation costs: none required, individual requests on a time basis |
| **PisteControl** | Mobile Piste Inspection |
| | Mobile documentation of piste controls for the central administration<br>**Installation costs: Setting up the maps and pistes on a time basis |
| **ComTool** | Communication Assistent |
| | Semi-automatic communication for team coordination internally or releasing information to the public<br>**Installation costs: Setting up the communication channels and the list of recipients on a time basis, largely executable by the operator |
| **SnowPack** | Modelling the snowpack |
| | Automatic modelling of the snowpack structure based on data from a weather station<br>**Installation costs: Setting up the interface to the data sources and calibrating the model parameters on a time basis |
| **ADAM®** | Forecast of the avalanche runout |
| | Simulation of the expected avalanche sizes and runouts based on current and forecasted snowpack simulation (see above) and the resolution of weather and snow data in complex terrain (ALPINE3D) for up to 24h into future<br>**Installation costs: Setting up the interface to the data sources and calibrating the model parameters on a time basis |

| Name | Function |
|---|---|
| **Weather station on Wyssen Tower** | Weather data |
| | Temperature, measurements of windspeed and direction, type and intensity of precipitation, rel. humidity and radiation<br>**Installation costs: retrofittable weather station on AVT, full installation depending on selection of sensors |
| **Weather station „stand alone“** | Weather data<br>(optional for maintenance) |
| | see above |
| **LIA®** | 3D Laser scan of snow height |
| | IInformation on snow height and distribution in the release area. Approx. 40 m range on each side of the AVT<br>**Installation costs: retrofittable laser on AVT |
| **IDA®** | Avalanche detection via infrasound sensors per sensor array |
| | Information on general avalanche activity, detection range 3-5 km and 360° around the system<br>**Installation costs: system with 5 sensors and a control unit typically installed in the valley bottom |
| **GINA®** | Avalanche detection via geophone |
| | Detection of avalanches in a defined avalanche path, detection range up to 50m<br>**Installation costs: system with 1 or more geophones in the avalanche path |
| **LARA®** | Avalanche detection via radar |
| | Long-range radar (1-4 km) for the detection of natural and controlled avalanches, expandable with a thermal camera or webcam.<br>**Installation costs: Turn-key system including commissioning depending on detection range, location and power supply |