liberty
snowmaking control
The Liberty software suite has been developed specially by our IT teams. Liberty gives each operator the possibility to perfectly manage snow production, in a customisable (customizable) manner, through maximum optimisation of the available resources. Adapted to all installation sizes, Liberty manages all the components installed (trail equipment, machine room equipment and components), and the resources required to produce snow (water and energy), according to the operating parameters retained by the snowmakers. In real time, Liberty adjusts the resources and the production according to changes in the weather conditions. Liberty also facilitates decision-making thanks to standardized and customizable production statistics and programmable periodic reports. It can also perform operational multi-level diagnostics through integrated applications for analysing the operation of the installation’s machines and components. Liberty is enriched with new graphic man-machine interfaces to facilitate its use (dynamic Trail Viewer, global select mode, MR Viewer, and LV Tools). Thanks to a new customer-server architecture, Liberty now offers innovative multi-user operation. Notably, mobility solutions allowing the user to view and control production via a tablet PC or a Smartphone.
Management of the snowmaking process
1. Permanent adjustment of resources according to the production conditions.
2. Real-time control and monitoring of snow production according to weather conditions and using programming.
3. Management of air and water resources: Multiple sources, limitation, and traceability (e.g.: lake filling during production, etc.).
4. Self-adapting and predictive system based on widely validated mathematical models (the status of resources and user choices taken into account).
5. Based on distributed intelligence, ensuring a 3-level security approach (Liberty, PLCs, modules).
6. Integration of the entire air & water “MYNEIGE” product line (upward compatibility), as well as the TechnoAlpin fan product line, for machine since 2005.
7. Management of the operation of competitors’ snow guns’
8. No limit to installation size.

\(^1\) option
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Snowmaking programming tool
1 Tool for selecting snow production areas (trail prioritisation, and scheduling). 2 User parameterisation of production (snow quality, start-up temperature, flow limitation, production objective, etc.). 3 Fine parameterisation without programming the entire installation. 4 Individual or multiple graphic selection of snow guns. 5 Software-based security of a shelter with associated message.

**Light Module** When resource management is not necessary, the light version of the Liberty software can be used for trail automation management only, where only the snow guns will be managed automatically.
Complete operational analysis suite
Complete multi-skin statistics package. Stored data, available in real time (production, weather forecast, status of components and machines, production progress, in ¼ h steps). Customisable automatic reporting (content & frequency) in Sno-Report, export of operating data in multiple formats (Office suite, html). Data server¹: Data sharing for third-party applications. Recovery of snow thickness data possible (Option with the CGx partner system). Production alert system by e-mail or text message².

¹ option, ² subscription required
Built-in diagnostic and optimisation assistance tool
1 Individual real time testing of components (status verification & forcing). 2 Oscilloscope mode for the analysis of analogue parameters (e.g. pressure, level of the dialogue signal, etc.) 3 Network diagnostic help: • Use of intelligent repeaters (acquisition of the dialogue signal, disconnection from the upstream network, FMT functionality). • Mapping of the network signal with position of repeaters and trail transformers. • Intuitive LV (24V) equipment diagnostic and testing software. 4 Remote access3) and intervention for technical teams, reprogramming possible from Liberty to the module.

3) requires an Internet connection
Optimised operator interfaces
**1 Liberty Manager** Navigational aid in the Liberty suite. **2 MR Viewer**: Dynamic 3D viewing of the entire installation (machines and piping), with access to machine parameters. **3 Trail Viewer** Customisable dynamic programming and display interface of trail components. **4 SnoReport**
1 Remote surveillance and remote access The operators can access Liberty via remote control software on several types of terminals: Ruggedized laptop, suitable for use in harsh outdoor winter weather conditions or tablet PC. 2 Liberty Mobile Schematic display and restricted and simplified control of installations on tablet PCs and Smartphone owing to the navigator built into the terminal. 3 Interfacing with damage module possible (iPhone & iPad applications available as an option with the CGx partner system).