



Concrete Cooling

MODULAR SYSTEMS
Ice and water plants
Ice storage plants

x-tec
swiss ag

ICE AND WATER PLANTS



The temperature of fresh concrete has a decisive influence on the processing quality the time of and on the certain attainment of the final hardness. An effective way to reduce the fresh concrete temperature is the use of ice and/or cooled water.

x-tec's long experience in the design of concrete batching plants and the demand of clients for more efficient cooling systems made our engineers creating a new system with a lot of advantages for the customer. Under consideration of well named customer ideas and the target of eliminating the problems of existing systems a new and modular system got developed which satisfies the requirements of the clients 100%.

The highly flexible plant operating with a pillow plate system is producing ice or ice water with the same working principle. Within a short period of some minutes the production can be changed from ice to water or water to ice just as the requirement of production is. Based on the high hourly production rate you can produce following quantities with one module:

ICE SYSTEMS	XIP 50	XIP 100	XIP 150
Ice production/hour	2 tons	4 tons	6 tons
Icewater production/hour	7.000 l	14.000 l	21.000 l
Storage systems	60 - 90 tons volume		

The ICE is very easy to handle and also very strong. The storage system is available in two sizes 60 tons and 90 tons.



ICE STORAGE AND ICE WEIGHING



A further step at the development of the ice/ice water production module was the design of a complete new storage system for the ice as well as a new flexible ice weighing and dosing system.

Because of the fact that users face big problems in handling the ice on traditional storage systems, the target was to design a system which is working on bottom extraction system.

The new developed x-tec storage system has two essential advantages. The first produced ice gets first out. It is the only proofed system with a working extraction system on ground of the storage. The screw conveyor floor guarantees a well dosed and efficient extraction of 100% of the stored ice. Based of the lower ice temperature of -1 degree there is no additional cooling of the storage necessary which saves energy costs in daily operation.

The ice weighing has also a dosing system on the outlet to avoid the ice coming out at once and creating "frozen and inhomogeneous" areas in the concrete mix as well as spillage. Also a flexible dosing during aggregates loading is possible now.

THE BASIC ADVANTAGES OF THE x-tec ICE SYSTEM:

- most flexible: As ICE and ICE WATER are produced with the same system you can work flexible at any time according to your production needs.
- lowest running costs: The system works with -1°C ice. Energy consumption is 40% lower than systems producing -8°C ice.
- high modular system: You can use up to 4 units (up to 24 tons of ice per hour) for one storage. You can enlarge your production any time without having additional modification on the system.
- Lowest service costs: The Ice and Ice water producer is a nearly maintenance free system because of having no moveable parts. The water pumps are also maintenance free. Only the compressor and the gearboxes require a periodical greasing and refilling of oil.



x-tec Australia Pty Ltd
www.xtecag.com

Switzerland
Trogenerstrasse 4
CH-9450 Altstätten
TEL: +41-71 757 7200
FAX: +41-71 757 7209

x-tec North America LLC
info@xtecag.com