

## Innovative in snowmaking and snow distribution

#### The beginning

- We started the snow development back in the early 90's with North Star, USA using flake ice as snow subject.
- We took part in delivery to several out doors facilities in Japan.
- Kotobiki Park was our first task with 200 tonn flake ice per day.

#### Entering the Vacuum Ice era.

- 2005/2006 we became the main snow partner with IDE Technologies, Israel.
- After the deployment of two large stationary machines in Switzerland and Austria, we worked hand-in-hand with IDE to develop this new market segment, making snow with vacuum technique

#### The IDE VIM-400 Vacuum system



## Development of slurry ice machine systems for snow making

- We soon realaized that an alternative system for the "bulky" and relatively complex machinery available was needed.
- In co-operation with ICE-GEN, Canada and SNOW-TEK, Finland, we took on the challenge of delivering 3 systems for the Sotsji Olympics.

### Sotsji

- With experience in snow crystal separation from water, we developed a vertical crystalizer tower enabeling the ice crystals to multiply and to "dry" to snow.
- We built three tank modules each to accomodate one ICE-GEN slurry generator.

## Separator



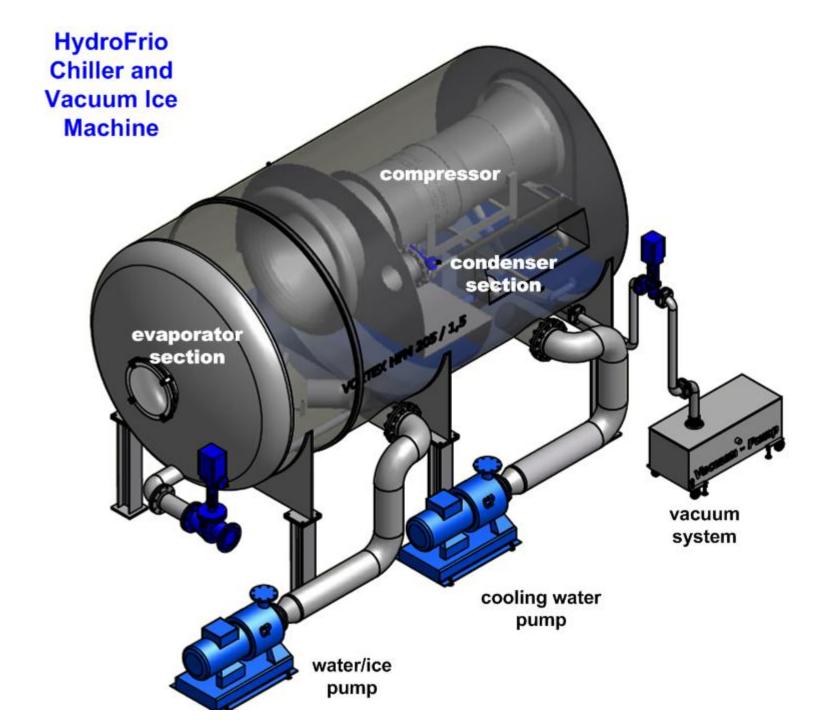


#### **Next Generation**

- With the "bulky" construction in mind, we started working with our own ideas in vacuum ice and traditional snowproduction based upon binear ice and snow distribution.
- The target was to manufacture a semimobile system for high quantity production with a slim distribution system based on water for transportation.

## The 300m3 slurry system





# The mobile 300m3 Vaccuum system



#### New ideas for snow distribution

- With a rapidly growing development in the understanding of "over-summering" and storage preservation of snow, we have developed a new way of replacing truck distribution by using water.
- This device will enable the two mentioned systems,- Slurry ice and Vaccuum Ice to deliver almost dry snow over long distances

#### From Slurry and Vaccuum systems

- The separator is simply connected to the production facility by means of two 40mm hoses. A slurry mixture (5-30%) is pumped from production to separation unit were the ice is transformed to REAL-SNOW.
- The transport water returns to the production to be reproduced to slurry ice.
- Distance can be 500 meter pluss.

## Snø separering

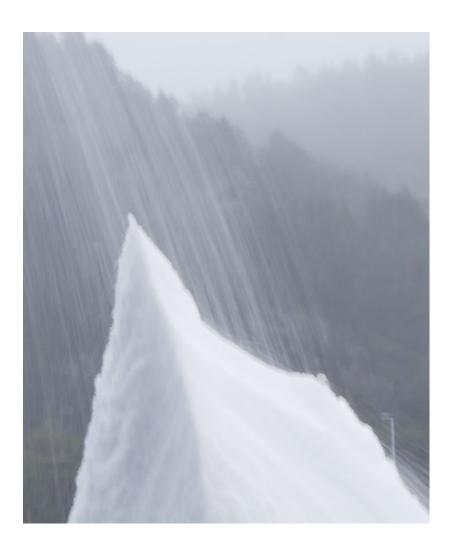


## Snø separering



#### Relativt tørr snø 12m3/hour





## Thank you