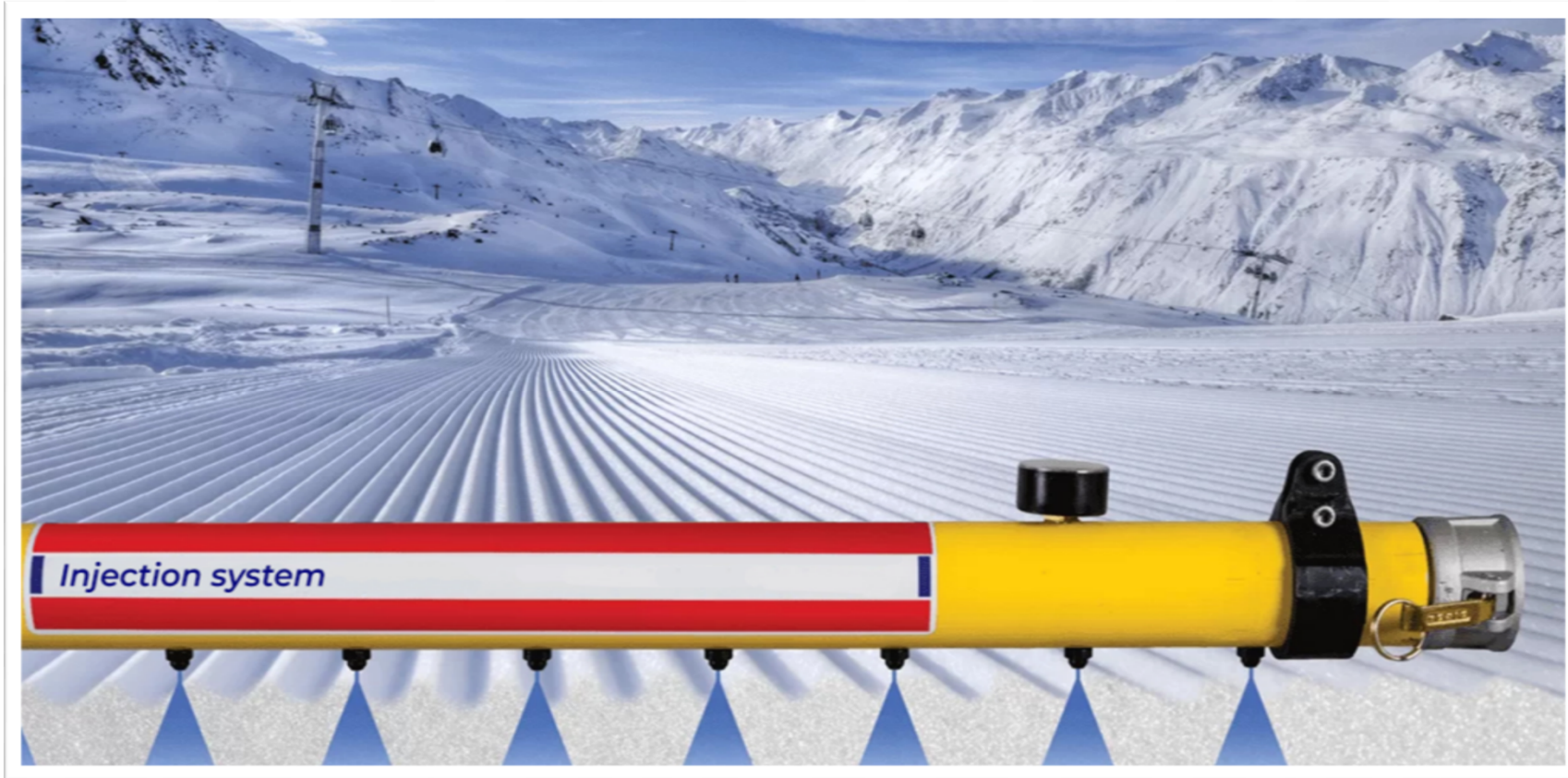


**KITZ**

**ALPIN**



World wide experience with slope preparation for Winter Olympic Games and World Cup with our injection system



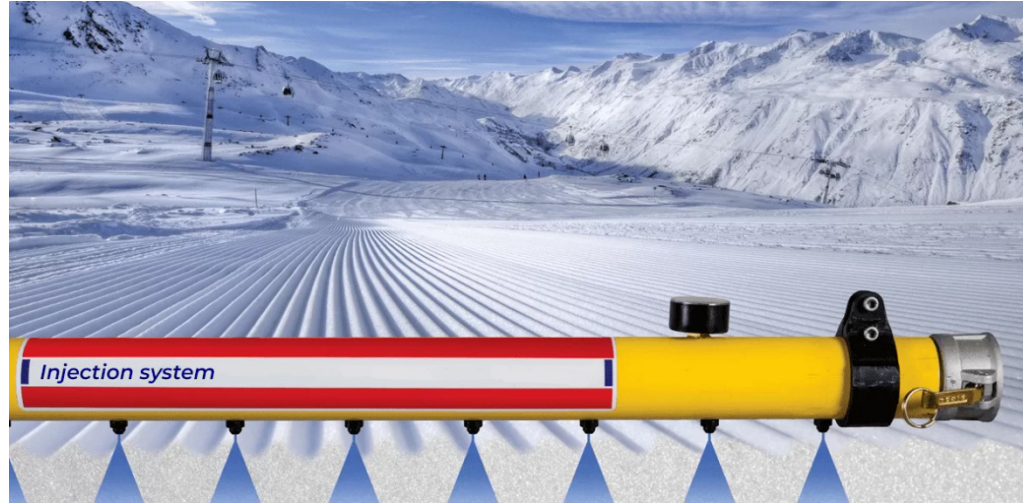
## Water

our most important source of life

Glaciers hold 68 % of all fresh water

Every snowflake is different ... and ... there is an infinite number of ice crystals on Earth





## Preparation with Injection Bar and Measuring Instruments





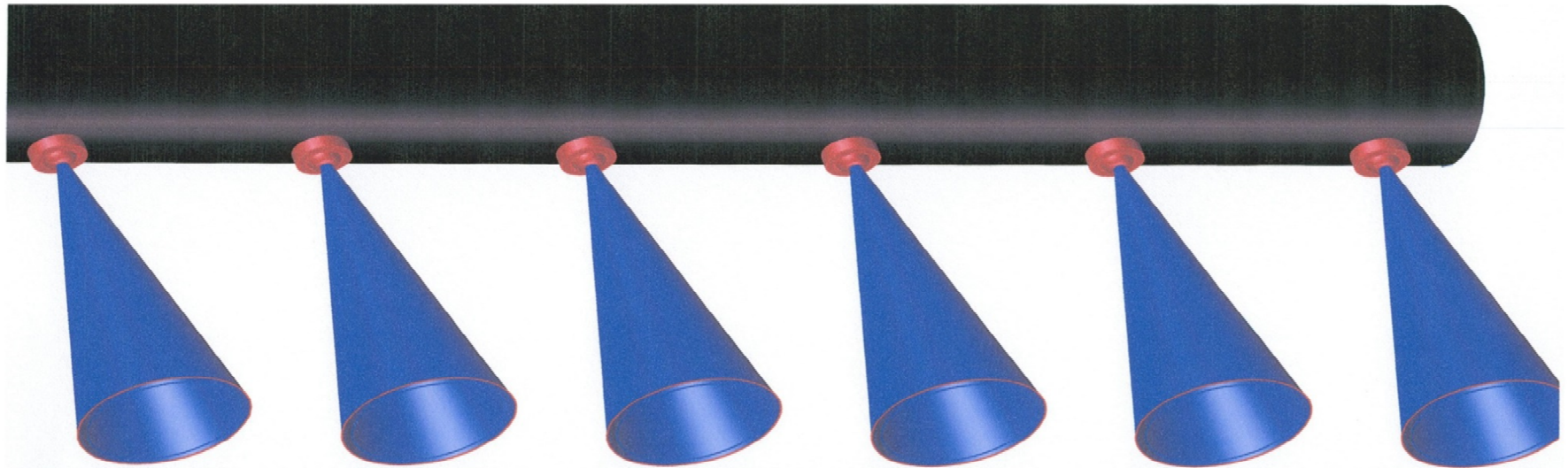
With the help of the injection bar water is gunned into the snow through special nozzles. This makes the heat disappear through thousands of holes in the prepared snow cover. The cold caused by evaporation is able to stabilize the slope to the preferred hardness without producing ice.



With the injection bar slopes also can be prepared at temperatures above freezing level in the same way. The snow surface remains widely waterless. Using this technique makes it possible to abstain from chemical snow hardener.

# KITZ

# ALPIN



The water is gunned into the snow with special rotation nozzles and spreads cone-shaped. All snow crystals are coated with water by capillary action. This creates a very large surface through which the cold caused by evaporation cools the snow cover top to bottom. The slope gets the hardest at the lower end of the cone. This guarantees a long-lasting high quality of the slope.



**Snow Section**



### **The benefits:**

1. The surface does not ice over
2. Consistent snow density
3. 30 m slope in one operation
4. Temperature resistance
5. High level of resilience
6. The piste does not break up
7. Safer and fair for all racers
8. Cost minimising



## **The injection bar is used worldwide**

**Winter Olympic Games:** From 1998 Nagano to Turin, Vancouver, Sochi, Pyeongchang and finally Beijing 2022

**World Championships:** since 2011 in Garmisch to 2021 in Cortina d'Ampezzo

**World Cup:** from A as in Adelboden and Alta Badia to Val d'Isere and Wengen

**Europa Cup:** e.g. Formigal, Obereggen, Soldeu

More than 1,600 races are held in Europe annually:

World Cup, Europa Cup, FIS Races

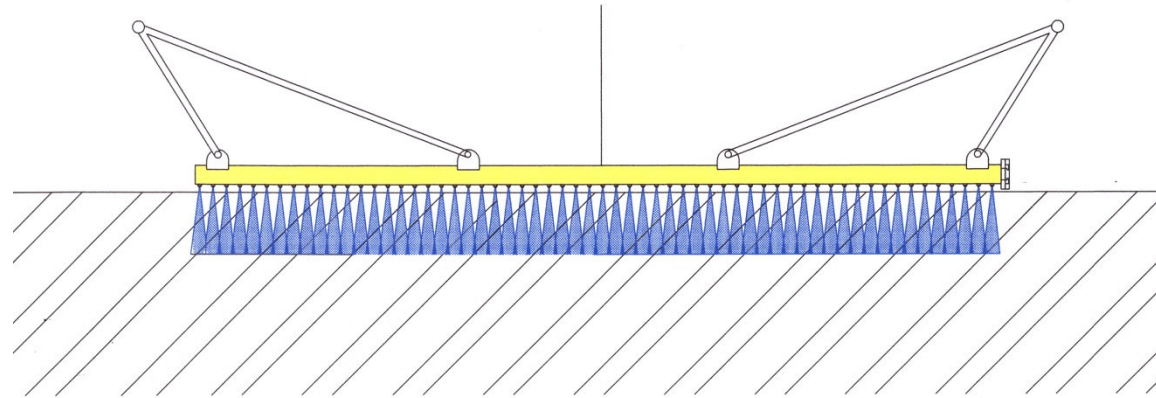
More than 80 % of all teams and ski clubs prepare their pistes using the injection bar





With the injection system, the pistes compacted to precisely meet the hardness requirements for each discipline. For example, for the different requirements of biathlon, freestyle, snowboard or alpine skiing.

Snow weight per m <sup>3</sup>	
Natural snow	70 - 200 kg/m <sup>3</sup>
Artificial snow	350 - 400 kg/m <sup>3</sup>
Ice	900 kg/m <sup>3</sup>
Water	1,000 kg/m <sup>3</sup>
Giant Slalom ladies	500 kg/m <sup>3</sup>
Slalom men	700 kg/m <sup>3</sup>



Your innovative partner for snow and piste preparation since more than 20 years





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