



Fact Sheet:

SKELETON IN CANADA

History of Skeleton:

The first skeleton runs were natural tracks, built in Switzerland in the late 19th Century and capitalized on the recreational popularity of tobogganing. Straight downhill courses were modified by adding curves to make the runs more interesting and challenging. The first official toboggan race was in 1884 and the first known skeleton event was in 1887. In fact, it was skeleton racing, which laid the foundation for the sport of bobsleigh.

The two sports were brought together in 1923, when the Federation Internationale de Bobsleigh et de Tobogganing was created. Skeleton first appeared in the Olympic program in 1928, and then again in 1948, both times the Games were held in St. Moritz, Switzerland. The modern era of Canadian participation in skeleton racing began in 1986 with the opening of the Calgary Track at Canada Olympic Park.

Sport Description:

i.) Start Times:

The most important part of skeleton competition is the start time – the time it takes the sled to travel the first 50 metres down the track. Without a competitive start – at least within a tenth of a second of the fastest – a medal finish is next to impossible. As a rule of thumb, a tenth of a second lead at the start translates into a 3/10ths of a second advantage by the bottom of the course. Top skeleton sliders are looking for maximum power and acceleration as they push their sled from a standing start, with the first 50 metres typically covered in about five seconds while reaching speeds of more than 40 kilometres an hour.

ii.) Driving:

Once the athlete has loaded at the start, they must then steer the sled through twisting, high-speed turns and straight-aways where top speeds can reach more than 135 km/h. Steering is done by shoulder and leg manipulations of the sled, which in turn cause the runner contact to change the sled direction. Steer too hard and the sled will skid, losing valuable time. Steer too little and the sled is at the mercy of the track, causing slow times at best, and a crash at worst. Skeleton sliders often talk of the "feel" they need to have to race well, and the sense they develop of when to let the sled run and when to steer. Just as downhill skiers try different lines to find the quickest way down a slope, skeleton drivers study every twist and turn on a track to figure out the fastest way to the finish.

iii.) Tracks:

Skeleton races historically took place on natural-ice tracks. Today, however, most competition takes place on tracks with an artificial ice surface. A notable exception is the natural-ice track in St. Moritz, Switzerland, which is a regular stop on the World Cup circuit. Most tracks are about 1,500 metres long and all have unique characteristics and varying degrees of difficulty. All courses drop a minimum specified vertical distance and feature numerous banked curves from top to bottom.

The Competition:

In skeleton there are separate racing disciplines for men and women. In World Cup competitions two heats are held over one day in each event. At the Olympics and World Championships (held annually except in the Olympic year), four heats are held over two days. The athlete with the lowest combined time in all events is the winner. There are also America's Cup, Europa Cup and Intercontinental Cup race series, the development level circuits for the newer sliders. These races allow the athletes to gain experience and earn the qualifications needed to compete at the World Cup and World Championships level. In addition to the senior World Championships, athletes under the age of 23 can compete in the Junior World Championships.

Since the ice becomes rougher as the competition progresses, it is an advantage to be among the first to go down the track. To determine which sliders get the best start positions, a seeding system is in place to reward the top sliders based on their previous results.

At the first World Cup competition of each season, the final results from the previous season apply, with groups of ten allocated on the basis of World Cup results. From these groups, there is a draw made to determine the actual starting order within each group. For the remainder of the season, the starting groups for the draws are based on the updated, current World Cup results as follows: Group I - 1 to 10; Group II - 11 to 20; Group III - 21 to 30; Group IV - 31 and up.

In World Cup competition, medals are awarded to the top three rankings, and recognition awards for placing fourth through sixth. In addition, points are awarded to the top-30 finishers in each World Cup race, which leads to the awarding of World Cup Titles in each of the disciplines; won by those accumulating the most points over the full season. At the World Championships, medals are awarded to the top three positions in each of the events. At the Olympics, athletes are seeded into groups of 10 based on the final World Cup standings for the season, again using the same ten sled groupings.

Competition Equipment:

The skeleton sled is low profile, but heavy, with a fiberglass "pod" which provides the aerodynamics to the lower part, mounted onto a steel chassis/frame. The sled "runs" on two highly polished steel runners. The runners are mounted such that the bow can be controlled, which assists in the steering of the sled. There are no brakes on a skeleton sled, so the athlete and sled will stop by decelerating in the braking stretch and sometimes they will have either fresh snow or foam pads in the track to assist with the braking. The temperature of the steel runners is taken electronically immediately prior to each race heat. Heating of the runners is illegal. At the finish line, the sled and athlete are weighed to ensure that they are below the maximum weight. To place all competitors on an equal footing, sleds are standardized according to specifications set by the Fédération Internationale de Bobsleigh et de Toboganning (FIBT).

Skeleton athletes wear alpine racing type helmets and skin-tight racing uniforms made from a stretch material. Racing shoes are similar to track spikes, for traction on the ice. Athletes will wear either goggles or face shields, while some riders wear elbow and shoulder padding over their racing suits.
