

Lage kulebakke med prepareringsmaskin

**Mogul course preparation for Iizuna mogul course
First draft of mogul course construction procedure
Henri Rohner, FIS Technical Delegate, December 30, 1997.**



The following instructions are based on beginning the construction on the right side of the course (looking down the hill) and working over to the left side (looking down the hill). Right side and left side are always skiers right and skiers left, that means always looking down the hill.

Special material needed:

- 120 red slalom poles
- 120 blue slalom poles
- several slalom pole drills
- shovels

Preparation for the work with the winch-cat:

The detailed layout of the waves that the cat has to make has to be marked with slalom poles on both sides of the course, about 1m outside the first track on the right side (about 6.5m from centerline on the provisional layout) and one snowcat-width away from the last track on the left side (about 9.5 m from centerline on the provisional layout).

Each wavetop of the first track has to be marked with a red pole (approximately each 7m, for detailed distances see provisional layout). In the middle between each red pole there has to be a blue pole marking the wavetops of the second track of the snowcat.

Each odd track (3, 5, 7) will have the same wavetops as the first line (red poles) and each even track (4, 6) will have the same wavetops as the second line (blue poles).

Before the start of the work with the cat, all the red wavetops are marked with additional red poles exactly on the edge of the first wave. This line of red poles has to be lined up in the fall-line so that the catdriver can follow the line and push up a wave at each red pole.

Work with the winch-cat



First track

The first and the second track are the most important part of the snowcat-work. The first set of waves have to be built exactly at the red poles. It is very helpful to have somebody with radio-contact to the catdriver walking down on the side of the course and correcting the catdriver if necessary.

After the first track is done, a set of blue poles has to be put on the wave-valleys, exactly corresponding to the blue poles on the sides of the course and exactly 1.6m to the left of the first line of red poles, again lined up with the fall-line (1.6m is according to the provisional layout)

On the way back up to the top the snowcat has to cut off the first wave at the blue poles (1.6m to the left according to the provisional layout) and groom the area left of the blue poles flat again.



At the end of this step we have a 1.6m wide wave-track between the red and the blue poles.

Second track

On the same track that was groomed flat again, the cat makes the second track now making the wavetops at the blue poles (and matching the wavevalleys of the first track).

After the second track is done, the red poles from the first track are moved to the left side into the wavevalleys of the second track, 1.6m left of the blue poles, lined up in the fall-line and with the red poles on the sides of the course. Again the last track is cut along the red poles and flattened by grooming.

At the end of this step we have two 1.6m wide wave-tracks

Third track

On the same track that was flattened by grooming the cat makes the third track now making the wavetops at the red poles (and matching the wavetops of the first track and the wavevalleys of the second track).

The procedure is now repeated until the left side of the course is reached.

Course preparation right after the snowcat-work

Right after the snowcat-work (on the same day !!!) skiers with shovels have to cut and smoothen the ridges between the wave-tracks. Depending on the snow-consistency the course has to be sidestepped or sideslipped until there is a smooth surface. The resulting moguls do not have to be very big. It is much more important that they are in a good rhythm and that their shape is not differing too much.

The course has to be left like that for a night. The first skiing should begin when the new mogul surface has hardened out a little bit. It should be a very light and controlled skiing (like ski school mogul skiing) making only nice turns without speed.

Mogul course preparation: procedure for the snowcat



Before the first pole the snowcat has to start pushing up the snow to make a pile at the pole.



When the snowpile is at the right location the cat has to lift the blade and should carefully drive on top of the snowpile.



Before the cat dives over the edge of the snowpile it is very important, that the blade stays lifted up. While diving over the edge of the snowpile the cat should be held by the winch so it doesn't slide