

Manual Trackpreparation for Truck and Tractorpulling



Version 1.0

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This manual is used within NTTD for a few years now and has led to better and more consistent tracks. The knowledge is collected by Martin van Lomwel in the past and all promoters who follow this manual step by step have made improvement in more consistent track preparations.

An useful advice from Martin van Lomwel:

"Don't let others tell you what to do and how to prepare a track, they won't be there when the track is not good on the day of the event..."

1. Tracks

Tracks with a grass crop or green manure on them need to be treated 6 weeks before the start of the competition by spraying to get rid of the grass, for better structure during track preparation.

2. Fixed point of contact for communication:

The promoter has a fixed point of contact who is responsible for the track(s). Only this point of contact communicates with the track advisor. This is to avoid different opinions and agreements between promoter and the track advisor.

3. Covering lanes:

Tarpaulin/Agricultural plastic must be available 6 weeks before the competition date. In consultation with the track advisor the track may or may not be covered before the competition date.

If the track(s) have been covered for a long time, please open up on a nice dry and sunny day, so the top layer of the track can dry off.

Dimensions: Tarpaulin/Agricultural plastic 12 or 14 meters wide and 150 meters long.

Advice is at least 150 meters in one piece, so no water can get on the track at the seams.

After an agreed appointment the advice from the track advisor has to be followed by the promoter.

4. Water drainage track:

The drainage of clay- or sandtrack, if the track is above ground level:

pull ditches along the track and make suction gulleys. Discuss this with the track advisor.

5. Availability machines:

Availability of track preparation machines for track construction and permanently available on competition day:

- Tractor with attached goose foot cultivator \ scuffle
- Tractor with rotavator
- Tractor with attached power harrow
- Tractor with attached slurry tank with spray attachment filled with clean water. Make sure this is not leaking.
- Tractor with attached leveling blade with laser or Grader with laser (See photo 5) or a Shovel with blade and laser.
- A loading Shovel and self-propelled tire roller preferably 8 tons. (see picture 10 + 11)

All this in consultation with track advisor and point of contact promoter.

6. Track length:

At Euro Cup events the track length is at least 140 meters.

More classified: 20 meters before the start of the 0 line + 110 meters [competition track] + 20 meters [run-out track]. Behind it 5 meters and a sand bank + 10 meters [gap to measuring space].

Trackwidth:

The constructed track must be at least 12 meters wide, on which a competition track of at least 10 meters wide can be marked.

7. Distance:

The distance between the competition tracks between the chalk lines must be at least 6 meters, preferably 10 meters. If the distance between the two race tracks is less than 6 meters, then all competition machines may only be driven if the other track is completely empty. Competition machines of a standard or sports class of the Farmstock of Trucks are allowed to drive in this case if track maintenance takes place on the other track.

8. Chalk:

Chalk for the chalk cart: brand Magkal or equivalent [no quicklime] 3 bags of 25 kg per competition day per track.

9. Braking wall

A loosely ideally sand braking wall at the end and over the full width of the track:

Length = 15 meters, width = 5 meters, height = minimum 1,5 meters.

Approximately 60 degrees angled upwards. A tractor or truck should not drive against it, but in it.

10. The start:

The start must be equipped over the entire width of the track with slightly sloping dragline bulkheads or Steel plates in the direction over the entire width of the track.

The sled should be with the wheels on these bulkheads or Steel plates at the start. Next to the start there must be a place for the pulling machines. No obstacles or persons are allowed on this place.

11. Trackpreparation:

If the tracks are still equipped with grass or dead sprayed turf, these should be loosened about 5 to 10 centimeter deep (until one has almost no grass roots anymore).

Loosely slide off the evenly milled turf. If there is no grass on the track anymore, you can start with:

- Step 1: For the 0/start line dragline bulkheads or stelcon plates with some slope dig in. Mark this clearly at the 0/start line with poles or shalon sticks to prevent damage to machines.
- Step 2: Open with scuffle / cultivator track 10 to 15 centimeter deep. See photo 3. Tighten each course and always start at 0/start line.
- Step 3: Milling the cultivated tracks with rotavator. Tighten each course and always start at 0/start line.
- Step 4: Lay the entire milled track with tractor and blade and laser (or Grader or shovel with blade and laser) on slope. See photo 5.
- Step 5: Open the track again with goose foot cultivator.
- Step 6: Bring water onto the track with a water truck and good sprayplate that sprays the entire track. Or spraybar See photo 13. *Test spray width and driving speed outside the competition area in advance to prevent flooding on the track.*
- Pay close attention to the right amount of water. Not too much in one time, it is better to apply in 3 parts. Always start spraying at the 0/start line.
- Step 7: Tractor scuffle / cultivator only open the wheeltracks of the watertruck.
- Step 8: Completely mill track(s) again.
- Step 9: Track evenly driven with shovel wheel-a-wheel or rolling with self-propelled tiresroll 8 tons. See photos 7 to 11.
- Step 10: Check the track
You do this pricking / judging every time after rolling the track.
 - Check the track hardness with a stick. This stick is a steel pin of around 12 mm. See photo 12.
 - Poke the stick upright 15 to 20 cm. into the track and pull it back up.
If it brings dry clay with it or breaks open the track, then water must be in the track. If you prick and you hear a popping sound (equivalent to uncorking a bottle) then there is enough moisture in the track.
 - Advice is do this in various places in the track.
Depending on whether it is clay track or sand track, determine the malleability and moisture content of the track with track advisor. If there is more moisture in the track needed, continue with step 11.
- Step 11: Open the rolled track with scuffle / cultivator again. Do not drive too fast so the cultivator can pull the stuck layer round. And always start spraying at the 0/start line. Spraying water on the track with a water truck, always driving at the same speed. Only open the wheeltracks of the water truck with goose foot cultivator. Completely milling the track again and then driving evenly with shovel again "wheel-to-wheel" or rolling with self-propelled tireroller.
- Step 12: View and check the track again! If it needs more water or water needs to be put in for the last time: see step 13.

- Step 13:
 - Re-open the track with goose foot cultivator.
 - Spray water on the track.
 - Pulling open water wagon wheel tracks again.
 - Track milling.
 - With sufficient moisture in the track after milling, work the track with rotary harrow to remove unevenness after a lot of machining. Also when rotating, tighten each pass at 0/starting line.
 - Hit the track for the last time with shovel or roller. When driving with a shovel with the bucket on the ground slightly pressed, drive backwards. (picture 13) This is to brush away the traces of the jamming. So that there are fewer unevennesses before covering the track. This is better for the plastic. Use a scraper or blade or grader if available.
 - Immediately cover the tracks complete after approaching/rolling. So the weather conditions do not affect the track. (picture 14)

12. Preparing the tracks

With 2 tracks at the same location, it is good to coordinate all equipment. So you can keep driving from track to track and all equipment can be used as optimally as possible.

Prepare in the right order, keeping the same cycle each time. This allows the machines to be used properly and the track preparation goes faster. Be careful with the weather! Always keep plastic on hand.

13. Track opening:

Open the track about half an hour before the start of the event, not hours in advance, this to prevent driving back and forth with various equipment on the track.

Provide enough people to remove or put tarpaulin/plastic off the track or on it.

14. If in doubt:

In case of doubt or questions regarding matters about the tracks, always consult with a track advisor. Let's communicate with each other, the track advisors prefer an extra consultation above doubt or questions.

We will try to make it a great event together!

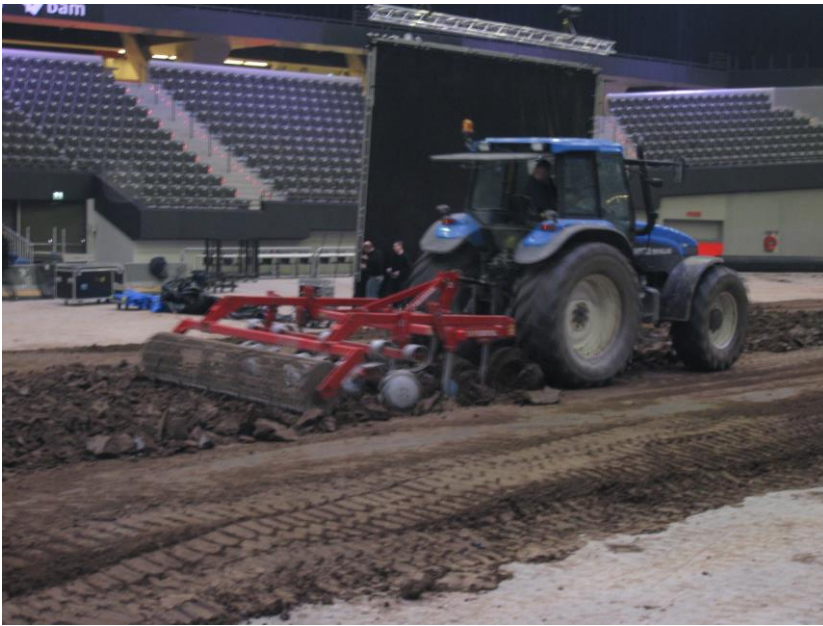
Description of track advisor tasks (from the NTTO official book)

- The track advisor contacts the promotor a few weeks (but at least 14 days) prior to the event, (within NTTO if possible together with the NTTO-event planner) to view the tracks. The track advisor reports the findings back to the NTTO-event planner or directly to the promotor.
- If the track advisor is going to view the track on his own initiative or at the request of the promotor or the NTTO-event planner or the NTTO board, an appointment will first be made with the promotor. The promotor passes on the name of their fixed point of contact to the track advisor.
- Based on his knowledge and experience the track advisor issues an advice to the promotor with regard to the track(s) and guides the promotor in improving the track(s) or helps himself in consultation with the promotor. The promotor has the final responsibility for the track(s).
- Advice shall be given with regard to:
 - The composition of the track
 - The moisture content of the track
 - The hardness of the track
 - The length of the track
 - The width of the track
 - The presence of stones on or in the track
 - The flatness of the track
- The promotor fully cooperates with the track advisor, all costs for preparation and any research costs are for the account of the promotor, as well as the travel and accommodation costs for the track advisor in the period prior to the competition.
- If the track(s) does not meet the requirements, the track advisor will consult with the NTTO-event planner and promotor in time to still achieve the desired result.
- If the track advisor is of the opinion that the job is not easy to get, or if the promotor does not provide sufficient cooperation, the track advisor informs the NTTO-event planner. The NTTO-event planner will inform the board of the NTTO via the functionarissen-committee. The board will then take the necessary measures.
- Together with the scraper driver(s) and tire roller driver, the track advisor ensures that the track is ready for competition at least 15 minutes before the start of the event.
- During the event, the track advisor will continue to monitor the condition of the track and coordinate any necessary work with the head-track marshal and the scraper driver(s).
- The responsibility for the track quality during the competition lies with the assigned NTTO officials (track jury and track people) and they act in consultation with the promotor.

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Photo 3: Goose foot cultivator



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Photo 4: Tractor with knife cutter



Photo 5: Kilverbak with laser



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Photo 6: Rotary harrow



Photo 7: Approaching the track



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Photo 8: Wheel to wheel



Photo 9: Shovel / Loader



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Photo 10: self-driving tires roll 8 tons



Photo 11: Ground vibratory roller



Photo 12: assessing the job



“Plop”

Photo 13: Tractor with sprayplate or spraybar that sprays the entire track.



Photo 14: Tarpaulin/Agricultural plastic roller for covering the track



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If necessary and available, a sheep's foot roller can be placed in it.

