CONSTRUCTING A HORSE ARENA WITH RUBBER GRANULATE

This guide targets everyone contemplating or already in the process of ordering the installation of a horse arena with rubber granulate, as well as those who already have a horse arena with rubber granulate – and wish to prevent granules from spreading to arena surroundings.

HORSE ARENAS WITH GENAN ULTRA COARSE RUBBER GRANULATE -GENTLE SURFACING FOR HORSE AND RIDER

GENAN ULTRA COARSE rubber granulate is suitable as top layer for both indoor and outdoor horse arenas (dressage and jumping), paddock, roundpen and walkers. The rubber granulate provides a resilient, shock-absorbing surface, offering less strain to joints and tendons – and reducing hoof wear. And should the rider fall off, a softer landing is ensured on the elastic rubber layer.

In comparison to horse arenas with either grass, sand or wood chip surfaces, conditions are far better on both rainy days and on days with temperatures below freezing, which makes rubber granulate perfect for outdoor arenas. GENAN ULTRA COARSE rubber granulate excels as the purest rubber granulate product on the market – being virtually dust-free and free from steel contamination. Furthermore, rubber granules withstand rough weather conditions better than both fibre and wood chip materials.

A horse arena with rubber granulate requires far less watering compared to other surface materials, and the need for maintenance is low. Several top riders use GENAN ULTRA COARSE rubber granulate in their horse arenas due to these many advantages.

Climate-wise, horse arenas with rubber granulate also have great positive impact; yet, as is also the case in many other contexts, e.g. in connection with the handling of batteries and household plastics, there may be environmentally negative effects, if rubber granulate is not handled correctly.

It is thus important to ensure that the arena is constructed to help prevent the spreading of rubber granules in connection with both normal use and regular maintenance. Furthermore, a code of conduct should be made for users, so they know how to avoid spreading rubber granules when leaving the arena.

At Genan, we are striving for a sustainable future, and our factories have the capacity to spare the environment several hundred thousand tonnes of CO₂ emission annually, when end-of-life tyres are recycled into rubber granulate – e.g. for horse arenas. And if Genan's recommendations for the construction and maintenance of horse arenas are followed, you can ensure that rubber granules remain inside the arena – and are not spread to nature.



GENAN

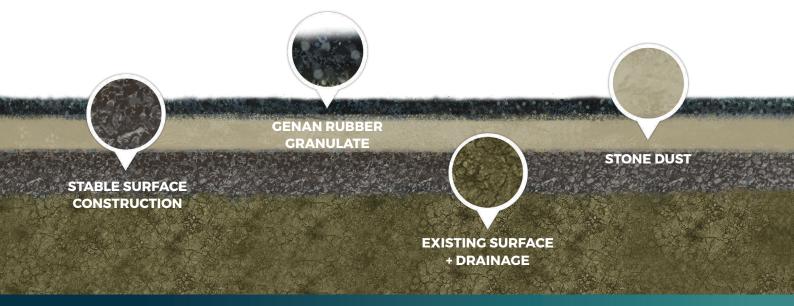
- is a Danish company, which is world leader in the recycling of end-of-life tyres
- is a high-technology manufacturer, working with sustainability, the recycling of valuable resources as well as the responsible use of rubber granulate
- focuses on high quality and the manufacture of products with a high degree of purity.

Genan has made three guides with recommendations for the construction and maintenance of as well as responsible conduct around horse arenas with rubber granulate.

GENAN INSIDE - THINK IN IMPORTANT MEASURES FROM THE VERY OUTSET

It is essential that different measures to prevent the spreading of granulate are taken into account as early as in the planning stage of the installation of horse arenas with rubber granulate. Genan recommends the following procedure for the installation of indoor and outdoor horse arenas with rubber granulate:

- 1. Check local rules and regulations in relation to drainage water management before installing a horse arena with rubber granulate.
- 2. Request documentation from suppliers of e.g. rubber granulate to verify compliance with applicable requirements and standards.
- 3. In so far as possible, avoid open wells and discharge points to drainage systems close to the arena. Inspection holes for drainage systems should be placed outside the arena.
- 4. If there are any open wells near the arena, install filters, i.e. "granulate traps", to retain granulate.
- 5. Rubber granulate can be laid out directly on top of an existing, compacted surface or on a recently installed horse arena with a surface of stone dust, sand/clay mix, crushed shells or fibre.
- 6. To keep granules inside the horse arena, a solid wooden barrier, at least 50 cm in height, should be mounted along the perimeter of the arena. The barrier must be constructed, so rubber granules cannot work their way out under the barrier and spread to surroundings (cf. Figure 1). If the arena slopes a lot, water running off the riding grounds may drag along rubber granulate, and a fine mesh net should thus be installed along the barrier to retain granules.



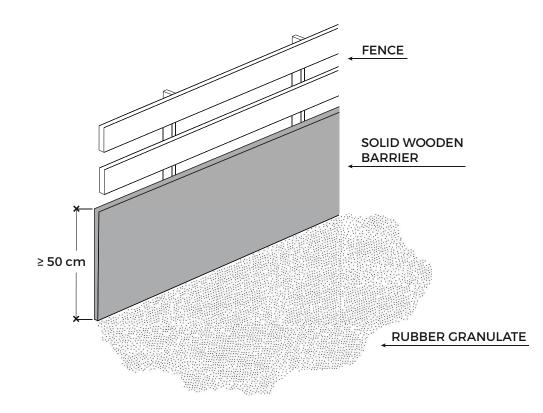
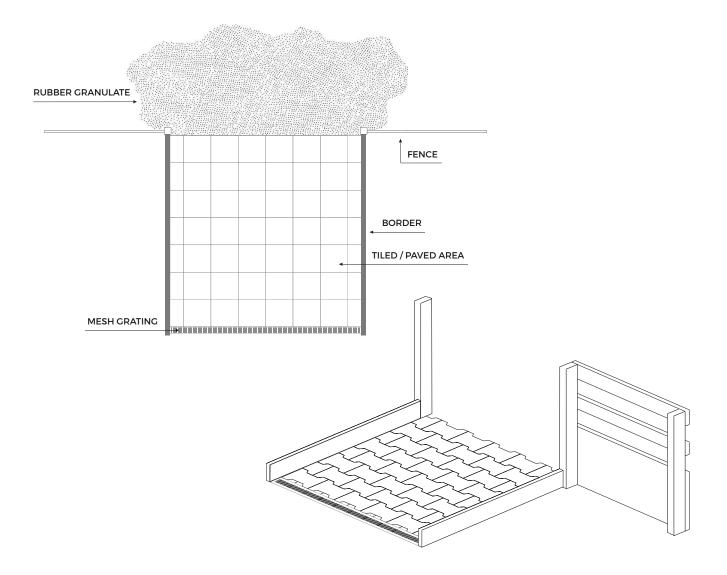


Figure 1 = Barriers around the arena to prevent rubber granulate from spreading to surroundings

- 7. Construct a paved / tiled area of poured concrete, concrete tiles, rubber tiles or the like at the entrance / exit area of the arena where excess granules from the horse's leg boots and bandages can be brushed off and swept back into the arena. The paved / tiled area must be large enough to prevent rubber granules from spreading to the surroundings (cf. Figure 2). Equipment such as a hoof pick, a grooming brush and a broom should be placed at the paved / tiled area, so rubber granules can be swept back into the arena.
- 8. When laying out rubber granulate in the horse arena, make sure that the packaging of the rubber granulate delivered is intact to avoid dispersal.
- 9. Do not start laying out rubber granulate until all containment measures to reduce dispersal outside the arena have been installed.
- 10. To avoid dispersal of rubber granules outside the horse arena, do not open the Big Bag until it is inside the arena.



- 11. Collect all empty Big Bags after installation and check that there are no rubber granules left in them when they are transported away from the area.
- 12. Clean machinery and other equipment used for the installation of the rubber granulate before such machinery / equipment leaves the area.
- 13. After the use of equipment such as arena levellers and rollers inside the horse arena, brush rubber granules off such equipment on the paved / tiled area. Sweep granules back into the arena.
- 14. If the riding arena is to be replaced or closed down, the company collecting and disposing of rubber granulate from the riding arena must be licensed to handle the granulate from the time of removal from the horse arena until recycled or disposed of in accordance with applicable waste management regulations.



Figures 2a and 2b = Arena with a designated paved / tiled area at the entrance/ exit

MEASURES TO PREVENT THE SPREADING OF RUBBER GRANULATE WHEN USING THE ARENA

In connection with the construction of the horse arena, it should be taken into consideration how users of the arena should be guided to prevent the spreading of rubber granulate to surroundings when using the arena.

- 1. Provide equipment at the entrance / exit of the horse arena, so riders can remove rubber granules from the horse and its equipment when leaving the arena. Also provide a broom to sweep rubber granules back into the arena.
- 2. Erect a sign at the entrance / exit of the arena to remind riders to keep granules inside the arena e.g. with the following text:



3. Signs should be erected in the stables, encouraging users to clean the inside of the horse's leg boots in the stable aisle and to collect any excess granules in the waste bin, from where they should be returned to the riding arena or disposed of as solid waste for incineration. The text on the stable sign could read:



4. Distribute handouts from Genan to riding arena users, if appropriate. This will give users advice on how they can easily help keep the rubber granulate inside the riding arena. Handouts are available for download at www.genan.eu.

FIND OUT MORE

Apart from the fact that horse arenas with rubber granulate should be constructed in the right way, arena maintenance and user conduct on and around the arena are also important factors to ensure that granules remain inside the arena. Consult the guide "Maintenance of Horse Arenas with Rubber Granulate – Genan Inside", which may be downloaded on www.genan.eu.



GENAN A/S | Jegindøvej 16 | DK-8800 Viborg info-dk@genan.com | www.genan.com