

FEI Footing Standard In-situ Test Report

Sample

Date(s) of testing conducted: DD MM YYYY

Arena(s) information

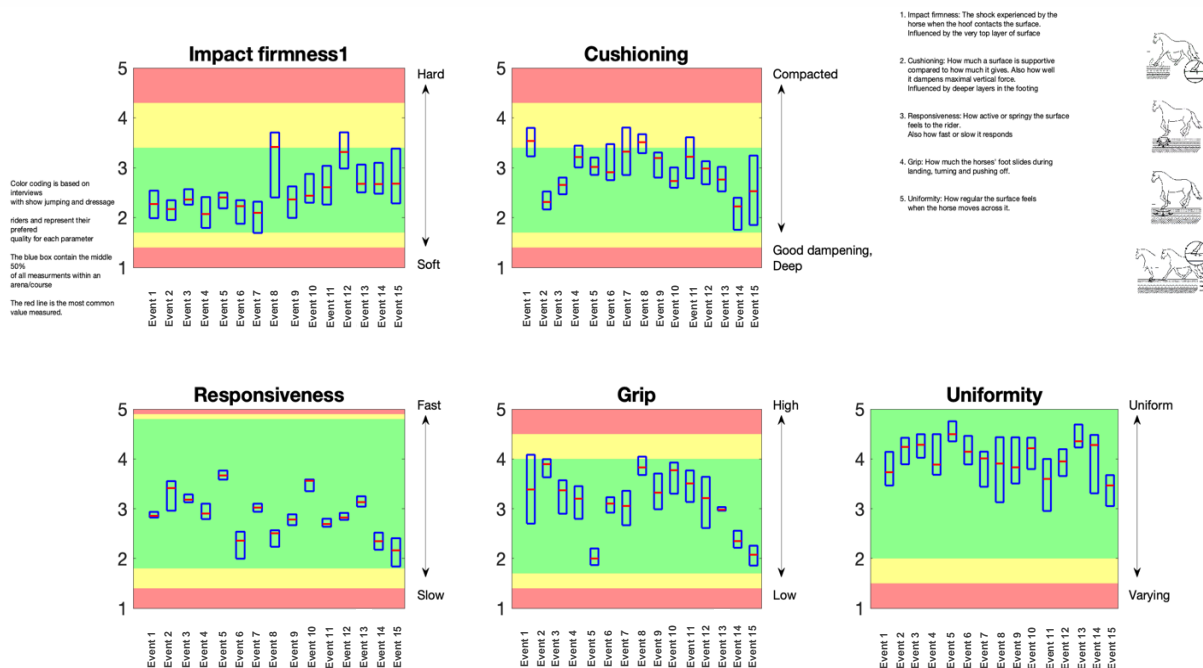
Discipline: Jumping

Size of competition arena: XXm by XXm

Number and size(s) of warm up arenas: XX; XXm by XXm

Evaluation and benchmarking based on OBST measurements

Comparison of OBST results against other events during season 22/23:



Overall comments on OBST results (sample):

The general assessment from veterinary perspective is that the properties footing provide a good balance between allowing performance while minimizing risk of injury. The primary reason being that there is a relatively low value on Cushioning, which minimizes maximal forces that the horse is exposed to. With Impact firmness, Responsiveness and Grip not being too low the whole combination becomes very-good and allow good performance.

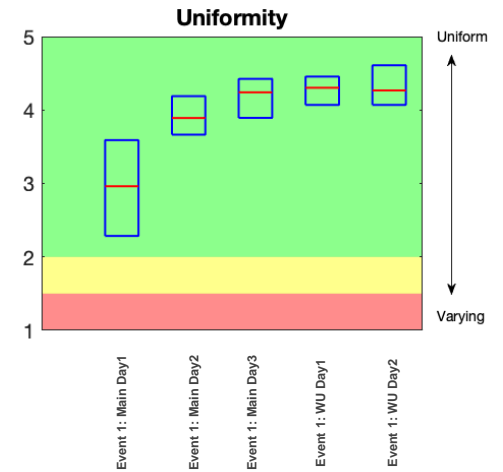
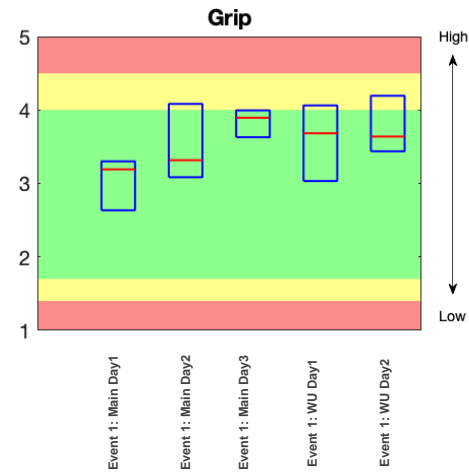
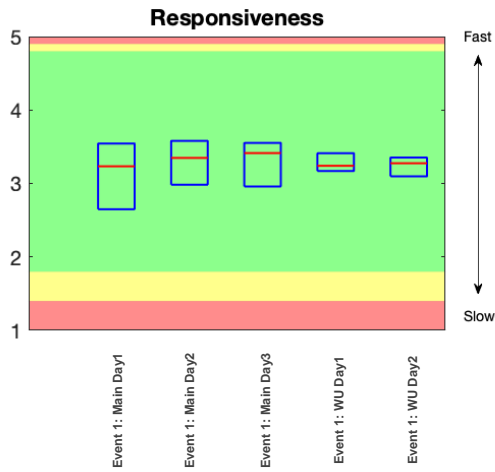
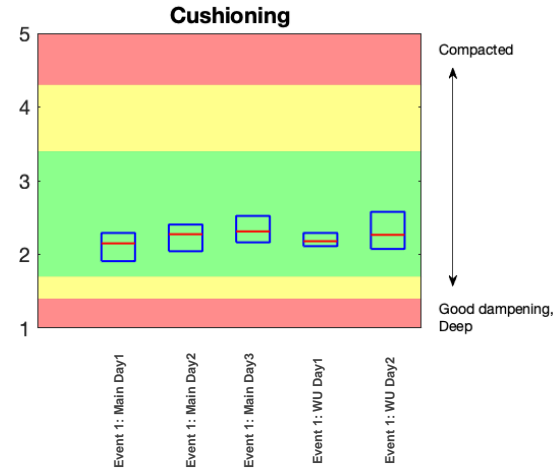
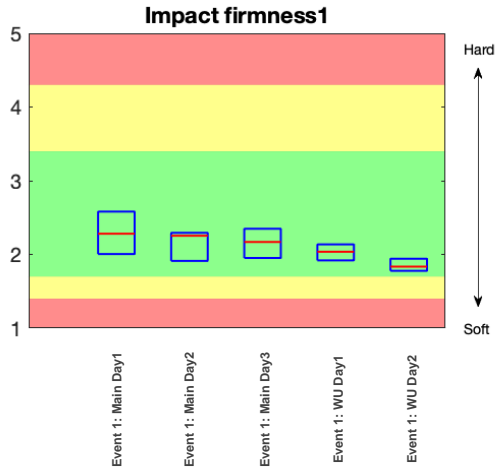
The material is well suited for the purpose. Importantly, it doesn't show signs of degradation/wear. This, however, will have to be kept in mind for the future.

The machinery used is adequate. There is a highly skilled and experienced person in charge of maintenance. Maintenance is well organized and integrated in the event schedule and there are adequate maintenance breaks between competitions.

The sub-construction with insulation on top (of a thicker layer of Styrofoam) show up as lower Cushioning when measured separately. There was no noticeable reaction on the horses when jumping in this area. However, it is an important observation that there are distinctly different properties on a part of the arena. More springiness in this area is most likely due to elasticity in the insulation. It should be considered during future installations that this is not exaggerated.

The following page presents a compilation of all measurements during the event. It can be observed that the uniformity increases over the days. This is common and logical for a temporary arena. It gets more uniform the more horses use it, accompanied with regular and adequate maintenance is performed. There is a slight tendency to increased Cushioning and some increase in Grip over the days, which can be attributed to more settlement of the arena as it is used and maintained.

Color coding is based on interviews with show jumping and dressage riders and represent their preferred quality for each parameter.
The blue box contain the middle 50% of all measurements within an arena/course.
The red line is the most common value measured.



1. Impact firmness: The shock experienced by the horse when the hoof contacts the surface. Influenced by the very top layer of surface.

2. Cushioning: How much a surface is supportive compared to how much it gives. Also how well it dampens maximal vertical force. Influenced by deeper layers in the footing.

3. Responsiveness: How active or springy the surface feels to the rider. Also how fast or slow it responds.

4. Grip: How much the horses' foot slides during landing, turning and pushing off.

5. Uniformity: How regular the surface feels when the horse moves across it.



Other details

1. Staff

- What is the arrangement with staff for installation and maintenance of the footing?
Contractor (XX) taking care of the daily maintenance.
- Who is responsible? Contractor responsible for maintenance procedures.

2. Material

- Kind of material (pure sand, fibre sand, etc.): Fibre sand
- Who selected/developed it: Mix designed by XX
- Is it owned, leased, supplied by contractor or other: It is owned by the organiser and stored between use
- Age: Unknown

3. Construction

- What is the base (concrete, ice, suspended floor, etc.): XX



- What are the different layers: Single top layer
- Thickness of top layer: XX cm

4. Maintenance equipment

- Types and number (tanker, floater, harrow, roller, etc.): Platz Max and powered tanker
- Supplied by (owned, supplied by contractor, rented, etc.): Supplied by sponsor

5. Installation procedure

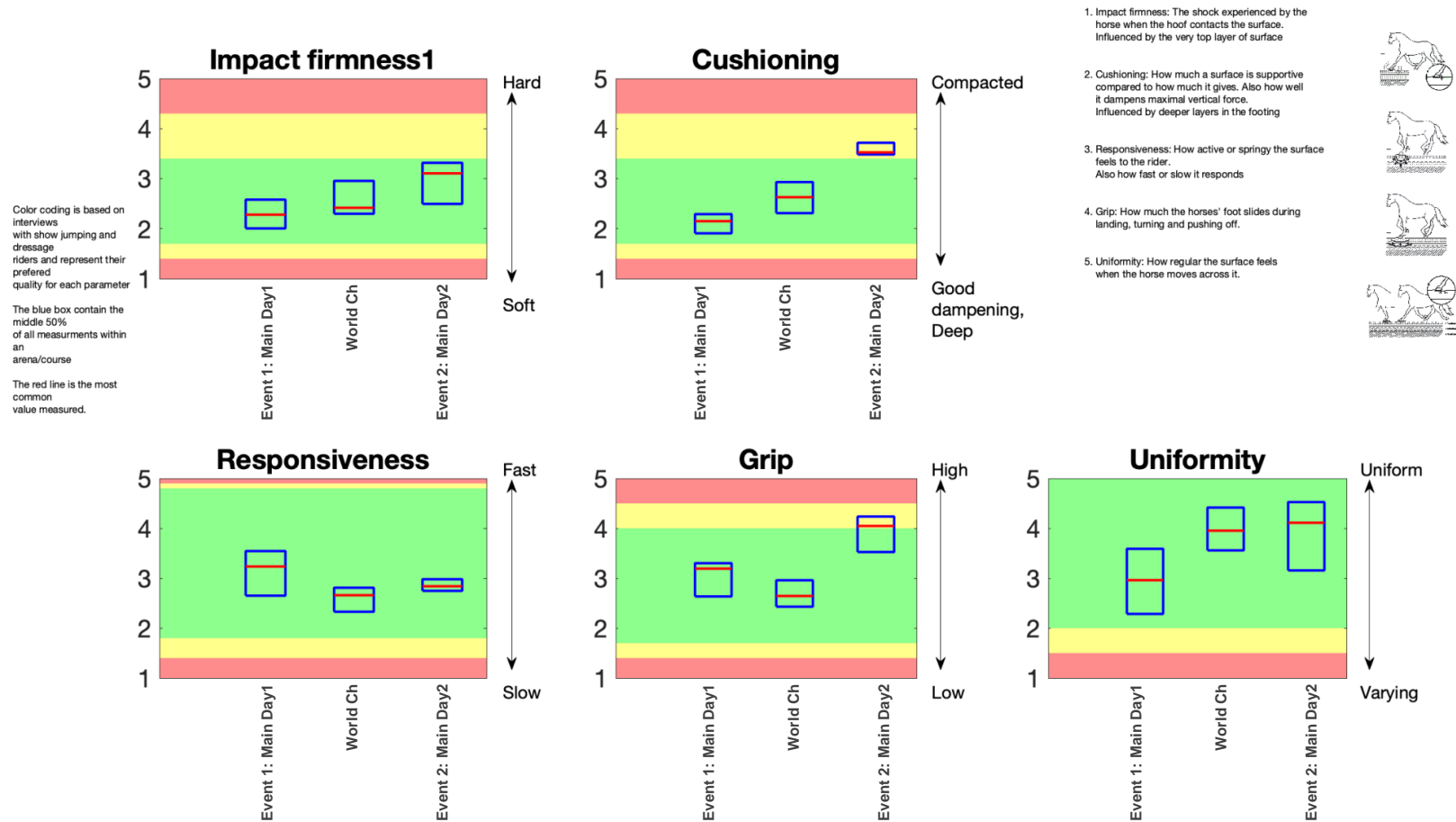
- Who is responsible for installation: Contractor
- Are there any special procedures/considerations: None
- How many days does it take and when is it ready for the first horses; Installed immediately prior to competition

6. Maintenance procedures

- What equipment is used in what situations: Two tractors w Platz Max groomers
- How is moisture control achieved and measured: Tanker and manual watering
 - Amount of water used: Unknown
 What is the time allowed for maintenance (fixed interval duration/max number of horses, etc.): In relation to the size of the arena and the amount of staff/grooming equipment
- When are longer maintenance intervals available (e.g., nights, what time): Evening/early morning

The following pages show the reports shared during the event with respective comments.

OBST Surface Testing: Comparison of Event 1 Main Arena Day 1 vs World Championships Main Arena and Event 2 Main Arena



Comments: First day of measurements in Event 1 compared to last day in Event 2 a week ago and the World Championships in the summer show clear similarity between Event 1 and World Ch. Most notably these two arenas show a lower value on Cushioning compared to Event 2, which means that horses are exposed to relatively lower maximal forces. All values on all arenas are within accepted values. We can expect Cushioning to increase slightly and uniformity to increase during the coming days since it is a newly installed temporary arena.

The comments and the charts from each day of measurements were made available to the Athletes via a closed WhatsApp group

FEI Footing Standard testing and report by:

Lars Roepstorff

Professor in functional anatomy of domestic animals

Swedish University of Agricultural Sciences

Uppsala, Sweden