SFN Team · Oct 17, 2023

Secrets of Show Glass Courts - Contra Vision Technology and its Application in Squash Show Courts

The evolution of squash courts has undergone a truly remarkable transformation with the advent of "all-glass courts." These self-standing Show glass courts, featuring transparent walls on all four sides, have revolutionized the way spectators experience squash matches. They provide an immersive 360-degree view, elevating the excitement of watching squash to unprecedented heights. These courts courts can be placed both indoors and outdoors. As such, they have become a defining feature of state-of-the-art sports facilities, ensuring that elite athletes can train under conditions that closely mimic actual tournament settings.

Understanding Contra Vision Technology for glass courts

Contra Vision® technology stands as a pivotal innovation in the realm of squash show courts. Since its introduction in the 1990s, it has redefined the sport. At its core, Contra Vision® technology achieves a one-way vision effect through the strategic placement of carefully designed dots, which are either printed or screened onto glass surfaces.

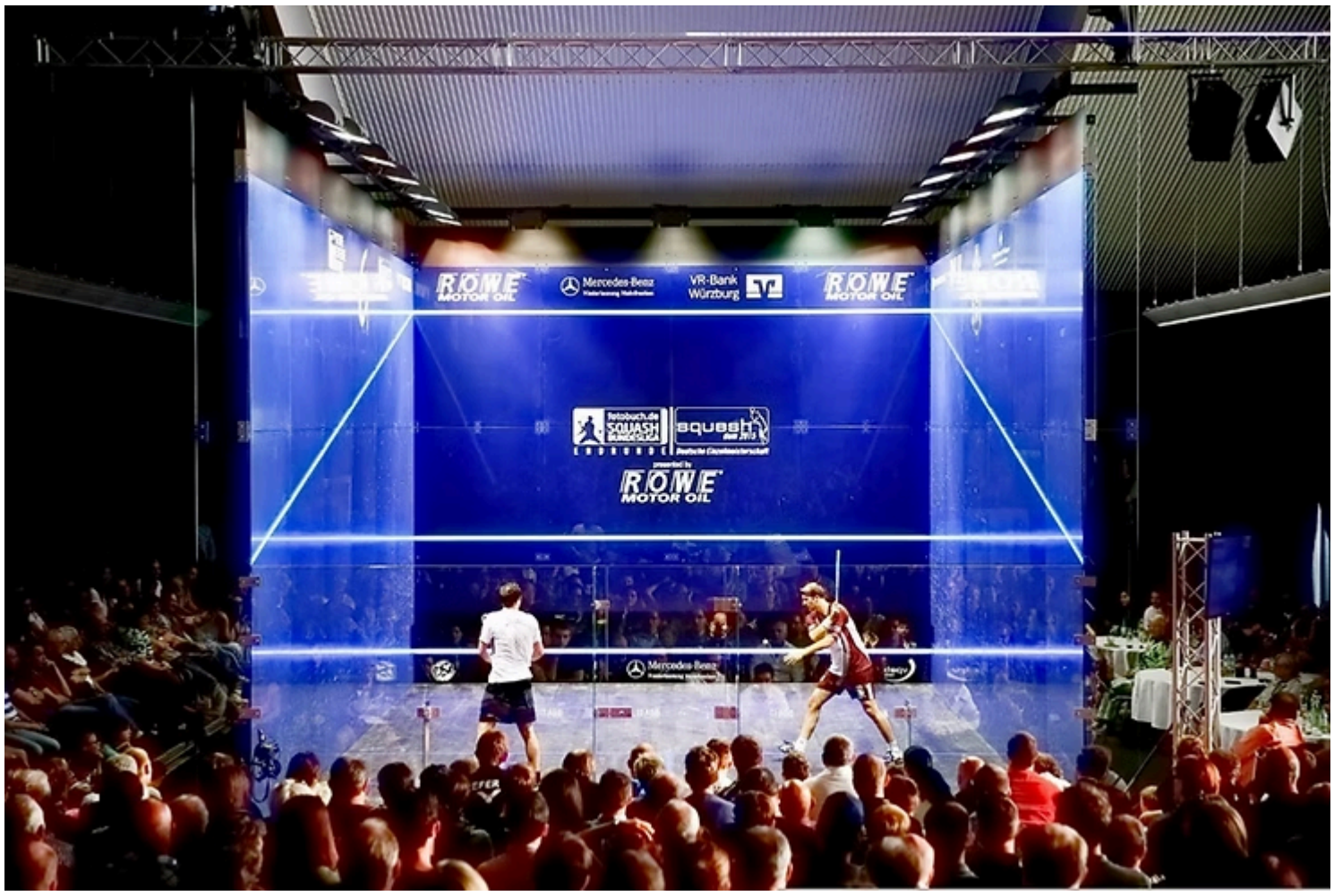
In the sport of squash, where lighting dynamics play a critical role, this technology takes center stage. It is essential to note that Show Glass Courts lacking the ceramic dot coating fail to meet the specifications outlined by the World Squash Federation, rendering them unsuitable for competitive squash matches.

To achieve the one-way vision effect in Show Glass Courts, ceramic dots in various colors are meticulously burned onto the playing side of the glass walls. Typically, these dots come in standard dark blue or white on the player's side. The side adorned with these colored dots faces the inside of the court, while the black dot side is oriented towards the spectators.

Mastering the Lighting Environment for Show Glass Courts:

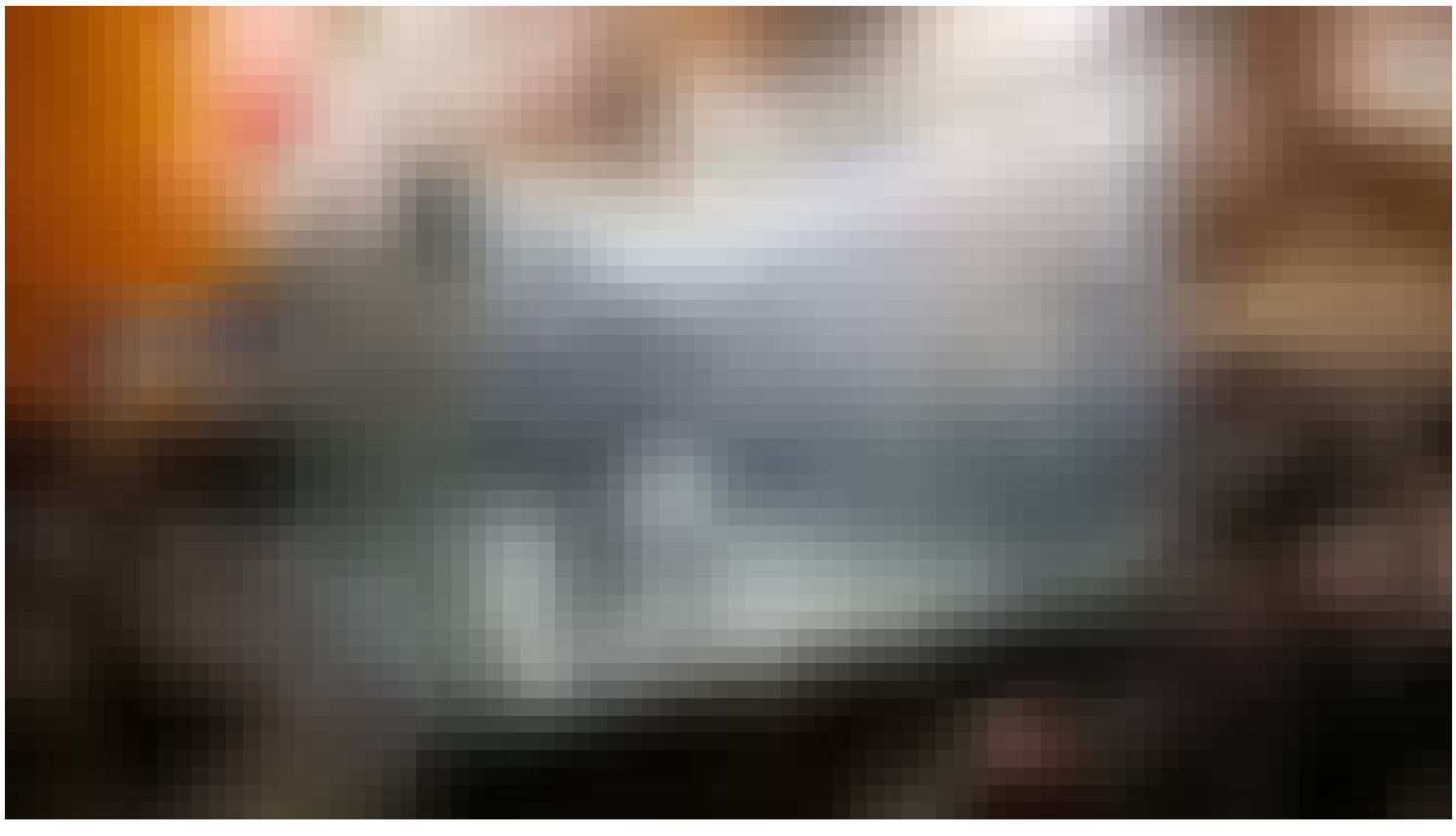
When it comes to Show Glass Courts, creating the optimal lighting environment is of paramount importance. Lighting plays an instrumental role in maximizing the impact of Contra Vision technology within squash courts. The one-way vision dots exhibit their full potential when there is significantly less light on the outside (the side with black dots) compared to the inside (the side with colored dots).

Consider the following example of a court in favorable lighting conditions:



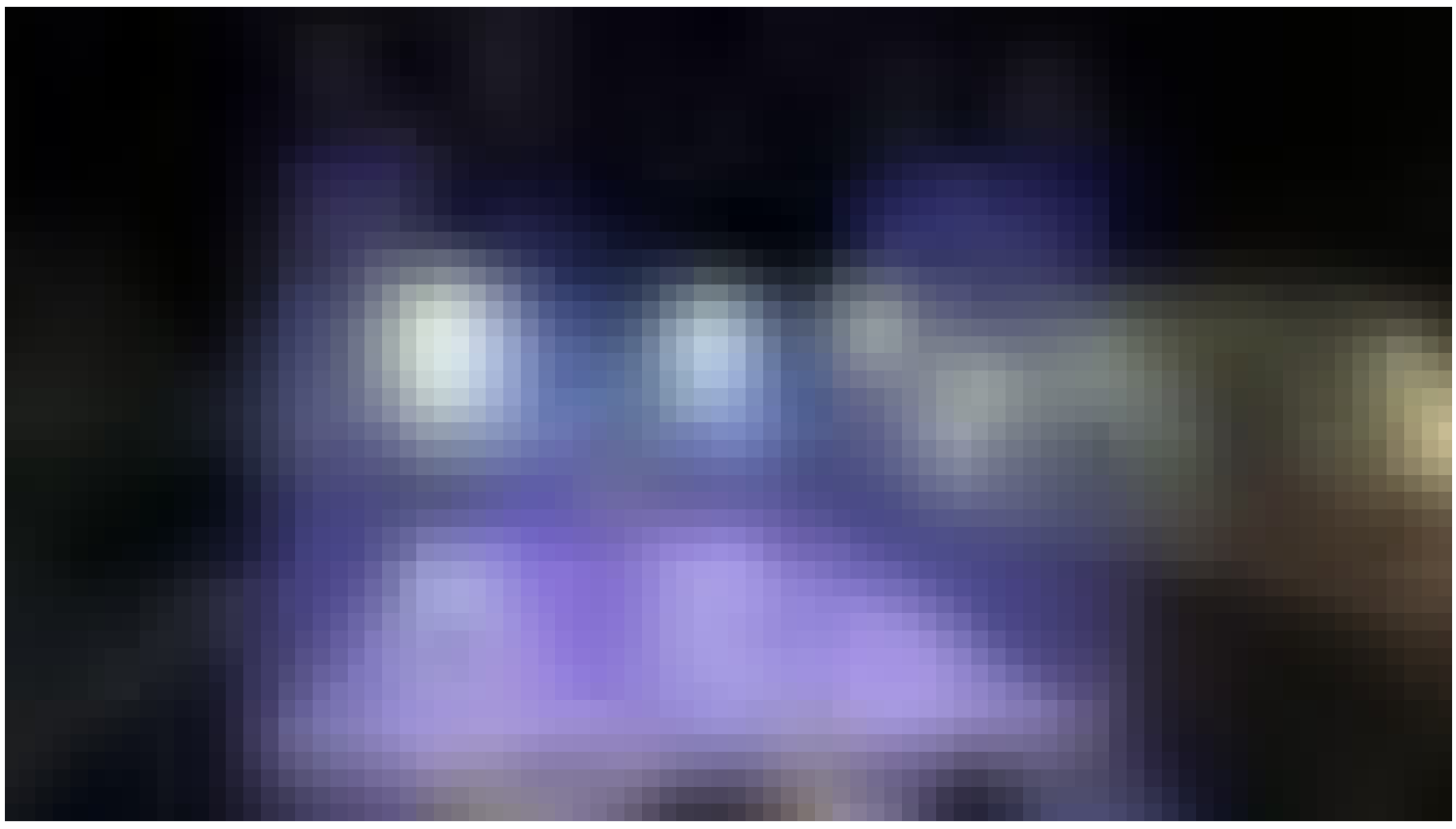
During daylight or when external lighting is excessively bright, there exists a risk of 'burn-through.' This phenomenon occurs when the impact of the dots may be diminished or even negated by the overwhelming external illumination.

Now, let's explore an example of a court in suboptimal lighting conditions:

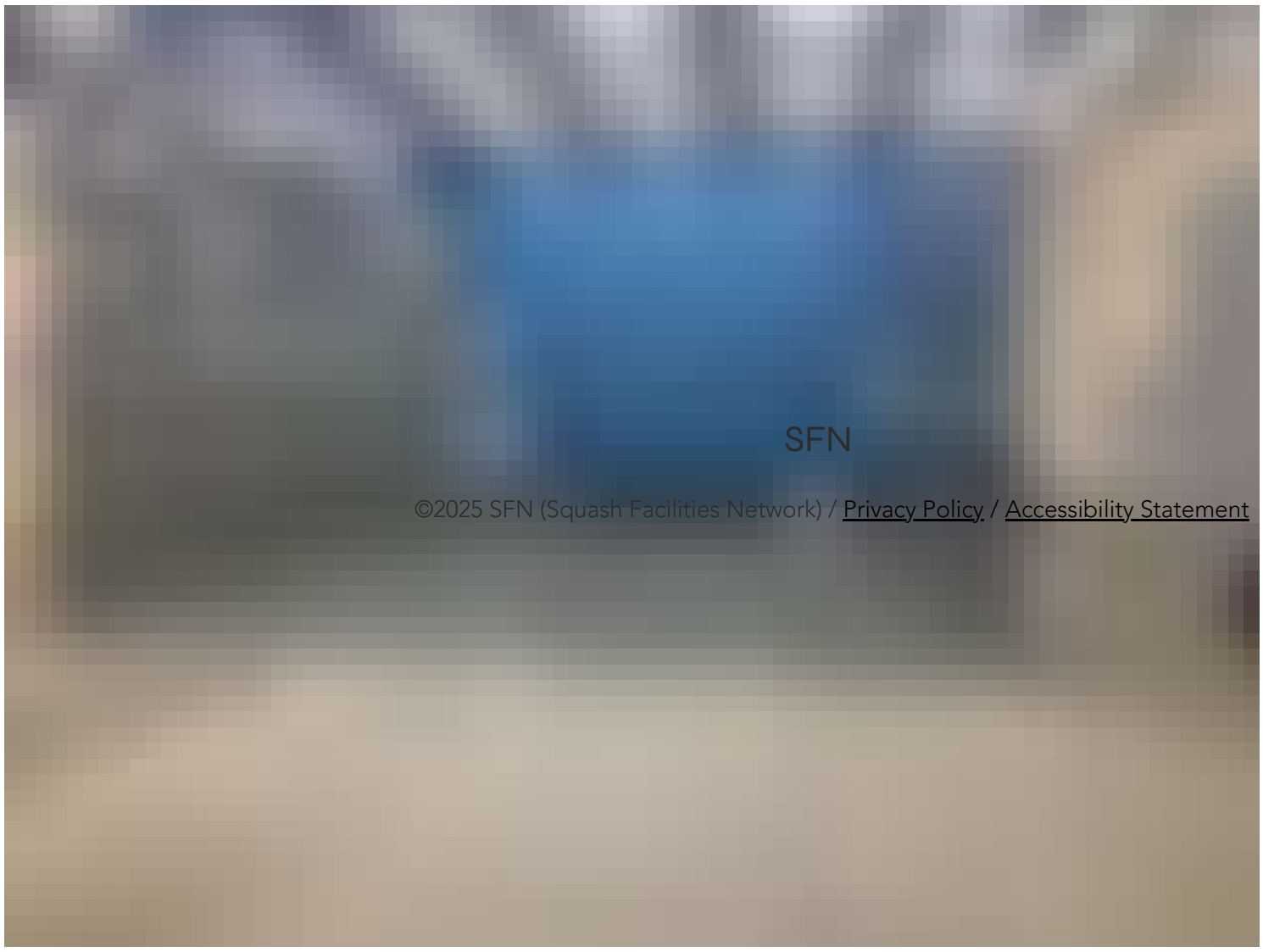


In light of these factors, meticulous attention to lighting is imperative, particularly during the installation of a Show Glass Court. Factors such as the presence of reflective glass surfaces on adjacent squash courts can significantly affect the playability of the court and should be taken into account.

Here are a few further scenarios to avoid that can lead to limited playability for the players.
Example for a fixed installation of a Show Court with windows positioned around the court.



Allowing the lighting outside the court to be as bright as the lighting inside, resulting in the blue walls appearing milky and reducing the one-way vision effect.



In summary, the lighting environment emerges as a pivotal factor in the architectural planning and placement of a glass court. Even a superior court can be compromised if not situated in an appropriate lighting environment, potentially causing distractions for players. The confluence of Contra Vision technology and optimal lighting holds the key to unlocking the full potential of these innovative courts, enhancing the player experience and captivating audiences worldwide.