

07 The diving

The new modular aquatic center in Seine Saint-Denis is located near the Stade de France. Its innovative architecture features a wooden framework covered with half a hectare of photovoltaic panels, ensuring the facility's energy self-sufficiency. Inside, there are two 50-metre pools and, on the diving board side, a variety of heights and diving platforms: two one-meter springboards, two three-meter springboards and a concrete tower staggered at three meters, five meters, seven and a half meters and ten meters for high-flying dives.

These events originated with Swedish, German and English aerial gymnasts who, as early as the eighteenth century, preferred to train by landing in the water rather than on the ground.

To assess the acrobatic figures in the dives, the seven members of the jury use a list of figures drawn up by each athlete. They then judge elegance and aesthetics, weighted by the difficulty of the sequences and the precision of the execution of each phase of the dive. Approach, flight, technique, grace and entry into the water.

Three of the most spectacular postures are shown in the image.

At bottom left, the profile of the diving platform is marked by a horizontal line, reinforced at the bottom. We are at the end of the diving board on which the approach and take-off phases have just been completed.

Above, the diver is taking off for her first corkscrew spin. She has used all her trigger force to rise into the air. The feet are grouped together, the toes pointed, the legs stretched, the upper body begins to rotate while the arms perform an asymmetrical movement, encouraging a gyroscopic deviation of the body launched by the initial impulse.

The central image shows the same diver, still in flight, a few fractions of a second later. She is performing a closed carp somersault. It's a roll in the air, shown in profile. The body is bent at the hips, the legs together are held straight, the feet remain pointed, the knees are held together against the chest, enclosed by the arms. The body is rotating, and the diver will stop this rotation to adopt a vertical trajectory, perpendicular to the surface of the water.

On the far right of the image, her body, almost in profile, is shown in the position in which she enters the water, represented in the lower right by wavy lines. Note the position of the hands, clasped together to limit the impact of the head on the water's surface. The tension and alignment of the body are palpable, the toes still pointed, the feet together, the legs together, the body straight, the arms framing the head well positioned in line with the nape.

The speed of contact with the water exceeds 50 kilometers per hour. The fall is linked to the Earth's gravity, so is independent of the size or mass of the athletes. If the position is right, very small splashes are produced during this final phase of water penetration.

In the high-flying diving event, starting from the ten-meter platform, each participant performs five groups of figures, with the women doing five dives and the men six for each group.

Synchronized diving events are characterized by the simultaneous jumps of two divers performing coordinated figures...