- ENTRY/EXIT DIRECT CONNECTION. Thanks to an innovative, patented design, the MILLENNIUM Reel does not use rotating rings with brush rub or mercury contacts. Therefore, all the problems associated with the rotary contacts have been eliminated, including faulty contact during rotation as well as maintenance and replacement of the contacts.
- **GREATER EFFICIENCY**. The <u>3 springs</u> used for rewinding the cable double as wires for the three electric signals. This provides for greater efficiency since there are no contacts.
- ULTRA FLAT. The reel's thickness is just 4.8cm, slightly more than the piste's height.
- FEWER WINDING TURNS. The diameter of the <u>cable coil</u> is 31cm. Therefore the reel can wind the 20-meter <u>cable</u> in just 20 turns. By contrast, currently available reels require 40 to 50 turns.
- LONGER LASTING SPRINGS. Springs last longer for three reasons:
- 1. The spring work is greatly reduced thanks to fewer turns of the cable coil.
- 2. The central pin where the springs turn is large in diameter (3.6cm) and thus reduces the stress of the spring on this fragile location.
- 3. 3 springs are used, working in concert to reduce stress on any one spring.
- HIGH QUALITY SPRINGS. The springs are made from a special top-quality steel strip.
- LONGER LASTING CABLE. The large diameter of the <u>cable coil</u> not only enlarges the cable camber, but also reduces the number of its bending. Therefore the cable has a longer lasting (both for the external boot and 3 internal wires).
- STRONG STAINLESS STEEL CASE. The case is sturdy and easy to clean. In addition, thanks to its flat, square shape, it is easy to carry and store.
- ADVERTINSING SPACE. The top of the reel has flat surface area of 33cm x 33cm, allowing for advertising space.
- STEADINESS ON THE FLOOR. Thanks to its solid 4.8kg weight and its four "<u>rubber feet</u>", the reel is extremely steady - pulls on the cable during matches can hardly move the reel.
- CABLE PROTECTION DAMPING SPRING. The cable next to the fencer's end socket usually requires many repairs over time. To reduce this problem, <u>a 10cm spring</u> was placed at this location to not only
- 1. minimize bending of the cable at the socket exit,
- 2. but also dampen the stress on the cable when the socket reaches the reel after the fencer's release.
- INNOVATIVE BRAKING SYSTEM. The reel's design moderates the speed of winding when the cable is released from longer distances. The <u>braking mechanism</u> exploits centrifugal force and activates only when the reel exceeds a certain rotary speed. Strong or "bad" pulls received by the cable at the end of the run are therefore avoided.