

TEST ZONE

Sachtler flowtech® 75 aktiv® 8

Exceeding expectations

Test performed by Luis Pavía

How is it possible that we have not realized before everything that could still be improved on such a necessary piece of equipment and with so many decades of experimentation and use since it has been around?





Now that they're within our reach, it's amazing how many years we have done without this array of innovations that developers have been able to collect and include in something as seemingly simple as a tripod. A tool that we have been using in image creation for more than a century for the still photos, but whose innovations in recent decades seem to have focused mostly on materials, mainly seeking to lighten weight while maintaining load capacity and rigidity.

The range of flowtech® tripods consists of two variants, both of the same size and between which the only difference is the size of the ball for the head. The 75 and 100 models offer 75 and 100 mm ball slots, respectively. Bearing loads of up to 20 and 30 kilos, they can be supplemented by different spreader models at medium or ground level, as well as by rubber feet in order to facilitate adaptation to our various needs.

As for the aktiv® ball joints, there are five variants: models 6 and 8 with a 75 ball, for loads between 0 and 8 kilos in the former, and from 0 to 12 kilos in the latter. And models 10, 12 and 14 with a ball of 100 for load ranges from 0 to 12 kilos, from 0 to 14 kilos and from 0 to 16 kilos respectively. Only for models 8 and 10 we have two alternative variants for the quick plate fixing system.

Both tripods and ball joints share the same set of design innovations, making them especially fast and versatile for a wide range of applications. For our laboratory we have had a complete team comprising the aktiv® 8 ball joint on a flowtech® 75 tripod with mid-level spreader, handle, rubber feet and

transport bag. A sufficiently significant configuration, since the differences with any other combination basically lie in the load borne, weight of the assembly without major differences, in very few centimeters of maximum height as a consequence of the small differences in size in the different ball joints, and in the elevation provided by the spreader selected.

As for the weight of the assembly, it should be noted that, thanks to the tripod's carbon-fiber build, it is very light compared to other models with comparable load capacity and robustness. The tripod configuration with spreader at mid-level -the one we tested- weighs only 3.5 kilos and the ball joint 2.7 kilos. And the differences in weight of other sets are due to the different configurations for ball joints, spreaders, and rubber feet. Always in small margins.

Starting with their own foundations, i.e., the tripod's leg structure, two distinctive features are noticeable at

first glance: they are not built from tubes, but from a specifically designed pseudo-trapezoidal profile, and with only three release levers to control the interlocking of the three sections simultaneously, but independently for each leg. While retaining the traditional concept, in which each section houses the next one inside, the ease of extending, collecting and adjusting the entire length of the three sections with a single leg motion is extremely comfortable and fast.

Comfort that is increased thanks to the large size of the drive lever and its location, at the top of the larger section, which is close to the ball joint. This means that it will always be in an accessible place and therefore we will never have to bend down to activate it. Handling is simple even with gloves, thanks to its handle shape and the aforementioned size.

More about the legs, we have only begun; their closed structure makes them very resistant to dust and dirt, but they are





not sealed, so that if at any time gets in, either by immersion or any other circumstance, it would pour out thanks to the holes provided to that purpose. Size and shape also make carrying the tripod to the shoulder significantly more comfortable, since we do not have one or two 'tubes' sticking in, but a much larger support surface that allows sharing the load and relieving tension.

As for their positions, even without a spreader they are articulated and interlocked at five predetermined fixed angles. From 0° when they are closed perfectly parallel, up to 90° to allow a really minimum height. We will discuss in more detail such minimum height later when reviewing the ball joint. The fact they stay perfectly parallel when closed, facilitates spreading up and folding in, thus speeding up this operation. This piece of equipment comes with magnets at the bottom of the largest section that simply keep the legs closed without the need for additional devices or actions, preventing them



from opening at the least convenient times.

The intermediate positions are at 20°, 42° and 76° over the vertical, and the interlocking and release system at these positions is individually controlled for each of them with a release mechanism at the top. Design and interlocking shape make accidental actuation virtually impossible. In order release the lock in each position and be able to open to the next -more open- angle, it is essential first to close the leg slightly, or the lock will remain firmly fixed. To go to a more closed position however, each time one of the presets is reached, it will be automatically secured. In addition, the release mechanism is at the leg structure's surface level and protected by the handle that controls the extension.

This combination of control systems for extension and angle of each leg provides great ease and speed of use, but always maintaining extraordinary levels of safety.

We still have something to say about the base of the tripod. At the bottom, dual-nail tips for grip on slippery terrain follow a similar design as all other of Sachtler's tripods, just as the attachment of accessories, such as dollies or rubber feet. They maintain the same system for attachment based on an elastic tensioner. The shape of the rubber feet specific for this model makes it easy to have it placed on a flat position or collected with the tripod closed.

And on the top, in the core of every tripod, the piece that houses the cup and where the legs are joined, still has interesting details, such as the three threads for fixing accessories. The first is a small, but sturdy piece with a rigid loop, useful for attaching the carrying strap or hanging a bag. And the second one is a handle, which we also had the opportunity to evaluate in our laboratory. It serves to facilitate transport and is balanced so that the assembly -ball-joint included- is comfortable to handle. But even in

a simple handle, taking care of details is possible, such as the fact that it can be rotated without tools so that it does not get in the way when lowering the tripod to ground level without having to disassemble the handle.

To finish with the foundations, there are three spreader modes. One at ground level, suitable for working on smooth surfaces, integrates the non-slip rubber feet and is fixed to the dual-nail tips by the same system as the non-slip rubber feet. The other two are at medium level, and can be differentiated by the tripod variant for which they are conceived: the 75 and the 100. Although fast, tool-free anchoring is common in the housing provided at the end of the larger section of each leg, the one provided for the model 100 has in its center piece a control device to limit its opening angle and, consequently, that of the entire leg structure.

Of course, each section of every spreader is individually extensible in

order to stabilize the tripod on any kind of surface and at any angle. But it should be noted that all the manoeuvres of all the elements are designed so that they can be carried out in a very fast, comfortable and safe manner. In this way it is not only easy to transport the tripod, but the time needed to have it available and with total reliability is down to very few seconds in nearly any situation, making it ideal for situations such as reports, documentaries, nature, sport, and so many others in which speed of operation marks a differential point in end the result.

At this point, let's see what the ball joint contributes most and to what extent it contributes to efficiency by complementing this high level of innovation that we are discovering, allowing us to leave for the end what seems to us one of the most important innovations in this field: the rapid system of levelling and anchoring to the tripod.

As a fluid ball joint, its qualities meet the highest standards both as regards

of materials and in finishes. Except for the lighter aktiv® 6, the rest of the range shares the same technical and functional features, being the only differences load capacity and ball size. For example, our lab's aktiv® 8 model shares the same load capacity of 0-12 kilos with the upper model, the aktiv® 10, which differs only in ball size -75mm or 100mm-. And both are the only ones in which quick plate type can be selected between two alternatives: the so-called Touch&Go, which allows a longitudinal displacement of 60 mm for load balancing, is mounted forward or backward, and is identified with a "T" after the model number (8T or 10T). Or, alternatively, the Sideload type, which allows up to 120 mm of displacement and facilitates mounting or dismounting the plate only with a lateral inclination of the chamber once the locks are released.

The vertical tilt angle is +90° to -70° with 15 counterweight adjustment positions plus a free one. As for friction adjustment, both vertically and horizontally





we find 7 graduations plus a free one. It is a wide enough range so as to allow use even with light loads, thus adding even more versatility of use. It also frees us from the need of having duplicate equipment on frequent occasions when systems capable of handling heavy loads are unsuitable for lighter loads.

Here some innovative features are worth noting. For example, the ball joint has an LED lighting system that allows telling all scales with ease, in addition to the level. With a short press it lights up the level gauge, and with a long one also the friction adjustment indices. It is powered by a small button battery, thus ensuring long life for this function. The level gauge itself incorporates another interesting novelty, and that is that it is not necessary to look at it vertically from above, but it is also visible from its own horizontal plane. This makes it possible to level out the ball joint even if it is placed above our heads.

And at this very moment of leveling the ball-joint we

enjoy all the magic. In most systems it is necessary to loosen a screw under the tripod head, level the ball joint, and screw it back in place, with a certain risk of unevenness involved. One of the great innovations of the aktiv® system is that by means of a single central cam on the front of the ball joint, the latter is released enough as to be levelled. The position and size of the cam also make it easy to have it used as a handle to help with this leveling task.

But if we go one step further and raise the cam to a second position, the ball joint is completely freed from the tripod, and can be moved to any other aktiv® support where it is possible to level and fix it again in a few seconds. This system also makes it easier to avoid the need to act under the head of the tripod or to place there any item that may impact its minimum height. This is the main reason why, by spreading the tripod's legs at 90°, we can achieve a minimum height of 23 cm for the quick plate from the floor. That is, very little more than the height of ball joint itself.

In a few quick measurements made to our test set, we have in our hands a tripod that while weighing only 6,3 kilos, supports loads of up to 12 kilos. Closed and with ball joint mounted does not reach 86 cm and, in a matter of a few seconds, it is ready to work at any height that can be adjusted uninterruptedly between 23 and 170 cm. We did not time this, but we have managed to have the tripod fixed at any height and with the ball joint level in much less than 10 seconds, without having the spreader mounted. These are only approximate measures, but they give us an idea of both versatility and potential of this set.

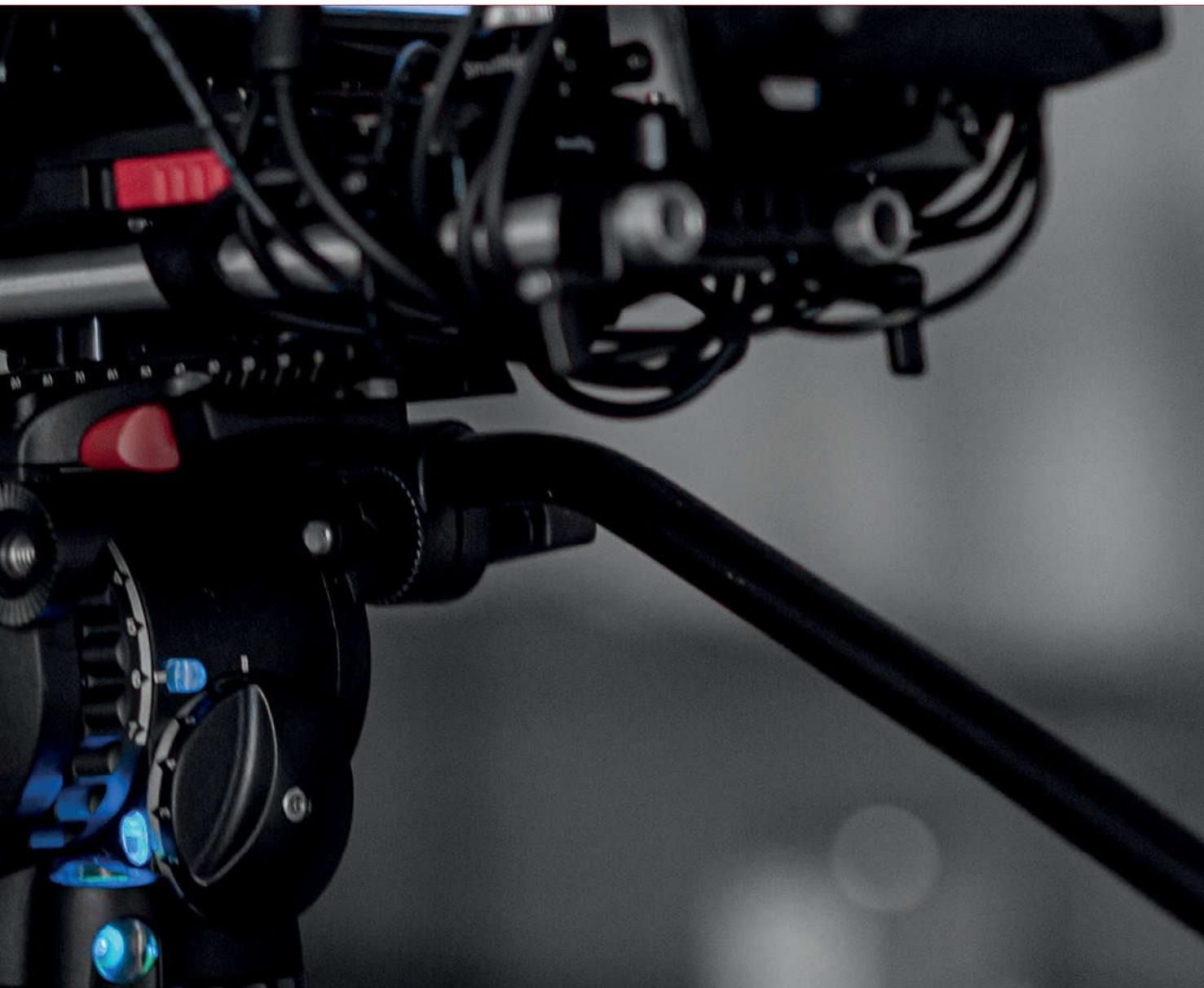
Potential that multiplies when we think about the ease of moving the ball joint between different supports and having it level again in a few seconds. To provide a cup support needed on another holder such as a slider, two other additional Speedswap® items are available: the adapter to mount the ball joint on the slider's plate and another



adapter to mount the slider on the tripod. These same adapters are useful to be able to use this fast fixing and levelling system on other supports that are not directly compatible.

After a few days of use, returning to traditional systems has been hard for us. Carrying the tripod over your shoulder and not having the tubes pressing is very appreciated. Keeping

the legs closed with a few simple magnets is very handy. The fact that it is possible to mount it in any position, strange as it may seem, is something that other tripods can also do, although few reach all the degrees of freedom allowed by this aktiv® flowtech®. And of course, we do not know any other that can compare in the times needed either to be placed



in the chosen position, or much less to have the ball joint leveled.

There is no doubt that, on this occasion, progress has been far beyond materials and that a truly outstanding product has been achieved. Reliability and safety are basic elements for any equipment that has to operate in the broadcast environment, but in all those situations in which speed of operation and

response provide added value, this set of tripod and ball joint deserves a prominent place.

Before I finish, an important thing. The flowtech 75 tripods were launched before the new aktiv® ball joints. To ensure compatibility, check that the tripod is one of the flowtech 75 aktiv® range. If not, there is no problem, since if purchasing any of the aktiv® 6, aktiv® 8 and

aktiv® 8T ball joints (all three featuring 75mm ball) you get the free upgrade in an official Sachtler service to the new version. This update does not entail the replacement of the tripod, but in the replacement of a piece on the cup's contour. All information for this update can be found at: <https://www.sachtler.com/en/product-support/aktiv-compatibility/how-to-upgrade/>. ♦



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