The automation of radio frequency (RF) tests is a requirement that is almost as old as testing itself. Automation saves time and money while making the measurement process more reliable through an automated movement process. Thanks to the SPINNER EasyDock this wish can now become true. Automated testing requires a precise positioning of test and measurement devices. Up to now, conventional push-pull mechanisms were designed for the measurement adapter to be manually fed into the test device, which means that they are not suitable for automated mating processes. A certain amount of misalignment/offset cannot be avoided and the measurement adapter has to reliably compensate for this.

SPINNER’s EasyDock supports automated quality tests and measurements of RF products so that they can be carried out faster and costs reduced – without sacrificing measurement quality or precision.

The SPINNER EasyDock is a spring-mounted measurement adapter which tolerates misalignment/offset in all planes and directions. The conical intake ensures that the adapter and the test item slide together reliably even if they are not centered or aligned. Moreover, they do not have to meet each other at a right angle since the adapter can also compensate for any tilt. The precision of the measurement process is totally unaffected by mechanical tolerances. This opens up a new area in test automation by saving time and money.

SPINNER EasyDock in motion!
In test environments with moving settings, measurement cables are quite often a weak point and quite quickly suffer from abrasion. This leads to maintenance breaks and recurring investment costs for new measurement cables. That is why SPINNER has developed its Articulated Lines to replace traditional measurement cables between a vector network analyzer and the test device. In contrast to conventional cables they have an excellent phase and amplitude stability, even in motion. Furthermore, they are not affected by temperature drift and also work at very high signal frequencies.

The use of several joints between rigid line sections allows the end of the line to be easily moved to all points within a sphere of approx. 0.5 m in radius without restrictions such as torsion or the limited bending radius of a cable. The choice of materials ensures high reliability and a long life time for Articulated Lines.

1 + 1 = 3...

...SPINNER EasyDock + SPINNER Articulated Lines =

1. Automated testing
2. Robust equipment
3. Cost savings and increased reliability

Combining SPINNER’s EasyDock and SPINNER’s Articulated Lines brings together the best of two worlds and supports the entire test environment when it is moved around to connect to the test device. The applications are quality tests and robot controlled measurements, the advantages self-evident: less manual effort and greater cost savings by turning traditional measurement methods into automated test and measurement environments.
The SPINNER EasyDock adapter is available with a N, 4.1-9.5, 4.3-10 or 7-16 connector as test interface for flange mounting and bulk head installation, and is equipped with a N or 3.5 mm connector on the rear.

The SPINNER Articulated Lines are available in the connector types 3.5 mm and N.