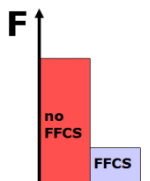
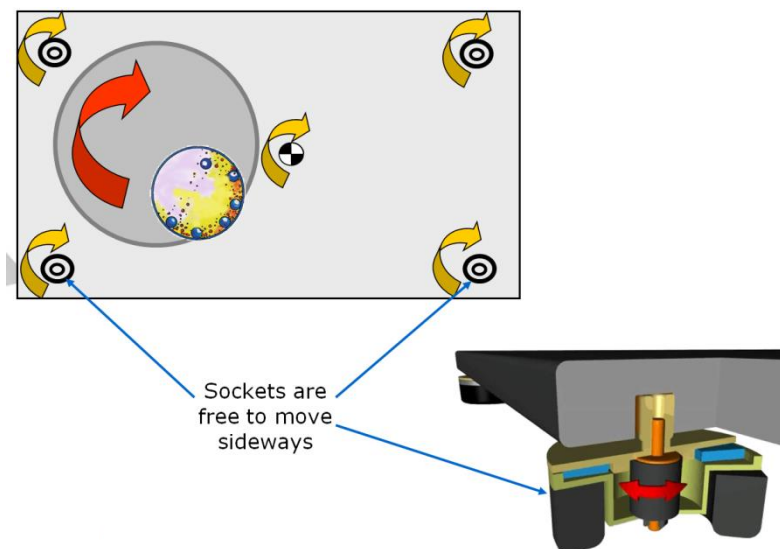


Controlled forces in single-station Planetary Ball Mills

Planetary mills with a single grinding station require a counterweight for balancing purposes. In the Ball Mill PM 100 this counterweight can be adjusted on an inclined guide rail. In this way the different heights of the centers of gravity of differently-sized grinding jars can be compensated to avoid disturbing oscillations of the machine.

Any remaining vibrations are compensated by feet with some free movement (**Free-Force Compensation Sockets**). This innovative **FFCS technology** is based on the d'Alembert principle and allows very small circular movements (within an amplitude of 1.5 mm) of the machine housing that result in an automatic mass compensation. The laboratory bench is only subjected to minimal frictional forces generated in the feet. Thus, a safe and smooth operation is possible even with high speeds and grinding jar masses.

In this way the PM 100 ensures a quiet and safe operation with maximum compensation of vibrations even with the largest pulverization forces inside the grinding jars and therefore can be left on the bench unsupervised.



The bar graph shows that the forces that act on the table are much bigger without free-force compensation socket