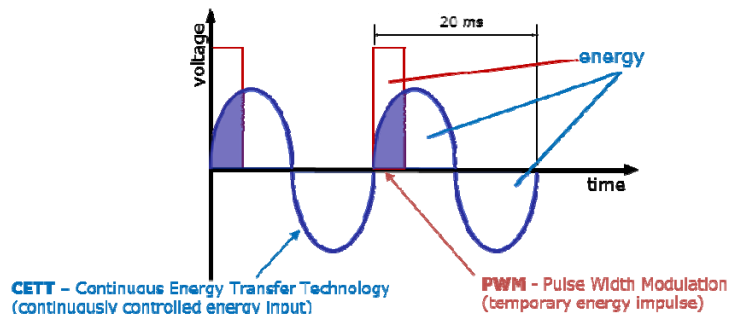


Technical Superiority thanks to CET Technology

RETSCH has patented the **Continuous Energy Transfer Technology** (CET Technology) on which the drive of the AS 450 control is based. The CET technology provides a **substantially higher energy input** than the technology used in conventional sieve shakers. The AS 450 control **achieves the highest amplitude even with maximum load** which ensures optimum separation efficiency and high reproducibility.



The electromagnetic drive which lets the sieve stack vibrate **continuously** transfers its energy in a **controlled** way to the sieve plate, following the harmonic sinusoidal oscillation of alternating current.

Conventional electromagnetic drives of analytical sieve shakers use the pulse width modulation technology (PMW). Here, the energy is transferred to the sieve plate by short rectangular impulses. As a result, the energy input is lower and the optimum amplitude cannot be maintained during the complete sieving process. Consequently, neither the separation efficiency nor the reproducibility are very good.

The two modes of drive can be compared with a mill wheel which either operates with only one float (PMW technology – less energy, discontinuous input) or many floats to produce energy (RETSCH CET technology – more energy, continuous input).

Another mode of drive can be found in the sieve shakers with imbalance drives. In contrast to the AS 450 control, the amplitude of this type of sieve shakers cannot be controlled. As a consequence, the energy which is transferred to the sieve plate varies strongly so that the sieving results are not reproducible.

Due to the controlled amplitude, the CET technology of the **AS 450 control** guarantees the **highest separation efficiency** and thus offers **superior reproducibility**. Consequently, **manual re-sieving is no longer necessary**.

