

## Press Release

### FRITSCH *premium line* – the first planetary ball mill with sunken grinding bowls.

Discover with the new FRITSCH *premium line* high performance planetary mill, a completely new dimension of high tech grinding: For the first time you will see a planetary mill with sunken grinding bowls.

#### Why did FRITSCH sink the grinding bowls?

Characteristic features of conventional planetary ball mills are grinding bowls clamped onto the solar disk of the mill. This limits the maximum rotational speed, because from a certain borderline rotational speed the centrifugal powers asserted on the bowl, are so high, that the fasteners may not be able to hold the bowl. Resulting in damaged mills and bowls.

On the other hand, the grinding of materials into the nano ranges require – an increasingly demanded task – much higher applications of energy and therefore higher rotational speeds as previous planetary ball mills allowed.

The sinking of the grinding bowl into the solar disc of this mill solves this problem! Now the center of gravity of the bowls is on the level of the solar disc. The appearing centrifugal powers produce considerably lower moments of tilt, which in turn allow clearly higher rotational speeds of the mill. So with the new FRITSCH *premium line* an up to 150% higher application of energy is possible. The grinding time into the nano range is hereby considerably reduced. For certain materials this increased application of energy makes the production of nano particles with planetary ball mills possible.

An additional decisive advantage of the sinking of the bowls into the solar disk is the new tensioning unit for grinding bowls **SelfLOCK**. The accidental dismantling of the bowl during grinding is impossible. Additionally, the user cannot operate it incorrectly. This new safety concept fulfills the risen demands of customers.

#### FRITSCH therefore sets new standards in the area of comminution!

The new FRITSCH planetary mill premium line was awarded on the occasion of the Hannover fair with the Innovation Award Industry in the nano technology category. Among 300 participants FRITSCH GmbH – Manufacturers of Laboratory Instruments secured this award.

#### Test it yourself:

We could probably tell you a lot – convince yourself! Experience the FRITSCH *premium line* in action, call us or simply register at: [www.fritsch.de](http://www.fritsch.de). We will stop by for a sample analysis. Or mail us a sample now for a test analysis and compare for yourself!



29 Lines  
Voucher copy is requested

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