

THE SPLIT OSCILLATION DRUM FROM HAMM

The benefits at a glance

- 1 HAMM oscillation - the benefit of experience
- 2 Maintenance-free oscillation
- 3 Low noise emissions
- 4 Perfect synchronisation of the drum halves for top quality surfaces without cracks
- 5 Significant reduction of shear stresses in the asphalt layer
- 6 No limitations in respect of the efficiency and cost-effectiveness of the compaction

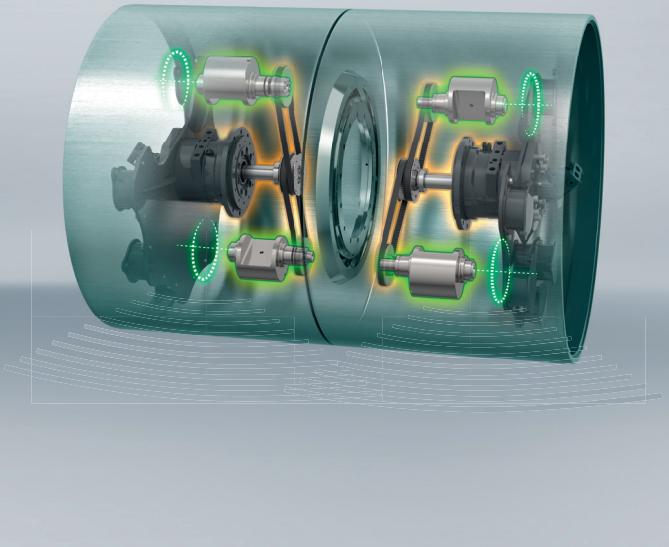


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THE SPLIT OSCILLATION DRUM FROM HAMM

High-quality,
cost-effective compaction

Customer voices:

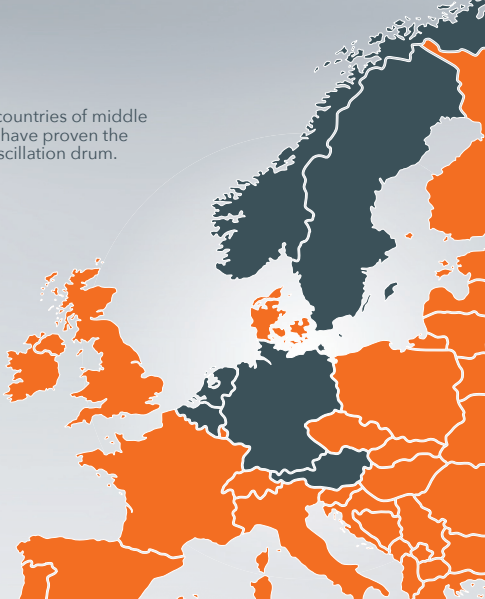
Field tests with over 50 construction companies in central and northern Europe under extremely varied boundary conditions and with diverse technical requirements have shown: the split oscillation drum ensures high-quality, cost-effective compaction.

"There is a very low noise level inside the cabin during compaction with oscillation. When driving as well as when compacting, i have hardly felt any vibrations."
(Daniel Tangen, Veidekke Industri AS, Norwegen)

"We have used the DV+ 90i VS-OS for the compaction on a roundabout with tight radius which connects the highway A7 to the industrial park of Dorfmark. The use of the split oscillation drum enabled top quality surfaces without cracks."
(Ferdinand Kalinowsky, Ewald Kalinowsky GmbH & Co. KG, Germany)

"Just like compacting with the non-split oscillation drum from HAMM, we were able to achieve outstanding compaction results in a short period of time. The drum showed its benefits especially in the compaction of curves."
(Arnold Rijper, BAM Infra, Netherlands)

Field tests in several countries of middle and northern europe have proven the benefits of the split oscillation drum.



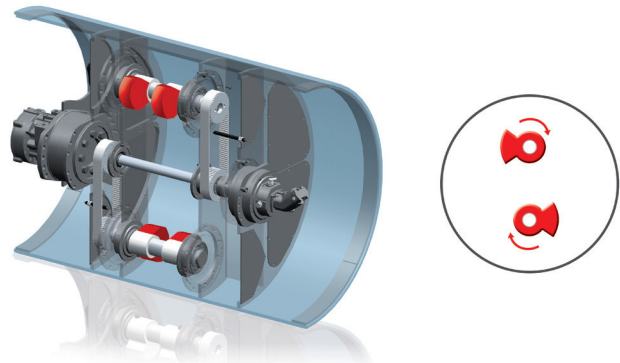
Compaction with oscillation: tried and tested over many decades

Over 35 years ago, HAMM became the first roller manufacturer to offer a drum with oscillation. Today, this technology is an integral part of HAMM's product range and is being continuously developed.

Now, HAMM has taken the globally established technology to a higher level with the development of a split oscillation drum. To achieve this, customer requirements have been collected carefully and analysed.

The result is a patented premium solution for challenging compaction tasks.

Easy to operate.
Convincing in its effectiveness.



The oscillation principle (demonstrated here on the non-split drum) – successful for over 35 years.

The oscillation principle:

Oscillation involves two unbalance shafts rotating synchronously. Here, the unbalances are offset by 180°.

This causes the drum to carry out a rapidly alternating forward/backward rotary movement, as a result of which the compaction energy is directed into the substrate tangentially to the front and rear in the form of shear forces.

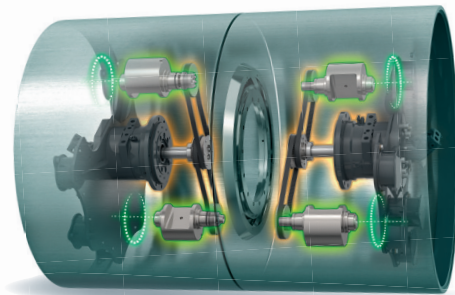
Higher quality thanks to split drums

In curves and on roundabouts as well as with every sharp steering movement such as when changing compaction lanes, there is a risk of material displacement and cracking if non-split drums are used for compaction.

This is because the part of the drum on the inside of the curve always moves a shorter distance than the part of the drum on the outside of the curve. This can be avoided with a split drum because the two halves rotate at different speeds in curves.

Thanks to their two-part construction, split drums prevent material displacement and cracks in the surface because they minimise the shear stresses in the asphalt being compacted.

They also show off their advantages in the compaction of displacement-prone asphalt types such as stone mastic asphalts or polymer-modified mixes.



In HAMM's split oscillation drum, there are two complete, mechanically independent oscillation units.

Double oscillation – top-class asphalt compaction

HAMM has now combined this added value with the advantages of oscillation compaction and launched a split drum with oscillation onto the market. Each drum half contains a separate, mechanically independent oscillation unit.

An integrated control mechanism adapts the position of the unbalance weights quickly and precisely to the position of the two drum halves. The synchronisation of the two halves is governed by an innovative digital hydraulic system. It ensures that both drum halves vibrate synchronously at all times, despite their different rotational speeds in turns.

And this exactly is the crucial factor for high-quality compaction.

HAMM OSCILLATION: intelligent compaction

1 HAMM oscillation – the benefit of experience

- HAMM has more than 35 years of experience with oscillation. More than any other manufacturer in the world.
- HAMM employs tried and tested compaction technology in the split oscillation drum.

Your benefit:

When comparing the split oscillation drum with a non-split oscillation drum, there are no differences in the way they are used. This means that the operator has no need to become familiar with or to retrain on a new system. This means: better compaction without the need for retraining.

DV+ 70i VS-OS



DV+ 90i VS-OS



Split oscillation drums are available in the DV+ series models. The corresponding models are identifiable from the "VS-OS" abbreviation in the designation.

2 Maintenance-free oscillation

- All HAMM non-split and split oscillation drums are maintenance-free.
- The drum shells are made out of wear-resistant steel.
- Temperature-resistant special belts are used in the oscillation drum.

Your benefit:

Complex maintenance work is eliminated, resulting in a drastic reduction in operating costs. Permanent availability of machines in day-to-day operations is ensured.

3 Low noise emissions

- Reduction in noise emissions due to the components used.

Your benefit:

The latest HAMM oscillation drums operate even more quietly than before and also offer improved steering characteristics. The result: more comfort for operators and active environmental protection thanks to lower noise emission.

Split oscillation drums for premium quality

4 Perfect synchronisation

- An innovative digital hydraulic system means that synchronisation of the two drum halves takes place quickly and precisely – even if there are differences in the rotational speed.

Your benefit:

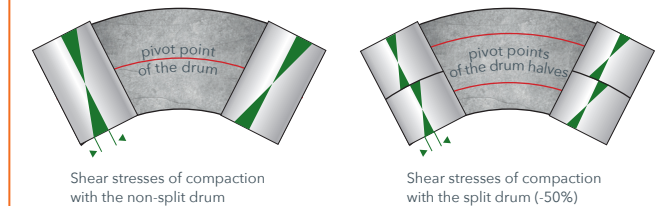
Top quality surfaces are produced. Surface cracks become a thing of the past.

5 Significant reduction of shear stresses in the asphalt layer

- The split drum ensures very low shear stresses in the asphalt during compaction.

Your benefit:

The reduction in shear stresses means that crack-free compaction is easily achievable even in tight curves or on roundabouts.



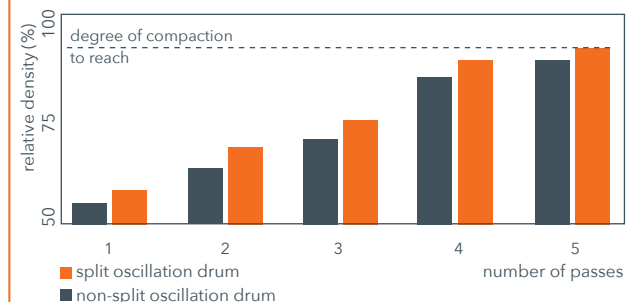
The design incorporating two drum halves prevents material displacement and the cracking of asphalt.

6 No limitations in respect of the efficiency and cost-effectiveness of the compaction

- The split oscillation drum achieves the same or even better compaction results as the non-split drum from HAMM.

Your benefit:

The efficient and cost-effective compaction you have come to expect.



First tests have shown that the required degree of compaction is reached with a small number of passes.