

CASE STUDY:

SMALL BATCHES AND MANUAL PAVING OF ASPHALT - COST-EFFECTIVE WITH ASHPHA-MIN®

Almost every day, very small quantities of asphalt mix are required for the paving of footpaths, pipe trenches, head-holes and small-scale restorative measures.

Such asphalt paving is mainly carried out „by hand“, which results in significantly longer paving times compared to paving with a paver. In addition, the asphalt cools down quickly when transporting small quantities – even when covered. If the asphalt is paved at too low a temperature, the resulting damage is usually already apparent in the following year, i.e. within the warranty period.

All too often, this problem is solved by buying more asphalt than is actually required for paving. This means the larger mass can retain the heat longer and the cooled edge area of the asphalt mix must be disposed of in the following days.

An alternative is **aspha-min®** – an additive that has been designed for the production of low temperature asphalt.

Used in hot mix asphalt, **aspha-min®** improves the workability of asphalt mix in such a way that – even at temperatures of 100 °C and just below – the asphalt can still be paved with good compaction results. In practice, this results in a significantly longer paving window and a resulting lower amount of remaining asphalt.



Frankfurt am Main: AC 32 T S 30/45, temperature reduced during manual paving at 3 °C outdoor temperature

Here is a **calculation example**:

a) Small quantity of asphalt without **aspha-min®**

| | | | |
|------------------------------|----------|--------|-------------------|
| Pick-up of 6 t asphalt mix: | 6.0 to * | 65 €/t | 390.00 EUR |
| Disposal of 2 t asphalt mix: | 2.0 to * | 10 €/t | 20.00 EUR |
| Costs: | | | 410.00 EUR |

b) Small quantity of asphalt with **aspha-min®**

| | | | |
|-------------------------------|----------|--------|-------------------|
| Collection 4.5 t asphalt mix: | 4.5 to * | 65 €/t | 292.50 EUR |
| Addition of aspha-min: | 4.5 to * | 5 €/t | 22.50 EUR |
| Disposal 0.5 t asphalt mix: | 0.5 to * | 10 €/t | 5.00 EUR |
| Costs: | | | 320.00 EUR |

The example shows that the addition of **aspha-min®** does not result in any additional costs. The reduced amount of asphalt for pick-up as well as for disposal results in savings!

However, **aspha-min®** offers even more advantages for manual paving:

Another difficulty with manual paving is the paving of highly loaded areas. Due to necessarily higher viscosity, high-modulus mix designs clearly impede manual paving. This often leads to rough and uneven surfaces that will not be accepted by an unsatisfied client.



Again, it is cheaper and smarter to rely on **aspha-min®**. Its addition not only extends the paving window but also temporarily reduces the viscosity of the asphalt mix. This reduction in viscosity pays off twice: The improved workability saves valuable paving time and also the appearance of the finished layer is much more homogeneous, closed, even and durable.

The combination of these two advantages results in a further advantage of using **aspha-min®**: The extended paving window and the viscosity reduction produce results that meet the requirements of the customer - even under adverse working conditions.

Our conclusion:

Small quantities of asphalt mix can be processed more easily, longer and in better quality with the use of **aspha-min®** – and more often than not, with reduced overall costs.

Do you need further information?

Do feel free to get in touch.