



BEARING & POWER TRANSMISSION SOLUTIONS

Case Study

Dow Corning 340 Heat Sink Compound



INDUSTRY

Road Construction

PROBLEM

The hot asphalt passes beneath the steel plate that must be preheated prior to the first application of asphalt to prevent clumping of the material. These road pavers have up to four very large electrical heating elements mounted on the back side of the 2" thick steel plate to bring the steel plate up to the same temperature as the asphalt. The heat from the elements must transfer through to the screed plate and reach the sufficient temperature where the asphalt contacts the steel plate. If an incorrect product is applied between the heat pad and the screed pad then the screed result is an extremely poor finish where grooves appear across the tarmac creating an unsatisfactory surface.

A second problem results when this equipment is rebuilt every two years. During teardown for replacement of the heating elements, they have become corroded to the steel plate because of moisture contamination, creating excessive labour time for removal and clean up.

APPLICATION

Road Pavers - All electrically fired pavers have a heat pad and a screed pad that smooths out the asphalt as it leaves the hopper creating the road surface. The heat and screed pads are serviced every one to two years where a lubricant is applied between the two plates. The product acts as a heat transfer compound ensuring that the screed plate receives uniform heat distribution.

SOLUTION

By applying the Dow Corning 340 Heat Sink Compound between the Heat pad and the Screed pad in a liberal amount, permits the heat to be transferred to the screed plate in an even distribution ensuring a smooth perfect finish to the road pavement.

BENEFIT

The resultant benefit is that the road pavement is laid evenly on the first pass without the need to either relay or patch up faulty screed work. This saves the construction company relaying costs, time and ensures an acceptable finish to the road pavement. The application of the Dow Corning 340 Heat Sink Compound also reduces the advent of corrosion permitting a quicker turn around when the heating elements are replaced, saving downtime and labour costs.

