



**Pavestech PST Limited**

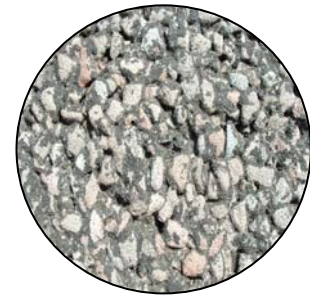
## *Pavestech Product Data Sheet*

*Number PPDS/027*

*Issue 2 - June 2008*

# **Paveblast**

HVI Retexturing Process to regenerate surface Micro & Macro texture  
Improving skid resistance to reduce skidding accidents



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## Product Description

Pavestech's "Paveblast" is a retexturing process designed to Renew, Restore or Improve the original design properties of the road surface with regard to texture and skid resistance.

Paveblast uses the High Velocity Impact Method (HVIM) of Retexturing Asphalt, the basic shot blasting process has been around for over 100 years and the first mobile shot blasting process since the early 80's.

Recent developments in the efficiency of dust separation and blasting technology now means this HVIM (High Velocity Impact Method) is the most effective and environmentally sound way to re-texture highway asphalt.

The Paveblast system is a mechanical process which is designed to remove surface contaminants, surface imperfections and coatings. The process is fully controlled, safe and environmentally sound. It uses no water, no chemicals or solvents, emits no pollutants or dust to the atmosphere and the removed material can often be fully recycled.

Steel shot is fed by gravity through a control valve into an impellor.

The impellor turning at high speed throws the steel shot through an adjustable opening at high velocity and at a specific angle on to the surface over which the self propelled machine is traveling.

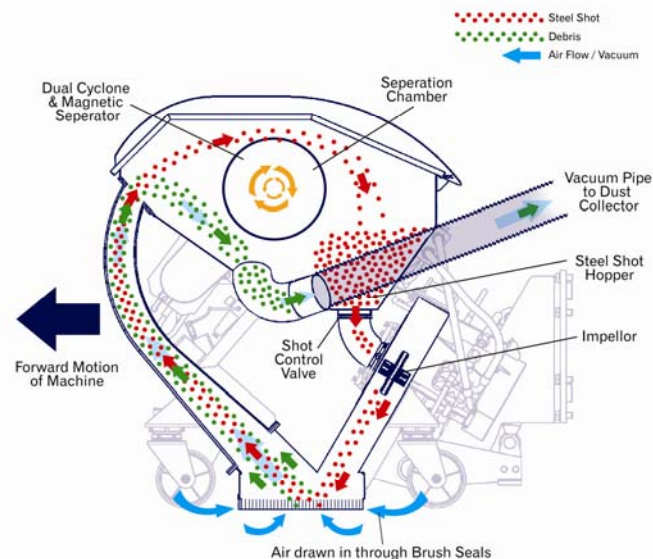


Diagram 1. HVIM / Blasting Head

The steel shot impacts the surface and bounces off, as it does so material from the surface whether this is contaminants, coatings or the surface material itself is abraded and loose material together with the shot is drawn up into the machine by the airflow created by the vacuum unit.

Brush seals enclose the blast head to the surface and air is drawn in through and under the brushes from the surface to ensure no shot or material from the blast head escapes to atmosphere. This is around 99% efficient but when the machine goes over any bumpy or uneven surface some shot particles can escape.

The debris and shot is drawn up into the separation chamber and by a dual cyclone and magnetic separation process the debris is drawn off to the dust collector and the shot is recycled back to the blast head.

The strength or degree of blasting required is infinitely variable and will depend on what the surface requires.

Accurate control of the blast pattern and the degree of removal or the texture created is controlled using various machine settings and operational practices. These include:

- Shot type
- Shot size
- Shot delivery control valve setting
- Impellor / Rotor speed
- Dust collector vacuum (airflow) setting
- Forward speed of machine
- Number and direction of passes



Before - After



The Paveblast process does not reduce the structural integrity of the asphalt surface, and can significantly extend the working life of the road surface.

Typically skid resistance levels are increased by 60% and the ability of the surface to remove water from under the tyre (Hydroconductivity) is greatly improved.

Paveblast can be used to solve the problem of low “Early Life Skid Resistance” on new SMA and Thin Surfacing materials.



- Remove excess bitumen from new surfaces
- Extend the working life of a road surface
- It Uses no new materials (*No Scarce High PSV Primary Aggregate*)
- No water or chemicals
- Does no damage to surface, no loss of durability
- The material removed is recycled back into asphalt
- No need for surface dressing (*No Scarce High PSV Primary Aggregate used*)
- No need for months of slippery road signs
- Helps to reduce accidents

**In general the process offers the highway engineer a very cost effective alternative to planing out and resurfacing or surface dressing, also it offers an environmentally sustainable solution as it is unnecessary to use more newly quarried materials.**

What customers say:

*“The works were carried out in a methodical manner, to time, on budget and with minimal impact on the travelling public. All in all we are delighted with this clean, quiet, unobtrusive process and have no hesitation in recommending Pavestech” - North Ayrshire Council.*

*“ The results so far are very good, the trial did what they said it would, on time, on budget and we are very pleased with the results, there have been no further serious accidents at this location since all the improvements” Senior Engineer for Cheshire County Council.*