

FACT SHEET

RESISTANT TO VIBRATION



Resistant to vibration...

...allows long lifetime
under vibration conditions
where other products fail

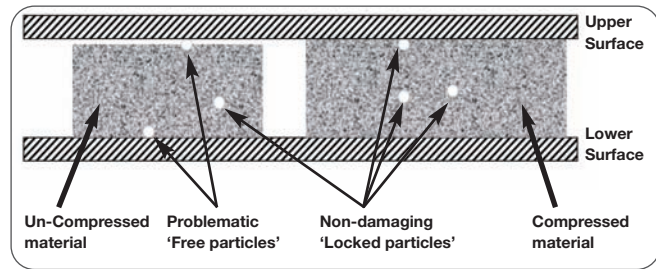
Superwool® Plus™
Insulating fibre

Superwool® Plus™ blanket has been shown to resist vibration under the most severe testing.

- Virtual elimination of large shot
- 30% more fibres
- All shot is locked up in fibre network

Good vibration performance

Some applications in which AES fibres are used combine high vibration with cyclic heating. Generally fibre products perform very well in vibration applications. However in some situations, where large acceleration forces are present, large shot particles can break loose from the fibre structure and, if retained close to the surface, with freedom to move these particles can damage the local fibre structure and cause holes.



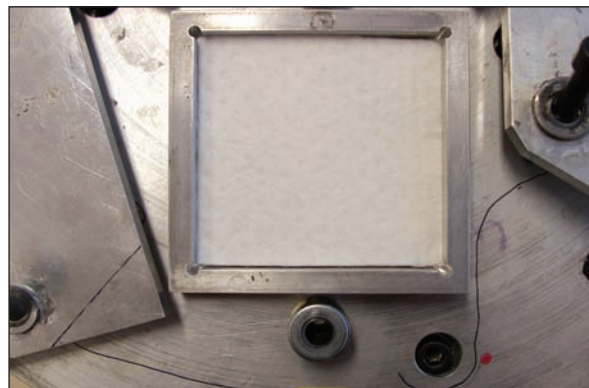
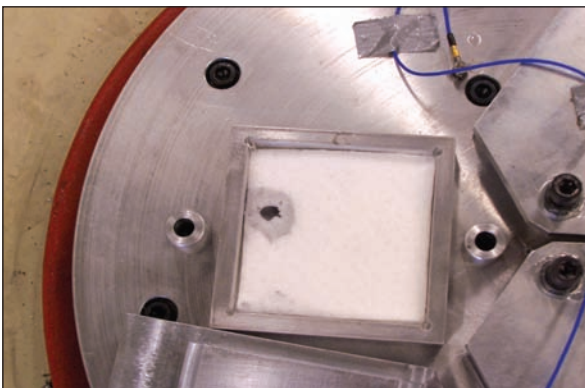
For good vibration performance it is important to eliminate large shot particle and the shot that is present needs to be restrained in the fibre matrix. Surfaces should be slightly compressed to stop the physical movement of the fibre structure or any shot particles that do become free from the structure.

Superwool® Plus™ blanket has been shown to resist vibration under the most severe testing.

How does Superwool® Plus™ blanket react to vibration?

Superwool® Plus™ blanket has been extensively tested on an automotive grade shaker table to assess and benchmark its performance in high vibration environments. Samples which had been heat stressed at 950°C (1742°C) for 20 hours showed no degradation during a 100Hz, 60g accelerated life cycle test. This is in contrast to Superwool® 607® material which was badly affected by vibration of large shot particles.

Superwool® 607® blanket after vibration testing



Superwool® Plus™ blanket after vibration testing

Superwool® Plus™ blanket vibration performance

Superwool® Plus™ blanket excels in a high vibration environment due to:

- Virtual elimination of large shot
- 30% more fibres
- All shot locked up in fibre network
- High tensile strength



Superwool[®] Plus[™]

Insulating fibre

Features

Benefits

An engineered solution (unique)

Takes insulation beyond normal performance

Patented technology

Proven chemical formulation

Exonerated from Carcinogen classification under
Nota Q of European Directive 67/548

Restrictions on use do not apply. No special
requirements for dust control, supply to the
general public or waste disposal

Lower thermal conductivity

Improves insulation by 20%

Up to 30% more fibres

Efficient prevention of heat transfer and
greater strength

Less shot

Cleaner workplace

High Fibre Index

Up to 20% reduction in thermal
conductivity giving energy saving

Stronger with good handleability (no tearing)

Ease of installation saving time and waste

Improved handling

Operator satisfaction

Soft & smooth feel

Less mechanical skin irritation

Consistent use of pure raw materials

Higher classification temperature,
low shrinkage and consistent quality

Lower density grade for the same result

Material weight savings up to 25%

Thinner lining for the same result

Create more working space within unit

Resistant to vibration

**Allows long lifetime under vibration
conditions where other products fail**

An environmental solution

Potential savings on waste disposal

Worldwide production

Availability



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SUPERWOOL® is a patented technology for high temperature insulation wools which have been developed to have a low bio persistence (information upon request). This product may be covered by one or more of the following patents, or their foreign equivalents:

SUPERWOOL® PLUS™ products are covered by patent numbers:
US5714421, US5994247, US6180546, US7259118, and EP0621858.

SUPERWOOL® 607HT™ products are covered by patent numbers:
US5955389, US6180546, US7259118, US7470641, US7651965, US7875566, EP0710628, EP1544177, and EP1725503

A list of foreign patent numbers is available upon request to The Morgan Crucible Company plc.

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