



Case Study

Bandvulc Group- Tire Mold Heat Exchanger.

GEOGRAPHICAL AREA:
United Kingdom

ISSUE:

Find a better solution for insulation of heat exchanger plates used on tire molds.

SOLUTION:

Heat Shield™ High Heat thermal insulation & corrosion prevention coating.

Coverage: 8-coats

RESULTS:

- ✓ Insulated to reduce heat transfer of heat exchanger plates.
- ✓ Prevented corrosion of the equipment.
- ✓ Allowed visual inspection of the surface.
- ✓ Temperature difference of 30C (prior to cure date)
- ✓ Long lasting - 5-10 years.

Award Winning Energy Saving and Asset Protection Coatings



Bandvulc Tyres is one of the leading suppliers of commercial remould tyres (remold tires) to the transport industry. They operate at the forefront of tyre technology using the best available machines and quality control systems. They needed to reduce heat transfer on heat exchanger plates used on equipment in their facility.

Solution:

“Bandvulc Tyres Ltd. applied Heat Shield™ to the exterior of a heat exchanger plate. The first coat was applied thinly and left to set for just over 20 days. After this period, the coats were applied more liberally up until the 8th coat. The 8th coat result now shows a temperature difference of roughly 30 degrees C. ”

-Calum Williams, Bandvulc Tyres, Ltd.





CASE STUDY
ADDITIONAL PHOTOS

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Note: Study was done before all 8 coats had completely cured. Heat Shield™ reaches its full insulating ability after a full cure. Temperatures are shown in degrees Celsius.

Date applied	2/9/2008	3/28/2008	3/3/2008	3/4/2008	3/7/2008	4/1/2008	4/14/2008
Date: temp taken		3/3/2008	3/4/2008	3/7/2008	3/18/2008	4/4/2008	4/16/2008
Application Coat	1	2	3	4	5	6	7
WITHOUT							
Top		101.5	97.8	98.4	97.5	99.0	98.5
Middle		97.9	96.8	97.0	96.6	98.7	98.0
Bottom		98.5	97.2	96.5	96.6	98.5	97.8
Heat Shield™							
Top		91.5	86.6	88.0	81.8	81.0	73.9
Middle		90.1	88.5	85.1	82.8	80.5	74.4
Bottom		92.1	88.4	86.0	85.4	81.1	73.5
Average without		99.3	97.3	97.3	96.9	98.7	98.1
Average with		91.2	87.8	86.4	83.3	80.9	73.9
Temp. Difference (°C)		8.1	9.4	10.9	13.6	17.9	24.2
Change in temp. (°C)		8.07	1.37	1.50	2.63	4.30	6.30
Percentage difference		8.1	9.7	11.2	14.0	18.1	24.6



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Exterior Heat Exchanger plate

