



ABEAR
INDUSTRIAL

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Attention: To Whom It May Concern

ABEAR INDUSTRIAL APPROVES OF CHEM CEMENT MANUFACTURED BY CHEM TRUST SOLUTIONS AS THEIR PRIMARY COLD BONDING ADHESIVE

Side-By-Side Testing of Numerous Bonding Systems Proves Chem Cement to be the Most Reliable, Consistent and thus the Strongest

We at ABEAR Industrial pride ourselves on supplying a durable, premium range of Pulley Lagging products to the local and global market. In addition, we provide the service of Pulley Lagging installation to all the major Pulley OEMs in South Africa, such as Melco, Bosworth, Lorbrand, CIS and Shaft Engineering.

Due to our positioning as a reliable and high-quality supplier to the market, we rely heavily on safe, reliable and strong bonding systems to meet the demands that our products face when in service at a mine or plant. As such we regularly conduct stringent testing of our current and of newly available adhesive systems. We have recently completed another round of tests where we compared numerous adhesives manufactured by a number of different companies.

When testing we consider the following:

- Safety
 - Solvents and chemical safety
 - Flammability
 - Packaging
- Ease and repeatability of application
- Through in-house Rubber-to-Metal 90' Pull Tests we look at the following:
 - Percentage of Rubber Tear Achieved
 - Whether the adhesive and primer reacted together and fully to achieve full cure of both. We have noted that lower quality or inconsistent adhesive brands often fail to cure the primer.
 - Cross-linking of the adhesive within its own applied layers and to the ABEAR Chloroprene Bonding Layer.
 - Total Pull Force Achieved (N/mm). SANS1669-2 requires a pull force of 12N/mm. At ABEAR a force of less than 20N/mm is considered a failure.

- Consistency of the adhesive to achieve the same results within the same batch and between different batches.

Chem Cement manufactured by Chem Trust Solutions passed our tests. It was the only adhesive to consistently cure the primer and to consistently cross-link within its own layers and to the ABEAR Bonding Layer, whilst also being safe in terms of solvents and chemical content. Between and within batches, it consistently achieved 100% rubber tear of our Chloroprene Bonding Layer, thus achieving results well above our 20N/mm minimum threshold.

We would also like to note that we are in the process of testing and refining the application process of Chem Grip, another adhesive developed by Chem Trust Solutions. This is looking positive as a ground-breaking adhesive for the rapid and consistent bonding of Pulley Lagging.

Should you have any queries, please do not hesitate to contact the undersigned.

Yours faithfully



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ABEAR INDUSTRIAL