



Reliability training program | accelerated life testing support & analysis

Tecram Srls was selected to provide a custom design reliability training course to engineers in the testing department of Cimbali Group. The material was carefully selected to support engineers in developing a pilot scheme with the knowledge acquired. The pilot scheme consisted an accelerating testing plan and execution on a small sample of piston air compressors employed in Cimbali's coffee machines. If successful, the methodology would be rolled out for the certification of other components used in the construction of a coffee machine.

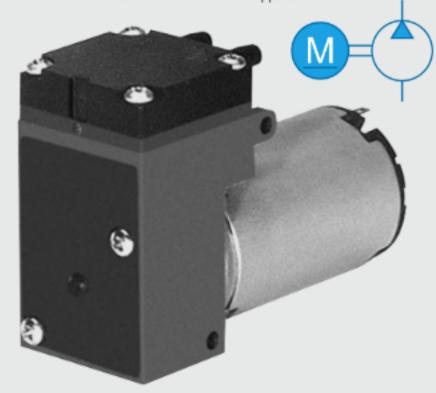
A Cimbali custom taylored reliability training program by Tecram



Tecram's large experience in reliability training Athe audience included participants from EMEA, Asia-Pacific and North/South America region, the advanced material was developed in English language and was presented subsequently to the teaching of the HBK foundation course RS250: Fundamentals of Reliability.

Accelerated life testing of a small compressor

At Tecram we prepared the testing specification to carry out an accelerated test on a small sample of a compressor used to emulsionate the milk and create the cream for the cappuccino.





The device itself was chosen as a pilot project for its robustness and difficult to bring it to failure during the test. Because of its long history in Cimbali's coffee machine, it could have supplied information regarding the failure modes and a failure distribution to validate the testing programme and estimate the acceleration factor.

The temperature cycle test was executed successfully within a period of 4 weeks bringing all devises under test to failure. Failure analysis of the units proved the same failure modes identified on the field validating the set up of the test. In addition to that, the speed at which the results were obtained provided Cimbali with a very economical test procedure to apply in the screening process of similar devices.

To find out how Tecram can help your business, visit www.reliability.it