

Example of a Successful Application

Repairing an Impeller

Many maintenance engineers are always looking for a way to REPAIR instead of REPLACE some of their operating Plant & Equipment.

This is where THISTLEBOND and ADVANCED POLYMER products can come into their own.

Other times, maintenance engineers CAN NOT find a replacement part. They HAVE to repair and make do.

The following is an excellent example of a COMPLETE RE-BUILD by using THISTLEBOND polymers to their utmost advantage!



This impeller arrived in our Dutch Distributors workshop from a MAJOR shipping company. It was on-board a tanker and required IMMEDIATE attention. You can see from the EXCESSIVE damage that a MAJOR repair would have to be undertaken OR the impeller replaced. The impeller was made from BRONZE and damage had been caused by SERIOUS cavitation.



After abrasive blasting the FULL extent of the damage c



an be clearly seen!

The first job was to re-build the exterior of the impeller to enable SUPPORT of the polymer repair material. Copper wire is used for this purpose.



The impeller was then re-built using THISTLEBOND RESIN & HARDENER (TRK19000) plus THISTLEBOND FAIRING COMPOUND (TRK19042). This formed the bulk of the repair to recover lost material.



The impeller was then MACHINED back to the correct size and profile.



The impeller was then further repaired with THISTLEBOND Paste Ceramic (TR200) and then finally coated with THISTLEBOND FLUID CERAMIC (TR205). The end result looks fantastic AND the customer was delighted with the speed of the repair - saving him much money!!