G-ARC FTA ADHESIVE

G-ARC FTA is a flexibilised two pack epoxy structural adhesive suitable for bonding a diverse range of substrates. The flexibilization mechanism enables GARC FTA to be used in applications where substrate movement in service needs to be accommodated. Service temperatures up to 70°C may be accommodated.

Typical applications include bonding ceramic wear components in wear applications and onto conveyor belt pulleys where a degree of impact resistance and flexing may occur. Bonding of metals, FRP and vulcanised rubber may also be considered.

Read all safety instructions before commencing any work. Ensure equipment is tagged and in date. Wear protective clothing as outlined on the SDS.

PROCESSING:

Environmental conditions.

- Substrate temperature must be between 10 and 35°C and at least 3°C above the dew point.
- Relative Humidity must be less than 80%

Substrate Preparation.

- Surfaces to be bonded must be clean and activated by surface abrasion (abrasive blasting, grinding, wire brushes, sanding). This is followed by removal of loose debris and solvent washing. Smaller areas may be prepared with hand tools to clean and abrade the surface.
- Greasy, oily substrates should be pre-washed to clean the surface. Hot water/detergent is a suitable alternative to solvent washing. Rinse with clean water.
- Equipment to be refurbished may require UHPW washing or steam cleaning to remove any ingrained organic material.
- Equipment where paint or other lining is removed by abrasive blasting must be washed down as above to ensure removal of any surface salt contamination. Do not use saline water.
- Wear resistant ceramic tiles are normally used as received. Wear clean gloves when handling to prevent surface contamination.
- FRP is prepared by removing the glossy gel coat usually by sanding or grinding, removing any loose debris and solvent wiping.

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- Vulcanised rubber is buffed with a 24 or 36 grit pad at 3000 rpm to give a rough surface finish. Do not scorch/burn the surface. Remove debris and solvent wipe. A chlorination etch procedure may also be suitable depending on the rubber grade. Contact GARC for information.
- Concrete should be prepared by either acid etching or grinding to remove laitance and leaving a profiled surface. Wet/damp concrete must be allowed to dry prior to adhesive application.

Adhesive mixing

- The use of full kits is preferred. A standard kit is 1.3 kg; a smaller 0.65 kg kit is available for repairs and smaller jobs. If decanting is essential then quantities should be weighed to +/- 2 grams.
- Empty both components on to a flat mixing board. Mix with a 75 mm trowel by folding the material into itself and scraping material from the board and returning it to the bulk. This should take 3 to 4 minutes for a standard kit. A uniform streak free consistency should be obtained.
- The mixed adhesive is now applied to one or both of the substrates to be bonded using a suitably sized notched trowel or spatula. Parts are now aligned and “hand” pressure applied to consolidate. Any clamps or retaining devices, such as magnets, can now be fitted ensuring adhesive is not pushed out of the joint line.
- Mixed adhesive must be used during the pot life time which is temperature dependent. Working time : 1kg kit at 25^{o}C is 40 minutes.
- Adhesive bond line thickness depends on the application (static/dynamic) and surface roughness of the substrates

Application: Work a thin layer of mixed material into the prepared profile. This ensures good surface wetting with resulting high adhesion levels. Use a 4mm notched trowel is recommended to control bond thickness.

Adhesive cure time

- This is temperature dependent. Generally, 24 hours is required to develop 90% of the bond strength with the balance over 7 days.

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FEATURES

Easy to apply
Solvent free
High strength adhesion

PROFILE

Colour	*Grey*
Pot life @25°C	*40 minutes*
Cure Time @25°C	*6 hours*
Mix Ratio by weight	*100:30*
Kit Size	*1.3 or 0.65 kg*
Coverage 1.3 kg kit	*= 1 m^2*