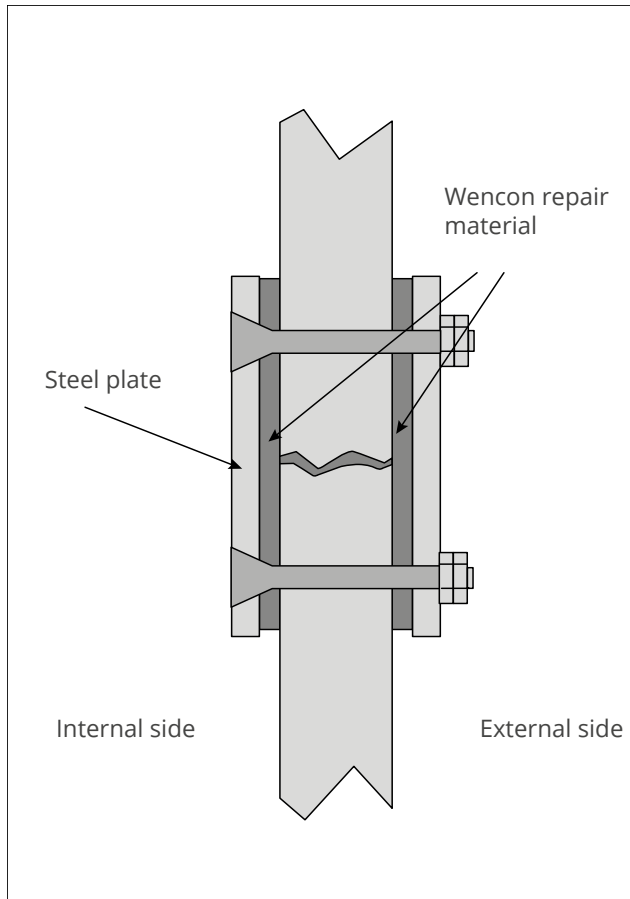


Turbo charger casings - sealing cracks

APPLICATION DATA SHEET No. 154



Remarks

This application is meant to seal a well stabilised crack. Application will only work, if the crack is stabilised

Stabilise the crack

Find the ends, stop the crack and stabilise it as described by suppliers of crack repairs.

Seal the crack

1. Prepare the entire area internally as well as externally acc. to Wencon surface preparation, next page.

Inside job

2. Make two pieces of metal plate, approx. 100 mm (4 inch) wide and 50-100 mm (2-4 inch) longer than the crack. The plates shall cover the repair area.

3. Form it in the shape of the crack. Use welding, bending or the like.

4. Drill holes as shown in the plates.

5. Clean the area again. Also the metal plate.

6. Mix and apply a layer of Wencon Hi-Temp or Wencon Ceramic Coating directly in the crack in a thickness of min. 5 mm (0,2 inch) as shown in the ill.

7. Before curing, place the prepared metal plates over the crack and make sure to get good contact. Remove excess material.

8. After semi cure the work with extra securing of the plate can start. Drill and tap holes in the engine block as shown, and mount bolts as shown. Secure the bolts with an anaerobic adhesive, bolt wires or the like.

Remarks

There is always a risk when mounting loose parts in a turbo charger. Calculate the risk in the situation and act accordingly.

Wencon surface preparation

Choose the relevant surface preparation, depending on the nature of the job.

Surface preparation using dry blasting methods:

Application with Wencon products on a dry surface, at minimum 3°C above dew point.

1. Blast the machine part to SA 2,5 using sharp-edged blasting media, to a roughness of min. 75 microns.
2. Leave the part for sweating out salts in a warm place for at least 12 hours or heat it up to 30 - 40°C (86-104 °F) using gas torches.
3. Blast again to SA 2,5, prior to the application.
4. For parts containing a lot of water and salt, it may be necessary to repeat point 2 and 3, until the surface remains light grey, for at least 2 hours after blasting.
5. For optimal adhesion of Wencon products, always use Wencon Bio Cleaner or Wencon Cleaner prior to application. Follow one of below two methods:
 - 5.1 **Wencon Bio Cleaner**
Wet surface: Apply Wencon Bio Cleaner and let it work for 5-10 min. If necessary use a brush, to make sure the surface is clean. Rinse off with clean water and wipe off with an absorbing cloth.

Dry surface: Apply Wencon Bio Cleaner and let it work for 5-10 min. If necessary use a brush, to make sure the surface is clean. Rinse off with clean water and dry with an absorbing cloth or with compressed air for a completely dry surface. Hereafter any Wencon products can be applied.
 - 5.2 **Wencon Cleaner**
After surface preparation, apply Wencon Cleaner with a brush and allow the product to evaporate before applying other Wencon products. Wencon Cleaner is non-flammable. Use only in large or well ventilated rooms.

Surface preparation using wet/damp methods:

Water jet the entire surface with water and sand to a standard equal, to SA 2,5 as described above.

If the surface is left wet after surface preparation, is it important to dry out the surface or alternatively use a Wencon UW product.

Surface preparation for emergency/temporary applications:

If above surface preparation methods are not possible, it may be necessary to use one of below methods:

- Blasting
- Grinding
- Needle Gunning

In emergency / temporary applications it may be difficult to prepare the surface according to above methods. In any case, it is important to clean the surface to SA 2,5 and 75 microns roughness. If possible dry the surface before applying. If not possible, use Wencon UW products.

For further information on Wencon surface preparation, please contact our Area Sales Managers.