

# APPLICATION PROCEDURES

## Surface Preparation

Unlike any painting system, the Enviropeel coating system can be applied on minimally prepared surfaces. Although any loose flaking rust or paint should be removed from the surface, this can be easily achieved by means of a wire brush and/or scraper. The intention of the surface preparation is to allow full contact of the Enviropeel with the surface that is to be protected, without any interference from contaminating solids or fluids.

## Essential Criteria

- It is important that severe contamination of the substrate such as petrolatum and heavy grease should be removed prior to application as this prevents contact of the Enviropeel film with the substrate.
- For effective performance of the Enviropeel, the surface of the substrate **MUST BE DRY** prior to the application of Enviropeel - blow dry using airline if necessary especially in joints and crevices.
- Under certain circumstances it may be necessary to pressure wash the substrate to remove contamination. After pressure washing, the surface should be dried using compressed air - taking care to blow any remaining moisture from voids and joints.

## Important factors before application

Before application of Enviropeel on the substrate, there are many factors to consider:

- Orientation of the flanges - flanges on vertical pipes are more likely to require edge sealing or special application techniques to avoid moisture ingress.
- Surface condition of the flanges and bolts and nuts - as noted, loose contamination must be removed. For heavy rust, where complete removal is impractical, Enviropeel pre-treatment oil must be applied to maintain inhibition performance of the application.
- Gaps or voids between flanges - special techniques, such as matrix tape may be required to bridge gaps.
- Possible condensation on the surfaces of the substrate. NB - This includes potential condensation or frosting (from low temperature fluids) during use - even if the application is made in the dry.
- Size and complexity of the substrate - for large flanges, high capacity application units will be required to maintain maximum continuity.
- Access - before application, problems with substrate access should be assessed and measures taken - this could include step-ups, scaffolding, inspection mirrors, removing obstacles etc.

*Note: a full survey of the substrate should be undertaken prior to the application to minimise unexpected problems and misunderstandings. Full service conditions, humidity, substrate & ambient temperatures must be recorded.*



Above: surface preparation using wire brush on flange.

Below: pressure washing to remove heavy grease.



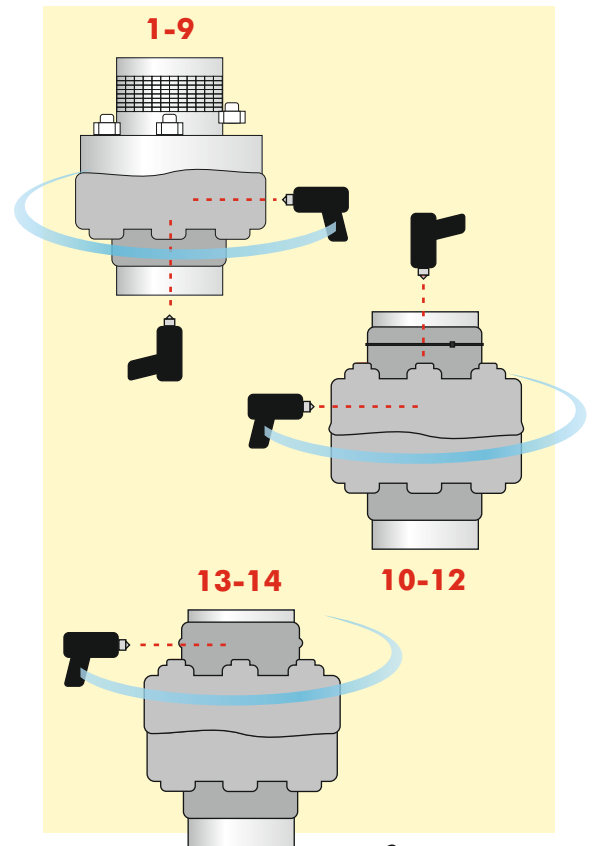
**SPECIAL NOTE:** For the Enviropeel System to work effectively, film thickness and continuity during application is of prime importance. The minimum thickness for two coats of Enviropeel after cooling on the substrate should be 160 mil (4mm) - average thickness may be considerably higher. However, if the substrate is subject to extreme UV exposure, the thickness should be increased to a minimum of 240-320 mil (6-8mm), as high UV exposure may reduce inhibitor levels on the outer surface of the application. Increasing film thickness guarantees full system integrity and performance.

**REMEMBER:** Intercoat adhesion is best achieved by over-coating as soon as possible. Make sure all areas to be over-coated are free of oil by carefully wiping them clean. This is especially important on overlapping seams where full bonding is essential. The overlap must be wide enough to ensure a strong bonded seam along all joined areas.

## Applying to Flanges on Vertical Pipes

When applying to flanges on vertical pipes use the following steps:

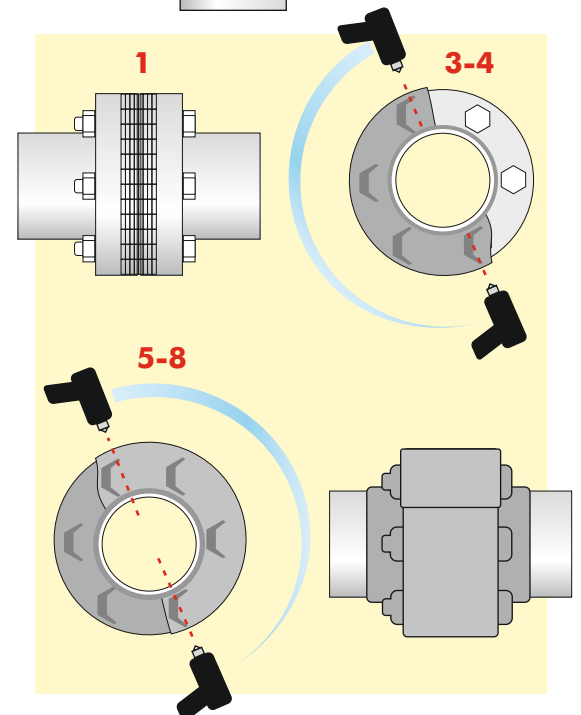
1. Install matrix tape round the pipe on the upper neck of flange.
2. Apply Enviropeel pre-treatment inhibitor into flange gap and on to corroded surfaces.
3. Apply first coat to the underside of the flange with the gun at right-angles to the flange.
4. Inspect to ensure Enviropeel covers the flange, bolts and nuts.
5. Trim off excess Enviropeel checking coating integrity.
6. Carefully wipe 1st coat with a lint-free cloth before applying 2nd coat.
7. Apply 2nd coat to the underside of the flange at with gun at right-angles to the flange.
8. Trim off excess Enviropeel checking coating integrity.
9. Carefully wipe the overlapping area with a lint-free cloth.
10. Apply first coat to top section from the upper neck of flange covering the matrix tape.
11. Install strap/tie wrap over the first coat above the matrix tape once the first coat is safe to touch.
12. Carefully wipe the overlapping area with a lint-free cloth.
13. Apply second coat over the first coat embedding the strap/tie wrap
14. Trim off excess Enviropeel with final coating integrity check.



## Applying to Flanges on Horizontal Pipes

When applying to flanges on horizontal pipes use the following steps:

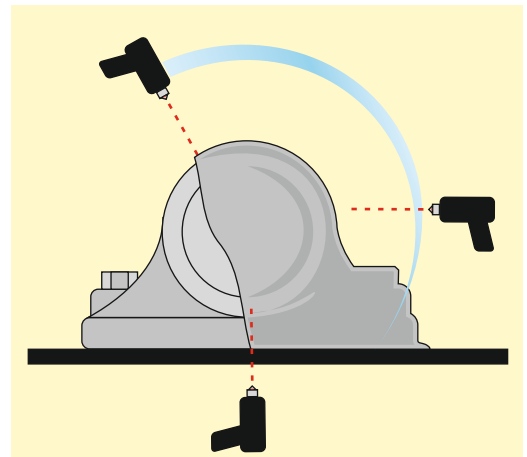
1. Install matrix tape around flange gap if necessary.
2. Spray/apply Enviropeel pre-treatment inhibitor into flange gap and on corroded surfaces.
3. Apply 1st coat anti-clockwise covering the bolts and nuts on both sides of the flange and along connecting pipes, starting with gun angled at approximately 11 o'clock (looking along pipe), coating down to 5 o'clock - see diagram.
4. Trim off excess Enviropeel and check coating integrity.
5. Carefully wipe overlapping area with a lint-free cloth.
6. Apply remainder of 1st coat clockwise on both sides of the flanges with the gun at approximately 11 o'clock angle down to 6 o'clock.
7. Trim excess Enviropeel and check coating integrity, ensuring material covers the flange, bolts and nuts without any holes.
8. Carefully wipe the entire surface of the application with a lint-free cloth before applying 2nd coat.
9. Repeat steps 3 to 7 for 2nd coat with a final coating integrity check.



## Applying to bearing housing and shaft assembly

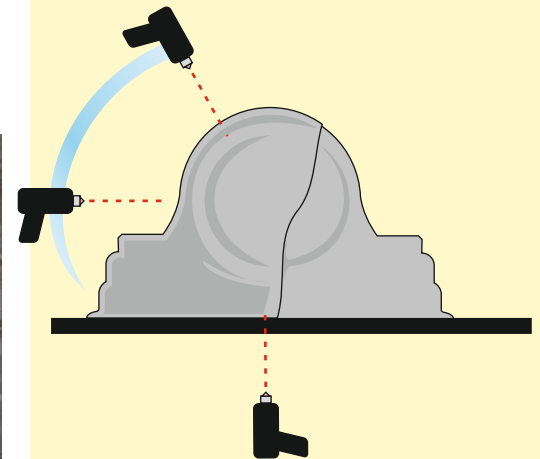
1. Make sure power is off to any drive/equipment that might cause the bearing and shaft to turn.
2. Clean bearing and shaft surfaces with wire brush or rag. Pay particular attention to any surface that will be rotating.
3. Apply Enviropeel pre-treatment inhibitor oil to all surfaces.
4. Each coat is applied in four sections: apply 1st coat to front of bearing, starting with gun at the 11 o'clock position and working down to 6 o'clock.
5. Carefully wipe overlap areas before each new section. Mirror the process for the front left, overlapping the first application.
6. Do this to both sides of bearing housing, extending the coating out onto the shaft for 1" - 3".
7. Trim excess Enviropeel.
8. Inspect to ensure material fully covers the housing with no holes.
9. Carefully wipe the surface of Enviropeel with a lint-free cloth before applying 2nd coat.
10. Repeat steps 4 to 9 for 2nd coat.

*Below: successfully completed application on a conveyor tail pulley pillow block bearing. Note extension of coating along shaft - this ensures ingress prevention yet allows the shaft to turn normally.*

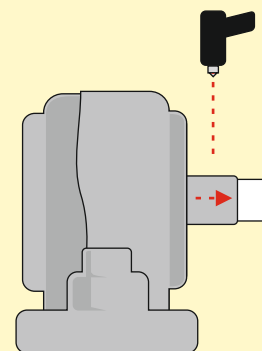


Coat in four sections: facing front of bearing, apply first to right hand front from 11 o'clock to 6 o'clock.

Mirror for left hand side and then repeat process on reverse side, overlapping front to complete 1st coat.



Once 1st coat is complete, check all joints, wipe to remove residual oils and repeat the process for the 2nd coat.



Spray material on to the shaft, in order to prevent contaminant ingress. Shaft will rotate freely within the Enviropeel.

If you have any questions about Enviropeel material or equipment please contact us using the details below. Email, phone or use the contact form on our website to get immediate help with any Enviropeel-related issue. Enviropeel material and equipment is designed and manufactured in the USA.



**Enviropeel USA** · 1-317-631-9100 · [info@enviropeelusa.com](mailto:info@enviropeelusa.com)

[www.enviropeel.com](http://www.enviropeel.com)

**ENVIROPEEL**