

## Applications

- Oil pipelines
- Oil \& water tanks
- Steel structures
- Power lines


## Features

- Manufactured to DIN 4925
- Anode can be replaced
- High collapse resistance
- Trapezoidal thread
- TerraFilter mesh
- Vent pipes

Cathodic protection wells, often known as Deep Ground Beds, are widely installed to protect metallic objects in contact with the ground from electrolytic corrosion, particularly structures within the oil, natural gas and water industries.

Open hole ground beds use stable non-conductive, corrosion resistant casings which can be installed up to 300 m depth where there is a static water level.

Deep ground bed wells are typically constructed using DN200 (8") PVC casing and screen which is covered with a TerraFilter mesh to prevent ingress of fines.

One of the potential reactions that occurs at the anode is the generation of chlorine gas from the dissolution of naturally occurring salts in the soil. For this reason, deep well anode systems typically have a vent pipe assembly, which allows any chlorine gas formed at the anode to vent to atmosphere. DN35 (1.25") PVC casing and screen provides high capacity venting to the system.

A full range of installation accessories includes:

- Wooden clamps (Bongossi/Eki)
- Lifting adaptors
- Vent casing \& screen
- Non metallic centralisers
- Top head enclosures
- Head works
- Locating pins
- Clamps
- Test posts


## Cathodic Protection

CASING \& VENT PIPE

| Nominal <br> Diameter <br> ND (inch) | Dimension <br> DN <br> mm | Outside <br> Diameter <br> mm | Wall <br> Thickness <br> mm | OD of <br> Socket <br> mm | Inside <br> Diameter <br> mm | Weight <br> kg $/ \mathrm{m}$ | Overall <br> Length <br> mm | Effective <br> Length <br> mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{\prime \prime}$ | 25 | 33 | 4 | - | 25 | 0.525 | 1000,3000 | 975,2970 |
| $1.25^{\prime \prime}$ | 35 | 42 | 3.5 | 46 | 35 | 0.64 | 1000,3000 | 970,2970 |
| $2^{\prime \prime}$ | 50 | 60 | 4 | - | 52 | 1.0 | 1000,3000 | 965,2970 |
| $8^{\prime \prime}$ | 200 | 225 | 13 | 247 | 199 | 13.7 | 5800 | 5720 |
| $10^{\prime \prime}$ | 250 | 280 | 12.5 | 297 | 255 | 15.6 | 5800 | 5720 |
| $12^{\prime \prime}$ | 300 | 330 | 14.5 | 350 | 301 | 21.2 | 5800 | 5720 |


| Screen |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Diameter ND (inch) | $\begin{gathered} \text { Dimension } \\ \text { DN } \\ \mathrm{mm} \end{gathered}$ | Outside Diameter Mm | Wall Thickness mm | OD of Socket mm | Inside Diameter mm | Weight $\mathrm{kg} / \mathrm{m}$ | Slot mm | $\begin{gathered} \text { Open area } \\ \% \end{gathered}$ |
| $1.25{ }^{\prime \prime}$ | 35 | 42 | 3.5 | 46 | 35 | 0.64 | 1 | 9 |
| $8{ }^{\prime \prime}$ | 200 | 225 | 13 | 247 | 199 | 13.7 | 3 | 20 |
| 10" | 250 | 280 | 12.5 | 297 | 255 | 15.6 | 3 | 20 |
| $12^{\prime \prime}$ | 300 | 330 | 14.5 | 350 | 301 | 21.2 | 3 | 20 |

Mechanical \& Physical Properties

| Property | Unit | Test Method | Specified Value |
| :---: | :---: | :---: | :---: |
| Density | $\mathrm{g} / \mathrm{cm}^{3}$ | ISO 1183 | 1.4 |
| Tensile strength | $\mathrm{N} / \mathrm{mm}^{2}$ | DIN EN 527-2 | 45-55 |
| Impact resistance at $23 \pm 2^{\circ} \mathrm{C}$ | \% | DIN 53453 | Min 90 |
| Modulus of elasticity | $\mathrm{N} / \mathrm{mm}^{2}$ | DIN EN ISO 178 | 2500-3000 |
| Co-efficient of thermal expansion | $\mathrm{K}^{-1}$ | DIN 53752 | $0.8 \times 10^{-4}$ |
| Charpy notched impact strength @ $23^{\circ} \mathrm{C}$ | $\mathrm{kJ} / \mathrm{m}^{2}$ | EN ISO 179/leA | 6 |
| Vicat softening temperature | ${ }^{\circ} \mathrm{C}$ | ISO 2507-2 | >79 |
| Thread | - | DIN 4925 | Trapezoidal* |
| Colour | - | DIN 6164-1 | Blue (RAL 5015) |

* Without O-ring


## TerraFilter Mesh

- Fitted over the slotted section of screen.
- Woven polyethylene filter mesh with 300 micron equivalent sieve analysis size.
- Outer heavy duty PE mesh secured at each end with heat shrink tape.
- Optional stainless steel band.

