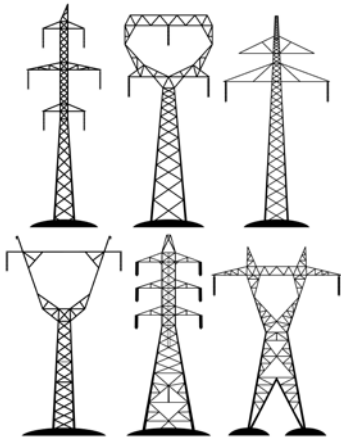




Global solutions for pipeline electrical protection





AD and DC Mitigation solutions for pipelines

Electromagnetic interference studies

Electromagnetic interference is a common problem when metallic piping is running in parallel or crossing power lines, either overhead or underground. The induced voltages from the power line to the metallic piping can cause a series of problems, but the most severe and dangerous are when the induced voltage reach an unsafe level for people working along the pipeline, in faulty conditions of the power line or during lightning strike, the effect becomes more hazardous.

- Geometrically accurate modeling of HV lines and pipelines
- Accurate modelling of different soil levels (multilayer)
- Induced voltages from the power line to the metallic piping
- Solutions to reduce from unsafe to safe level
- Calculation of coatings & insulation joints stress during faults & lightning strike

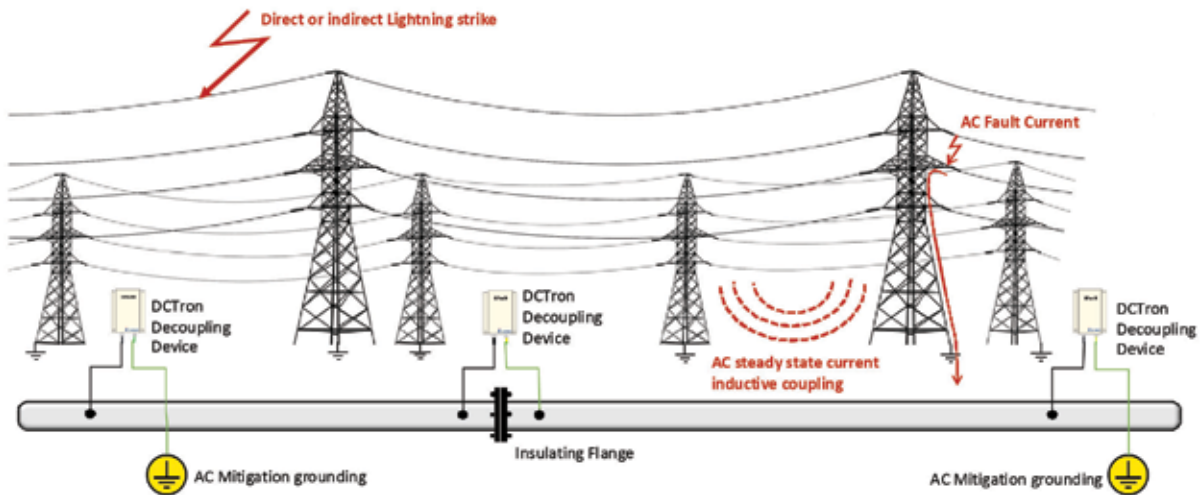


Stray current control & corrosion monitoring studies

It is vital for underground metallic infrastructure such as pipelines & steel foundations which are in close proximity of a possible stray current generation source to examine the effect of possible stray current and to prevent its catastrophic consequences.

- Control of stray & leakage currents in railway & metro projects
- Stray current collection grid sizing
- Dynamic & static modeling





DCTron™ - DC Decoupling Device

DC Decoupling Devices for AC Mitigation solution systems

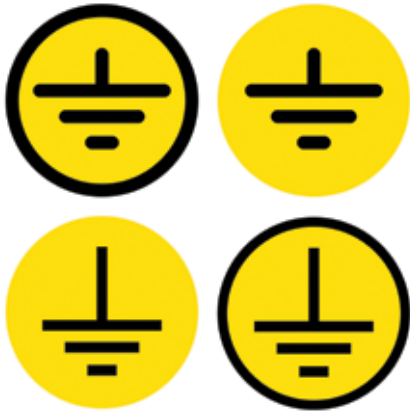


The ELEMKO DCTron is a DC Decoupling Device which is sized and installed at selected locations helping to reduce any AC voltage produced on pipelines wither by AC HV power lines or Lightning strikes.

- Touch voltage protection
- Coating stress voltage reduction
- Insulating Joint protection
- High short circuit current conduction
- Lightning protection
- IEC and CE compliance

Pipeline Lightning Protection – Overvoltage stress relieve

Technical Characteristics of DCTron models		
	DCTron 25	DCTron 50
Continuous AC Drain	25A rms	50A rms
Maximum AC Drain 5s	500A rms	750A rms
Maximum Short Circuit Current 0,5s	3,5kA	6kA
Maximum DC operating voltage	-25V	-25V
Maximum voltage drop during AC drain	2V	2V
Maximum leakage current after polarization	<1µA	<1µA
Maximum Lightning current discharge (10/350µs)	100kA	100kA
Maximum Surge current discharge (8/20µs)	100kA	100kA
Aluminum Enclosure	IP 66	IP 66
Size (H x W x D) in mm	250 x 147 x 112	300 x 151 x 135

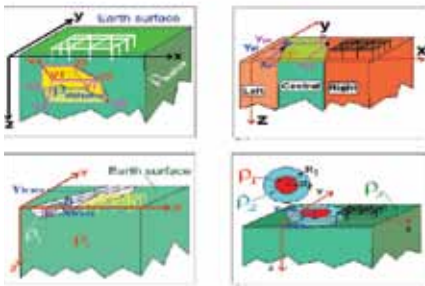


TERRAFILL™ - Ground backfill improving compound



TERRAFILL™ is backfill combining a high conductive solution with a high corrosion protection performance. It is compatible with copper and zinc grounding conductors improving the contact resistance with the soil providing an additional corrosion protection environment.

- Certified as per IEC 62561-7 "Lightning Protection System Components (LPSC), Part 7: Requirements for Earthing Enhancing Compounds, reviewed by TUV and BVQi
- Hydroscopic behavior helps to maintain constant soil conditions during season change
- High corrosion protection performance
- Environmental friendly – no chemicals
- 45 Years applied practice and experience
- Reported and justified study for its performance based on your soil conditions



TERRAFILL™ - Not just another concrete with graphite mix...



Available in bulk containers or in easy handle enclosures. It is offered as TERRAFILL™ powder or TERRAFILL™ ready to use format!



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