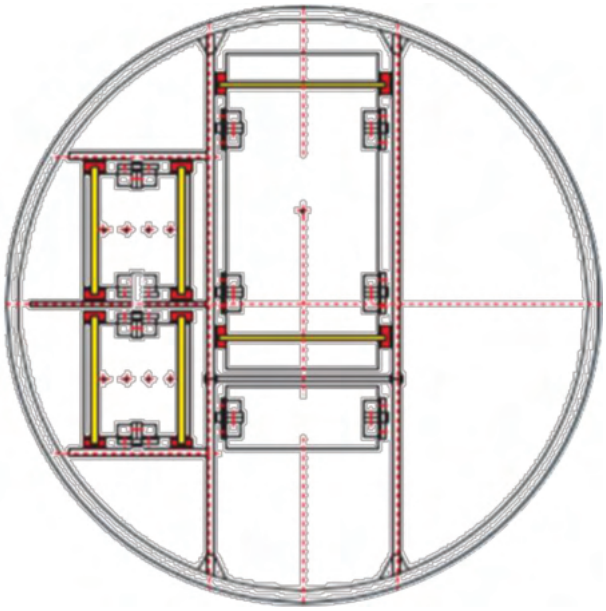
DEEBAR® (Pty) Ltd
ELECTRICAL & MECHANICAL ENGINEERING
"ENSURING YOUR SAFETY"

technogrid®
ENERGY ABSORPTION SYSTEMS

# OVERWIND ARRESTING

Conveyance arresting is the accidental event of the winder not stopping the conveyance timeously. Advantages of the ***technogrid***® overwind impact protection system:

- Very small initial impact forces. This is due to a light Catch Strap, Catch Frame or Catch Hook and the progressive energy absorption properties of the system.
- Predictable reaction forces relating to the conveyance and headgear design.
- A ***technogrid***® is narrow and occupies minimal space in the shaft steel work.
- A ***technogrid***® system can be retrofitted into existing mines.
- Each ***technogrid***® system is custom designed for the given application.
- No maintenance required only an annual visual inspection.



Plan view of how a ***technogrid***® overwind system Can be installed inside the shaft steel work

A ***technogrid***® overwind system with Catch Hooks (Left) and Catch Straps (Right)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# PREDICTABLE ENERGY ABSORPTION

When designing a **technogrid** ® overwind system the following factors are taken into account:

## Total Conveyance System Inertia

- Rotor
- Winder Drum
- Sheave Wheels
- Rope Detail
- Conveyance A (Cage or Skip)
- Conveyance B (Cage, Skip, or Counterweight)

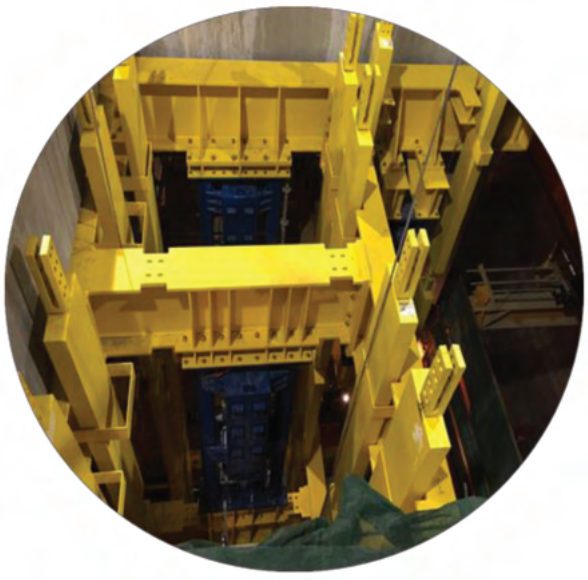
## Stroke Distance

- The stroke of the system is dependent on the specified deceleration rate and rope breaking force.
- Limited by available space in headgear.

## Impact Speed

Once the total energy of the conveyance system has been calculated, the ***technogrid***® over wind system is designed to optimise the energy absorption with the given design specifications and limitations.

This is done by configuring technogrid units in series and parallel.



A ***technogrid*** ® overwind system being installed in the headgear


**For a Technical Proposal please contact us and provide a Winder Duty Cycle Design Specification Sheet.**

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