

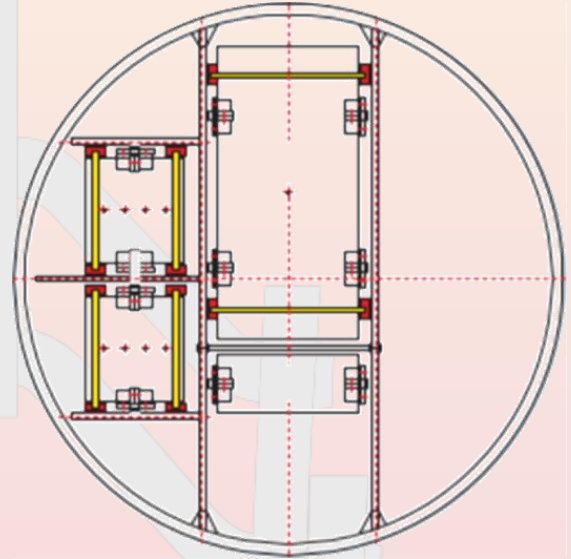


OVERWIND ARRESTING

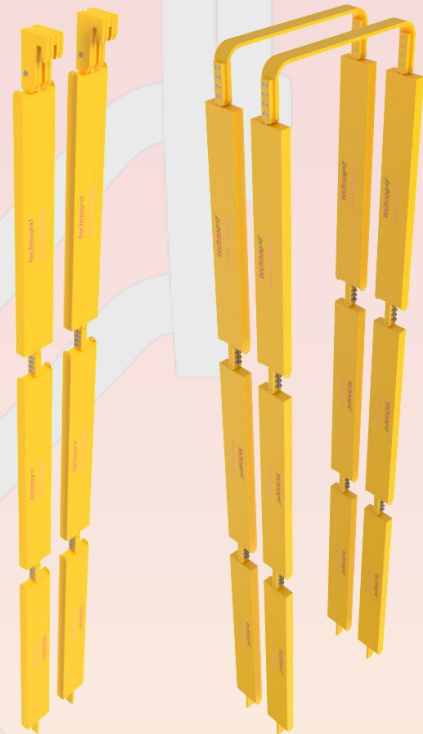
Conveyance arresting is the accidental event of the winder not stopping the conveyance timeously.

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)

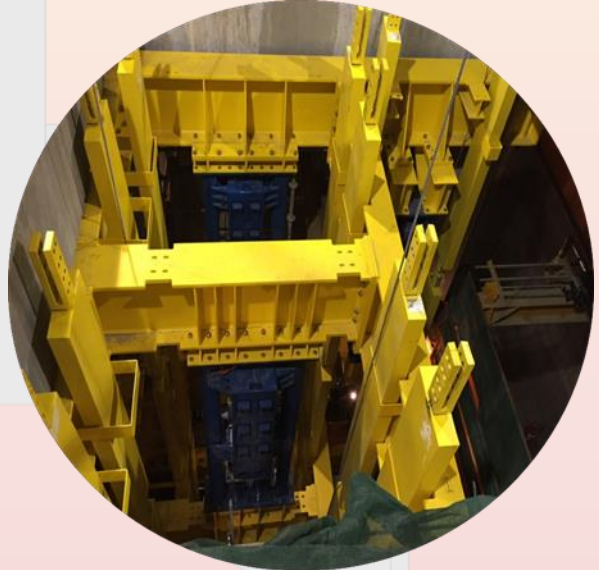


PREDICTABLE ENERGY ABSORPTION

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***® overwind 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.