technogrid®

ENERGY ABSORPTION SYSTEMS

technopost® - STATION STOPPER

At the heart of the station stopper device, is the *technogrid*®energy absorbing system. Each *technopost*® station stopper has one *technogrid*®.

The *technogrid*® is a strain energy absorption device that will absorb the kinetic energy of a moving object (like a Loco or a hopper) by deforming a metal grid of known design and characteristics through a stroke deformation of predicted value.

The *technogrid*® unit is centrally mounted flush between the rails.

One end of the *technogrid*® is anchored to the footwall. While the "impact post" is attached to the other end.

- ✓ Over 200 units have been supplied throughout Africa
- ✓ Most Mining Houses in Southern Africa have approved *technopost*®
- ✓ **3 common options** available:

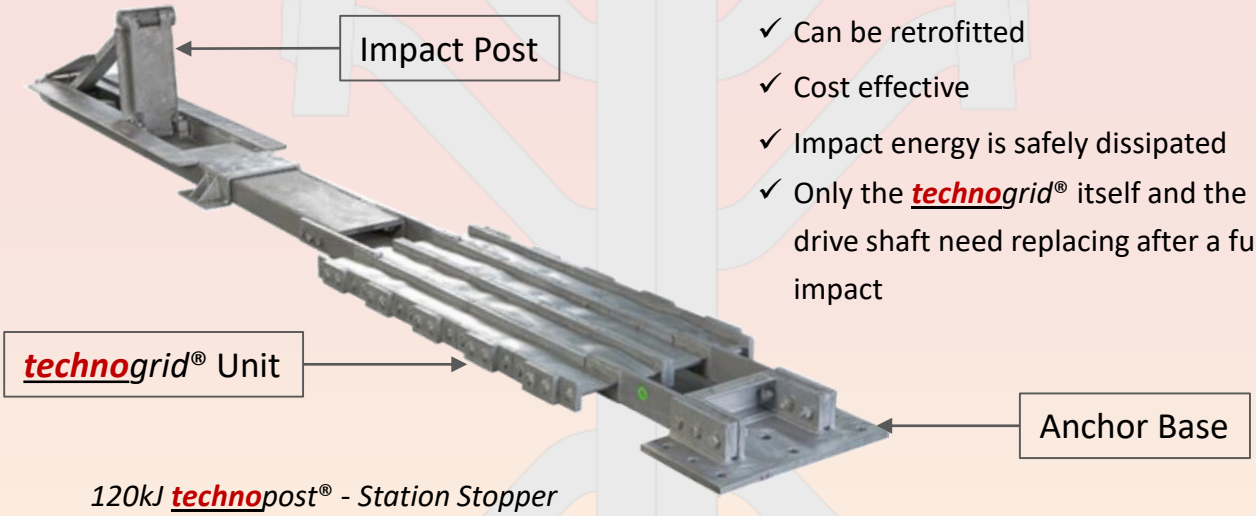
  60kJ *technopost*®

  120kJ *technopost*®

  300kJ *technopost*®

FEATURES of the *technopost*®:

- ✓ Minimal excavations
- ✓ Easy to install
- ✓ The *technopost*® is installed between the rails
- ✓ Minimal drainage requirements
- ✓ Controlled deceleration (less than 1g)
- ✓ Low maintenance
- ✓ Can be retrofitted
- ✓ Cost effective
- ✓ Impact energy is safely dissipated
- ✓ Only the *technogrid*® itself and the drive shaft need replacing after a full impact



120kJ technopost® - Station Stopper

DEEBAR

sales@technogrid.co.za

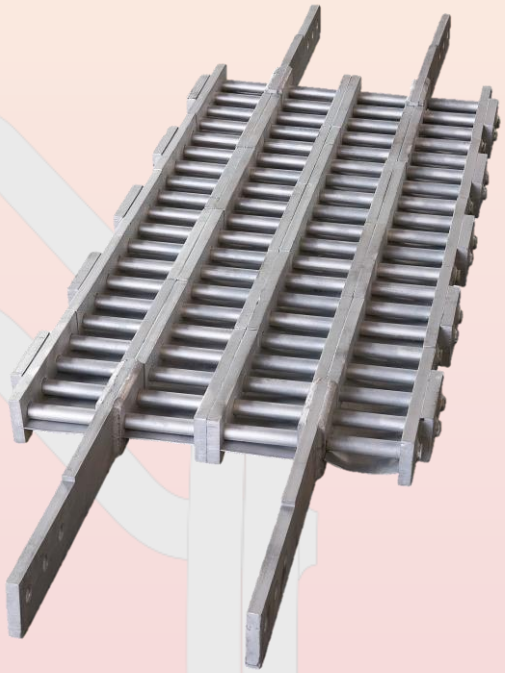
www.technogrid.co.za

technopost ® - STATION STOPPER OPERATION

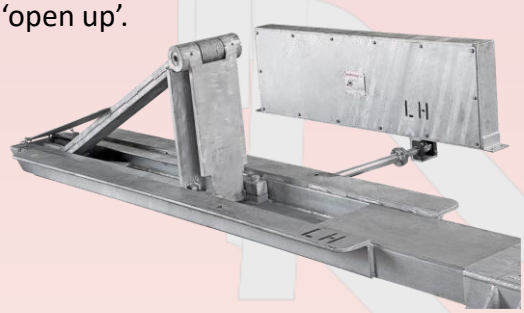
The impact post is designed to fold flat between the rails to allow traffic flow. The control of the system can be interlocked into the existing station stopping devices and cage winder interlocking systems.

The impact post is always in the up position and has to be lowered by activating a solenoid valve to allow traffic to pass over the device. If the power source is interrupted while the impact post is in the lowered position, the impact post will automatically fail to the safe 'up position'.

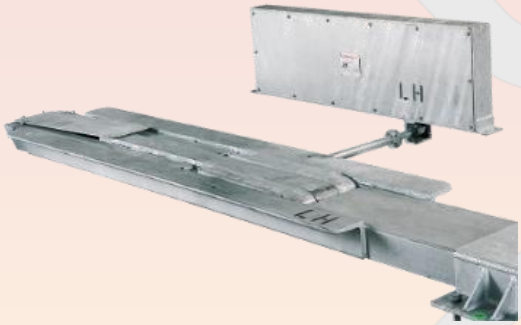
During an impact, the drive shaft coupling will 'shear off' and allow the *technogrid®* to 'open up'.



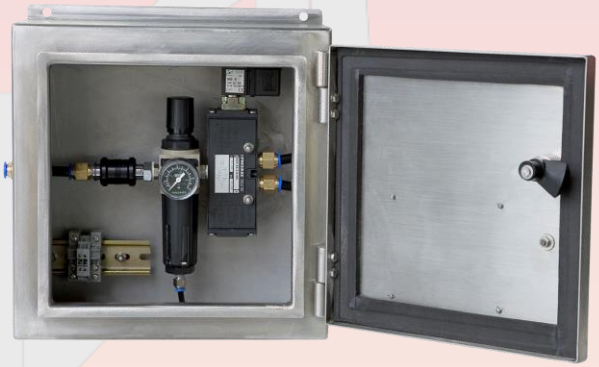
120kJ – 650mm Stroke technogrid®



Impact Post Default Position



Impact Post Lowered Position



Control Box

The impact post control can is achieved with pneumatic or hydraulic actuators driving the shaft coupled to the impact post through 90 degrees rotation.

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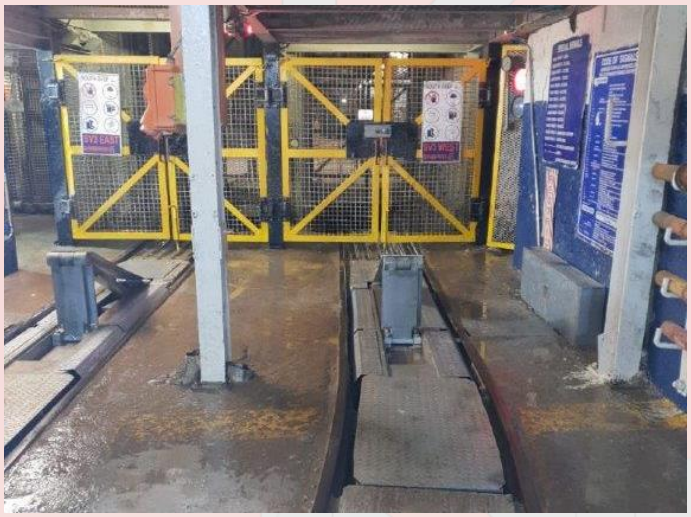
technopost® - STATION STOPPER OPTIONS

technopost® common options	Straight Track Length required for Installation	Maximum width of technopost®	Stroke length on Impact	Installation depth from Top of Rail
60kJ	5.7m	700mm	325mm	140mm
120kJ	6.4m	700mm	650mm	140mm
120kJ Compact	4.1m	700mm	650mm	240mm
300kJ	10.5m	540mm	1500mm	140mm



120kJ Compact technopost® Installation

Loco has not derailed after impact

A *technopost®* Station Stopping device can be designed for application specific energy requirements.

Please contact us or our Southern African distributors **DEEBAR (Pty) Ltd** for a quote or technical proposal.

✉ sales@deebar.co.za

On request from the client, we can certify the *technopost®* after installation, to ensure the units have been correctly installed. We can also audit the *technopost®* on an annual basis.