technogrid®

Control that impact

- Wide Energy Range
- High Velocity Impacts
- Controlled Deceleration
- Predicted Reaction Forces
- Maintenance Free
- Easy to Install
- Cost Effective

Close-up of Technogrid®

The **Techno**grid® is a strain energy absorption device which absorbs the kinetic, or potential energy, of a moving object by deforming a metal grid of known design and characteristics through a stroke deformation of predicted value.

The **Techno**grid® is a series of multi bar units that are connected in a staggered grid shape. On impact, the grid bars will yield and deform under double curvature bending. The yielding of the bars is what allows the units to “open up” and stroke, and it is the strain hardening of the material that absorbs the impact energy.

For larger and more specific energy requirements, the **Techno**grid® can be easily calculated and designed to suit the application. Safe deceleration and high end forces can be controlled for a wide range of energy's. The optimum configuration of the units can be achieved by combining the grids in series or parallel to suit each individual application.

Technogrid® with base and catch hook

Predictable Impact Energy Absorption

APPLICATION

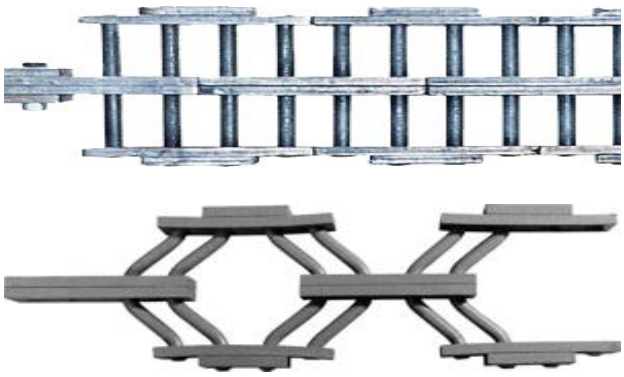
- ❑ **Conveyor belt counter weight arresting**
- ❑ **Station stoppers (arresting underground trains)**
- ❑ **Cage over-wind impact arresting**
- ❑ **Skip under-wind impact arresting**
- ❑ **Decline shaft runaway impact arresting**
- ❑ **Jack catch posts (catch gear)**
- ❑ **Runaway gantry crane arresting**

For larger energy requirements multiple units can be added in parallel (2 units – double the reaction force). Multiple units can be added in series (2 units – double the stroke).

120kj Technopost® unit (station stopper for mines)

Decline arresting with catch frame and Technogrid®

The **Techno**grid® can absorb any impact as long as the crash/catch framework is designed to put the **Techno**grid® into tension. As illustrated on this page, various examples of crash/catch framework designs are shown. Those range from simple hook to more complicated compression legs to absorb the energy from granulation tank explosions.



Technogrid® before and after impact