

# technogrid®

## IMPACT ENERGY ABSORPTION



- **WIDE ENERGY RANGE: 2kJ TO 5 000kJ+**
- **HIGH VELOCITY IMPACTS: 120kph**
- **Controlled deceleration**
- **Predicted endforces**
- **Maintenance free**
- **Easy to install**
- **Cost effective**

The **Technogrid®** 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.

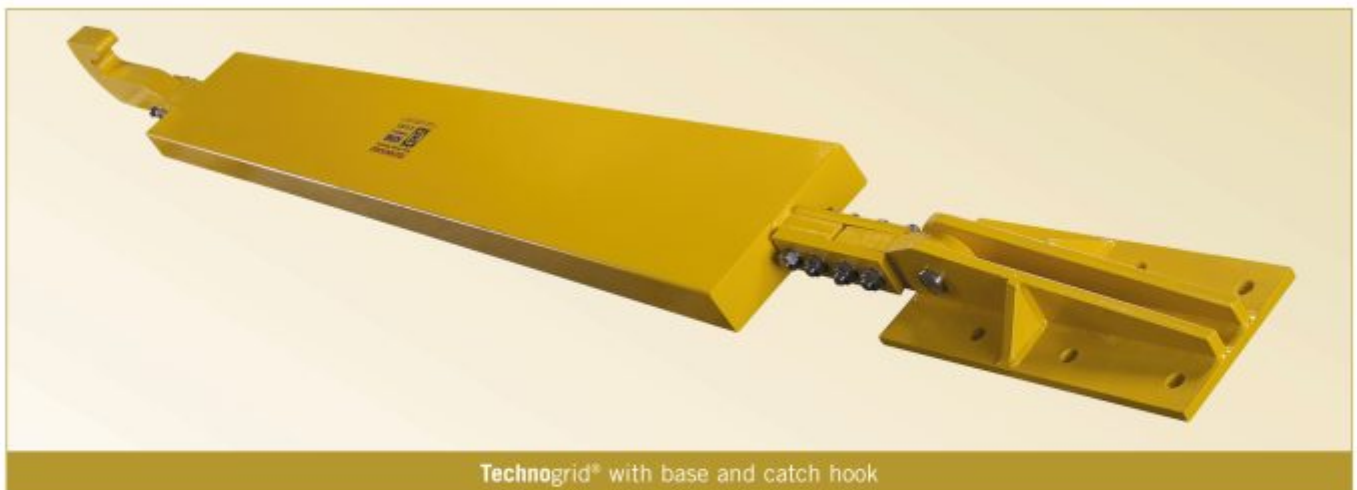
The **Technogrid®** is a series of multi bar units that are connected in a staggered grid shape. On impact, the grid bars will yield and deform under double curvature bending. The yielding of the bars is what allows the units to "open up" and stroke, and it is the strain hard-



Close-up of Technogrid®

ening of the material that absorbs the impact energy.

For larger and more specific energy requirements, the Technogrid 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



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The Technogrids® can absorb any impact as long as the crash/catch framework is designed to put the Technogrids® into tension. As illustrated on this page, various examples of crash/catch framework design are shown and they range from simple hooks to more complicated compression legs to absorb the energy from granulation tank explosions.

## APPLICATION

- Conveyor belt counter weights
- Station stoppers
- Over-wind protection
- Under-wind protection
- Incline shaft protection
- Jack catch posts
- Kibble crash doors

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



Decline arresting with catch frame and Technogrids®



Close up of Technopost in raised position



120kJ Technopost unit (station stopper for mines)



Arresting hook