



SPECIALISTS IN **AUTO-RESET**  
TECHNOLOGY





## **AUTO-RESET:**

A feature that automatically resets the arm or break leg when an obstacle has passed returning it to optimal functionality and preventing costly breakages.

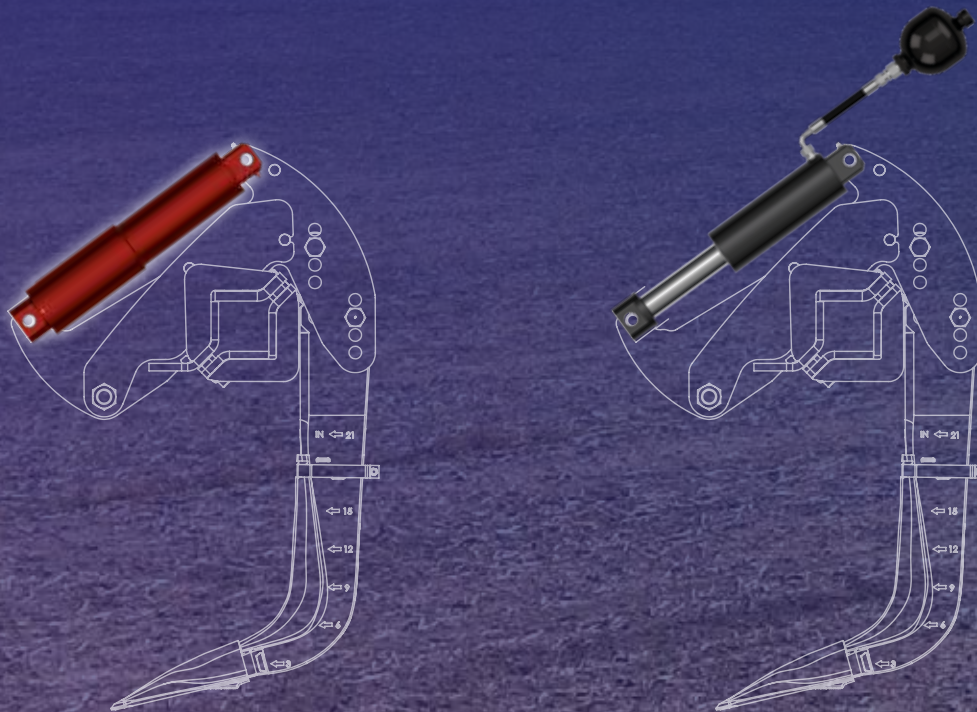
Others make do with more costly, potentially polluting hydraulics or cloggable manual coil springs.

## **MANUAL RESET:**

A shear pin allows the leg to receive blunt force up to a point whereby the pin will shear if enough force is applied.

This is useful in the way it protects the equipment from damage however it means the user must get out of the cab every time this occurs to change the pin.

The user also must notice the pin has sheered, not realising would mean them having to re-work these sections.



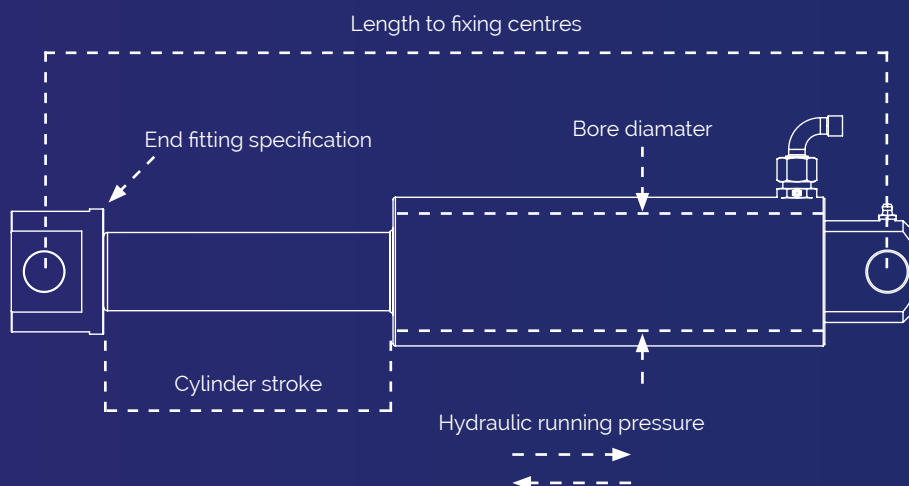
# NitroSprings™ VS HYDRAULIC CYLINDERS

NitroSprings have a number of key advantages over the use of hydraulic cylinders, including;

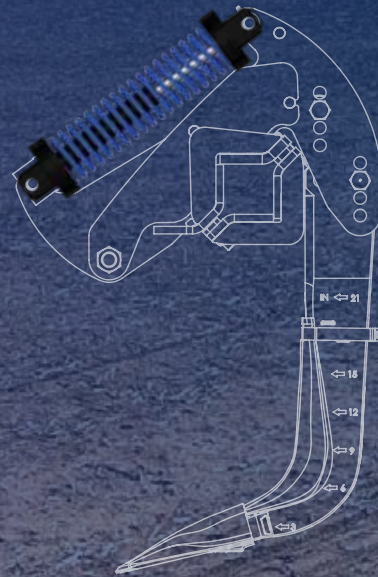
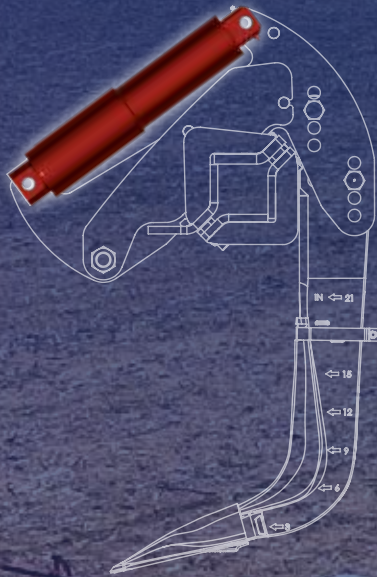
- Self contained single unit
- Easy installation – Fit and use
- Cost effective solution
- Safe and clean
- Work independently
- Requires hoses, fittings and accumulator tanks
- Multiple parts and time to install
- Leakages can spread oil
- Connected - so one unit's movement affects another

NitroSprings are designed to be fitted to replace existing hydraulic cylinders without the need for any changes to the existing equipment.

## Information required to convert to NitroSprings™



+44(0)1604 499 332



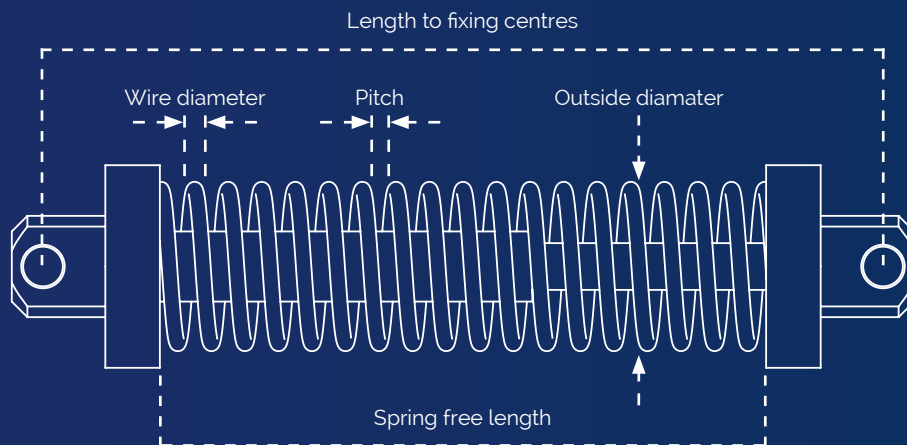
# NitroSprings™ VS COIL SPRINGS

NitroSprings have a number of key advantages over the use of coil springs, including;

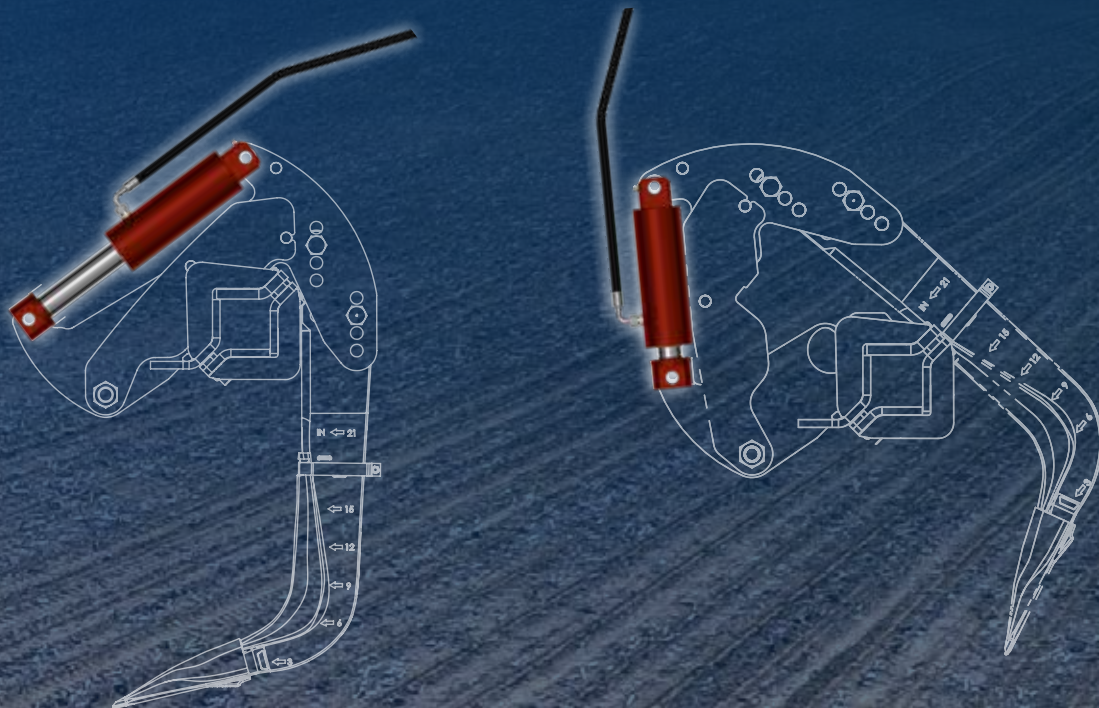
- High force compact
- Easy installation – fit and use
- Highly durable, long life
- Impact resistant
- No deformation under load
- Less force and larger than gas springs, often requiring 2 springs per unit
- Need to be pre-loaded on installation
- Lower fatigue life
- Can be damaged by stones or requires guards
- Can deform or bend under load

NitroSprings are designed to be fitted to replace existing coil springs without the need for any changes to the existing equipment.

Information required to convert to NitroSprings™



sales@metrol.com



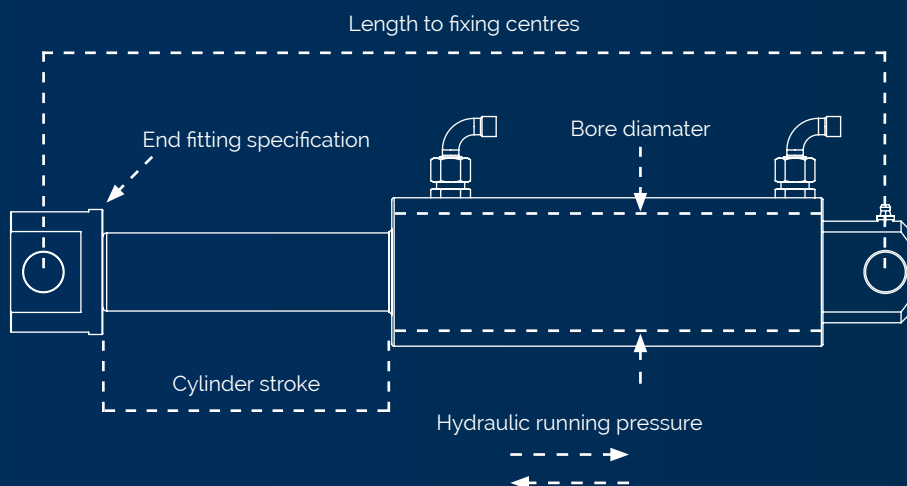
# Hydro-NitroSprings™

## The latest in auto-reset technology

This hybrid solution combines NitroSpring power for the auto reset of the leg, along with the controllability of hydraulics, all on one cylinder.

- The NitroSpring effect absorbs the force of the leg breaking back and resets after the obstacle has been passed.
- The Hydro part enables the operator to move the leg to a certain position along the working stroke of the spring, as with traditional hydraulics.
- Hydraulic action can be in compression or extension.
- Eliminates the need for complex hydraulic systems and accumulators

## Information required to convert to Hydro-NitroSprings™





Available, serviced and supported through our global distribution network.



CAD Design



Prototyping



Technical Calculations



Field Testing



Production



FEA Analysis

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