Deformation Tubes

Rail

Standard range of deformation tube devices.

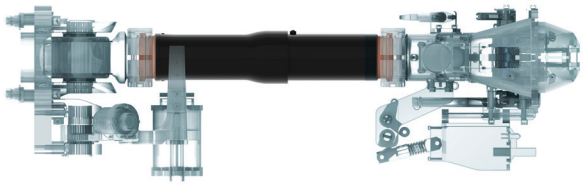
Providing a more cost effective solution with shorter lead times, to meet customer project requirements.

Deformation forces from 400kN to 850kN

Deformation Tubes

These devices are very efficient at absorbing energy by controlled deformation. By their nature these are 'single use' and are most commonly used with a recoverable energy absorbtion device.

The combination of a deformation tube and recoverable energy absorption is a very effective way of enabling rolling stock to have good crash protection and low operating costs by avoiding repair costs arising from minor collisions and coupling activities.



Product Details

Standard range of Oleo Deformation Tube Devices:

- Standard fixed length and design per stroke.
- Extensive range of available strokes.
- All units are tested by Oleo with validated mathematical models in accordance with EN15227.
- Available with Radioss and LS-Dyna finite element models.
- The system used by Oleo for the mathematical modelling of crash scenarios is approved by a European Rail Authority as being accurate, appropriate and properly controlled.
- Reduced manufacturing lead time.

Product Advantages

- Performance can be fully optimised with Oleo 1D Train™ at no additional cost.
- Consistent and predictable deforming forces across the complete stroke.
- Controlled energy absorption throughout the total stroke.
- Near 100% energy absorption efficiency.

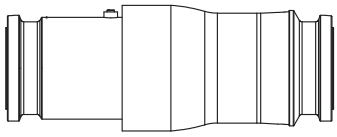
Applications

- Metro
- Light Rail
- Locomotive & Freight
- High Speed
- Mainline

Deformation Tubes Data

Deformation Tube Samples

D040



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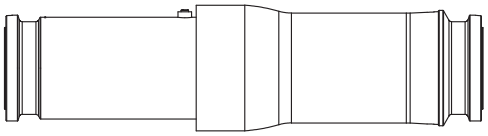

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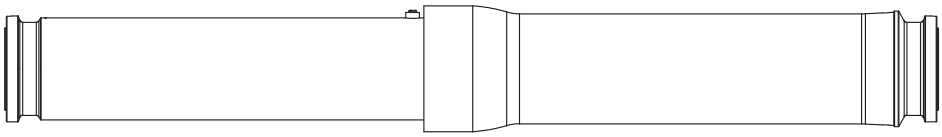
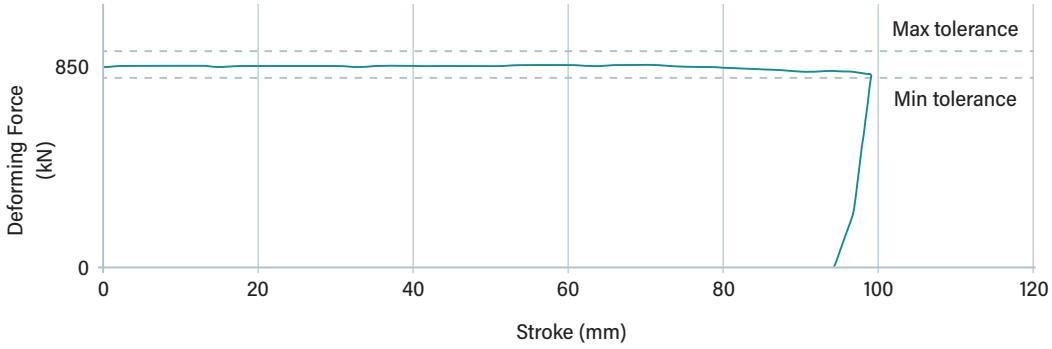


Dynamic Impact for Oleo Deformation Tube (MAX deforming force)



Range Overview

Deforming stroke (mm)	Deforming force (kN)		Unit Code	Energy Absorption (kJ)
	Min	Max		
50	400	850	D020	41
100			D040	82
150			D060	125
200			D080	166
250			D100	210
300			D120	253
350			D140	294
400			D160	337
450			D180	378
500			D200	421