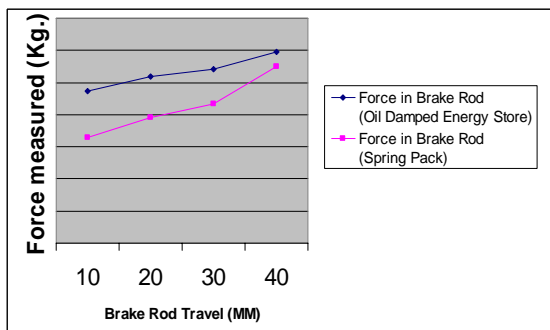


## HANDBRAKE OPERATION

The Knott Group is committed to continuous improvement throughout our range of products. One area of recent change is the overcentre handbrake operation. A new **Oil Damped Energy Store** is being introduced across the Knott range of over-run couplings. It represents the natural progression from the existing spring pack, which has been in use for over 20 years.

The original spring pack remains a sound solution to the requirement for applying a force to maintain the handbrake lever in its on and off positions; combined with the overcentre handbrake operation it fulfils the parking brake requirements of the auto-reverse mechanism.



The new **Oil Damped Energy Store** takes the Knott product to a new level of performance, giving positive benefits to Manufacturers, Users and Distributor/Repair centres alike.

Testing of both types has shown that the **Oil Damped Energy Store** provides a consistently higher output force to the brake rod. (See graph)

The revised design requires the operator to pull the handbrake on, like the current design, but adds a noticeable quality feel to the action. Trials have received very positive responses from customers.

The new design consist of a fully enclosed spring to activate the mechanism, the speed of actuation is then controlled by oil which acts as a damper to provide a progressive feel to the handbrake operation.

The new couplings are compliant with the very latest requirements of European Directives 94/20/EEC and 98/12 /EC which amends the earlier directive 71/320/EEC



Allied to this, the system offers the following benefits:

1. The trailer manufacturer is seen to have the latest available technology enclosed within a neat, modern, aesthetic design in combination with the ergonomically designed handgrip.
2. More consistent and smooth feel for the operator coupled with a high perception of quality and a more distinct over-centre action.
3. No requirement for the red safety bolt to guard against the risk of the handbrake unloading rapidly during maintenance and no sudden movement of the handbrake as sometimes seen with a badly adjusted brake set up.
4. Improved action in emergency situations when operated by the breakaway cable and combined with optimised mechanical force transmission through the handbrake lever.
5. The new **Oil Damped Energy Store** is pre-set during assembly and then sealed.