

Nussbaum Unique Technologies

SST

Nussbaum's patented system was developed for mobile columns constructed for lifting trains. The locking system is incorporated into the lifting system by having a rod that is threaded with a ball screw as the cylinder ram and a locking nut on the rod that locks on the cylinder barrel. This results in the efficiency of hydraulic power for lifting and lowering and a mechanical lock capable of holding the lift at any height.



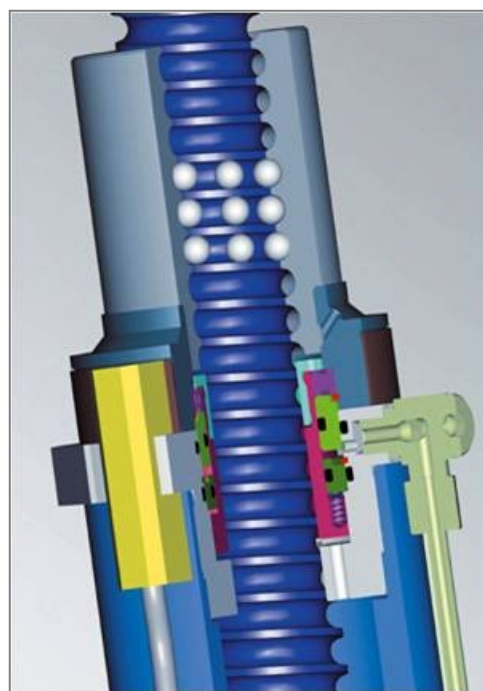
Proportional valve technology synchronously controls all cylinders while a rotary encoder on the nut feeds location data to the electronic system so synchronization of the lifting units is monitored to within a tenth of a millimetre.

SST Technology Products

- Power Lift (6 Tonne 2 Post Lift)
- MCS Wireless 5500 & 7500
(Wireless mobile columns with either 5.5 or 7.5 tonne capacity per column)

SST Features

- Heavy duty lifting
- Automatic locking at any height
- Allows for wireless synchronisation of up to 8 mobile columns
- Faster, less wear and less power consumption than mechanical screw.



SST Operation

One hydraulic circuit operates the ball screw locking nut to allow the cylinder to lock and unlock. The nut unlocks first before the cylinder begins the normal raising or lowering. As the cylinder rod moves, the nut follows the thread and rotates. The rotations are captured by the rotary encoder and due to the amount of rotation per thread; it is easy to capture high resolution data of the cylinder position. The cylinder position data is fed back to the electronic control system and this gets translated to the controller for the proportional valves to keep all cylinders at the same height.

SST Cylinder Service

Note that when servicing products with SST Cylinders that not only does the hoist have a serial number but each cylinder has its own unique identifying serial number. The SST cylinder serial number can be found stamped into the nut assembly.