



Anchoring the tripod and releasing the pier from trailer

Locked and sealed position – transport mode

The actuator is pulling the blue tripod well up against a floor sealing and the pink top plate down on the three grey fixed pipes. The well and the top plate are in that sense squeezed towards each other.

Readiness for unfolding, partial release

The actuator expands and thereby lowers the blue and red modules down towards the ground. Both modules are then hanging on to a ball-pin cylinder under the pink top plate. Which in turn still rests on the grey pipes. The well is however now disconnected from the floor.

Unfolding

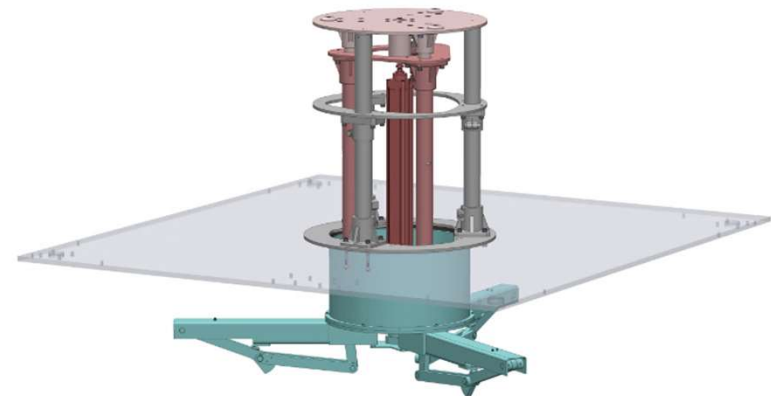
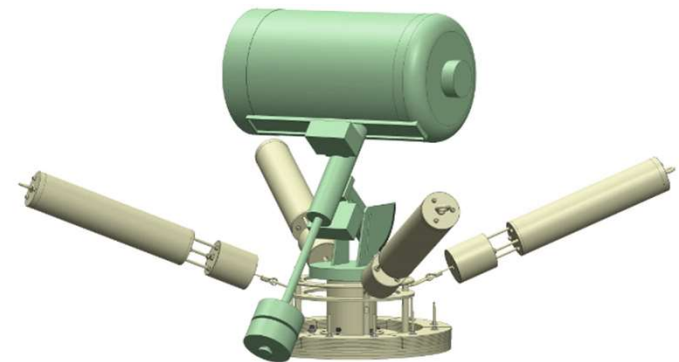
A central winch unwinds three leg wires which causes the legs to drop down until hitting the ground individually. The tripod remains in level regardless of the ground being inclined or uneven.

Drop-lock anchoring

The ball-pin is released which causes the blue and red modules to drop downwards with 130 kg. Which in turn instantly causes lever arms on the tripod to activate a locking mechanism for each leg. The tripod stays in level as before, but now anchored to the ground.

Readiness for observation mode, full release

The actuator expands and thereby lifts the pink top plate and docks it on to the free hanging yellow suspension platform. The top plate is now disconnected from the fixed pipes and the rig is fully released.





Lifting the astro gear and preparing for polar alignment

Detaching the damping trains

Compression blockers are attached on the damping trains while the actuator lifts the 280 kg yellow platform until it rests solely on the top plate. The damping trains are then detached and hooked up alongside the inner walls. They still remain attached to the pipe rigging structure.

Setting latitude and azimuth, rough polar alignment

The wedge's latitude angle is adjusted by tilting the scope. The yellow adapter cylinder is then rotated until the wedge is pointing north. The gear could be lowered prior to these steps, for convenience.

Rock solid at top position

The actuator lifts the gear to its expansion limit. Locking steel pins are inserted into open slots in the red outer telescopic tubes. The actuator then lowers the gear a few millimetres until it rests solely on the three pink inner tubes. Rock solid with a ground weight of 440 kg.

Precision levelling of wedge

The rig has now been converted into observation mode. The last fine-tuning of getting the wedge in perfect level could therefore be carried out. Which is done by adjusting three tilting bolts on the adapter plate.

Exact polar alignment

The final polar alignment of the wedge could now take place, usually with guidance from dedicated astro software.

