

CEMENTING AND WEDGING TOP PACKER (CWTP)



CEMENTING AND WEDGING TOP PACKERS (CWTP) are used to pressure grout unstable ground formations and fault zones or in conjunction with Cementing Wedging Bottom Packers (CWBP) to repair deteriorating up hole fault zones, thereby saving hole below fault and costly re-drill.

Packer has a inlet port on top as illustrated (right) and a non return valve, the top port is opened while setting the packer, rods are left in position with seal on packer engaged with rod and grouting can begin. Upon grouting, the slips retaining tube and cup are ejected, opening outlet port at bottom of packer.

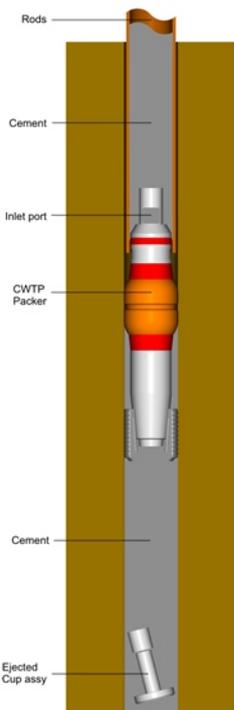
Permeability testing and ground stabilization can be done after hole is completed, rods are run to lowest test location, a Cementing Wedging Top Packer (CWTP) is used to test this location and also grout if required. A Cementing Wedging Bottom Packer (CWBP) is then used below the next section of hole to be tested, a CWTP packer is then used at the top of this section to do test and grout if required, and so on.

No time is lost due to rod trips or waiting for cement to set, the time and cost savings using this method could be considerable as only one rod trip is required for multi testing and grouting.

See also: Sub Set Grouting Packers (SSGP)

Construction: Aluminium and Urethane

INSTRUCTIONS FOR USE



Lower open rod line (no barrel) to required location, a shoe bit with an internal chamfer and internally flush with rod must be used to center rod line

Insert Cementing and Wedging Top Packer until cable tie on slips is level with top of rod, remove cable tie and push packer to below thread and connect head rod, tighten rod in chuck, set pressure relief valve at 400 PSI or 27 Bar and pump packer down, a high pressure reading and relief valve discharge indicates packer has locked in hole.

Slowly raise rods (*) while maintaining fluid pressure until pressure drop occurs, indicating that top inlet port is partially open, raise rods a further 35mm then lower rods 45mm to open top port fully, packer is then ready for use and fluid pressure can then be adjusted as required
Grout should be properly mixed to avoid blocking inlet port, when grouting is completed, back fill hole while pulling rods

If rods are accidentally raised from packer before testing or grouting is completed, stop pump and lower rods to re-engage seal on packer.

(*) 155mm for BQ, 165mm for NQ and 180mm for HQ packers maximum, please ensure rods are internally free from grease and scale before inserting and pumping down packer.

Note: do not put weight on packer with open rod line, packer could jam in rod and pulled up hole.