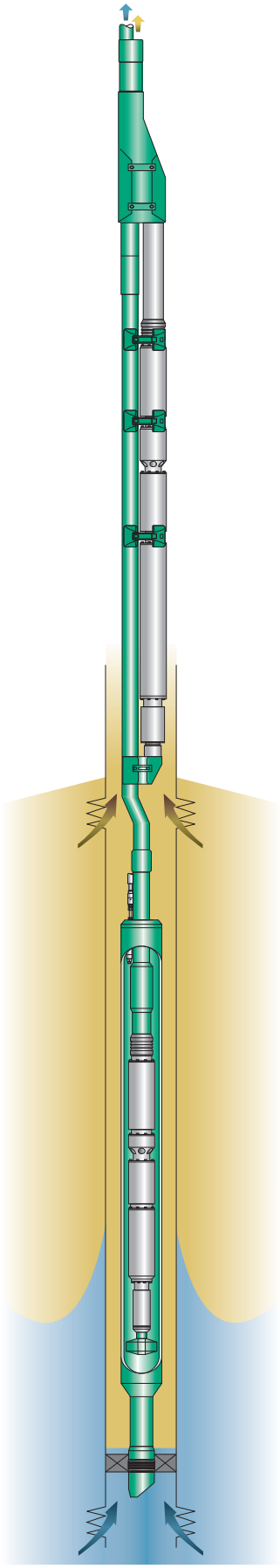
# Dual Concentric Multiple Zone



As the originators of dual ESP technology, RMSpumptools' in-depth background and expertise in dual ESPs, translates into an unparalleled range of systems that cater for the wide variety of completion needs demanded by today's sophisticated ESP user.

## Description

A dual ESP system, using two independent ESP systems that separately and individually produces two separate production zones in the same well, without co-mingling the fluids.

## Operation

The Upper Zone is produced by the Upper ESP which is configured with the RMSpumptools Dual-Flow Y-Tool. The Lower ESP, which is encapsulated in the successful RMSpumptools pressure-tight shroud (CAN) suspended off the bypass of the Upper ESP, pumps the Lower Zone. The tailpipe of the Shroud is fitted with a Seal Mandrel that engages into the PBR of a permanent packer, which separates the two production zones.

Co-mingling of fluid is prevented by use of a separate concentric tubing string (inside the main production string), creating a micro annulus. The concentric tubing is fitted with a Seal Bore in the "Dual-Flow Y-Tool".

## Application

Dual Zone ESP pumping utilising a single well bore, where anti co-mingling is required.

## Advantage

A low cost solution to dual zone pumping, requiring no down-hole "intelligent" technology. Only one well required to produce two zones. No down-hole production measurement equipment is required because accurate measurement of production of each zone can be done at surface. Producing from two zones in one wellbore eliminates the need of drilling a second well.