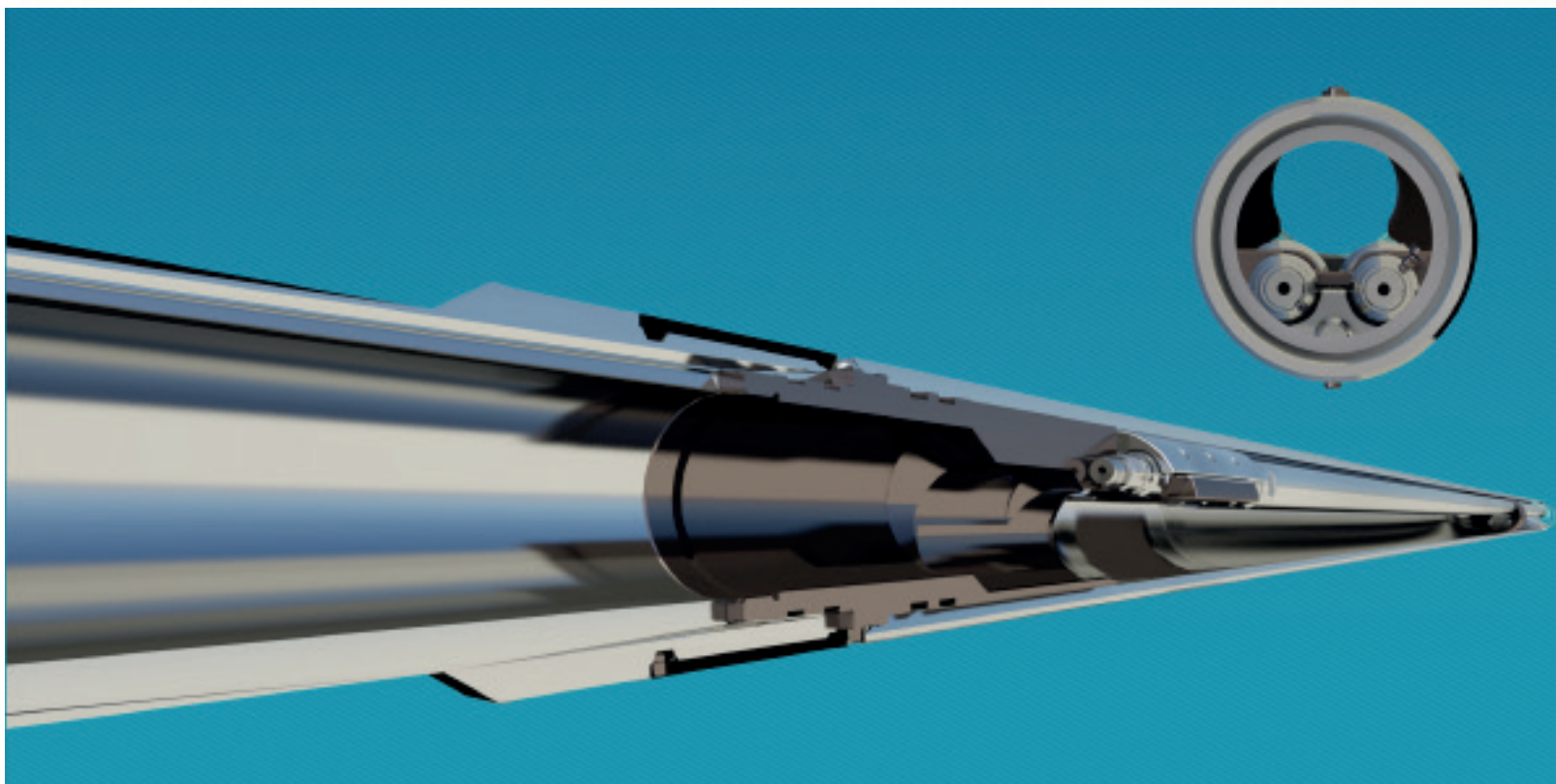


## Expro Petrotech® 15K TCS Carrier

Expro Petrotech 15K TCS Carrier is a tool for bottom hole sampling of petroleum reservoirs. The 15K tubing conveyed carrier can provide up to 2.24 litres of single phase reservoir fluid by using four single-phase samplers. Carrier sections can be added if additional samples is sequenced. Each containing two bottom hole samplers.



The tool can be operated in extreme wells with high pressure and temperature without compromising the safety. Activation by individual rupture discs allows the operator to choose the exact time of sampling, and each sampler may be activated individually. Non-reactive material makes the tool excellent for trace element sampling and sampling in highly corrosive hydrocarbon fluids containing CO<sub>2</sub>, H<sub>2</sub>S and brines.

The material of the tool provides insignificant loss of H<sub>2</sub>S from the sample. It has no requirement for re-establishing single-phase at surface. Sample transfer is performed rapidly and without jeopardizing the integrity of the sample. No wireline operations are necessary to collect high quality samples.

### Benefits

Can be operated in HPHT wells without compromising the safety. Activation by individual rupture discs allows the operator to choose the exact time of sampling, and each sampler may be activated individually.

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## Expro Petrotech® 15K TCS Carrier

### Features

#### High Pressure & High Temperature

The working pressure and temperature of the carrier is 15,000 psi @ 400 °F (full differential).

#### Triggered by annulus pressure operated rupture discs

Each sampler can be activated individually and at the operator's chosen time by rupture discs.

#### Non-reactive

The carrier and samplers provide service in the most hostile well environments with extreme H<sub>2</sub>S levels.

#### Positive displacement operation

A slow positive displacement of the floating piston ensures no pressure differential across the sample entry ports when using single-phase samplers.

#### Full bore

The carrier ID is full bore 2.25", 23 mm offset.  
 Max. wireline tool OD: 1.75"

### Technical Specification

Sample capacity:	2.24 liters (4 x 560 cc) single phase.
Full-bore:	2.25"
OD/ID:	5.5"/2.25"
Main internal bore offset:	23 mm
Max temperature:	204 °C / 400 °F
All fluid exposed parts according to:	NACE MR-175 / ISO 15156
Max diff pressure internal:	15,000 psi @ 400 °F (test pressure: 16,500 psi)
Max diff pressure external:	15,000 psi @ 400 °F
Design spec:	API 5C3
Tensile rating:	300,000 lbf @ 400 °F and 0 psi
Make up length:	61ft with PCS samplers 67ft with SPS samplers
Total weight:	1000 kg (PCS tools + pup joint)
End connections:	Hydril 4.5" 23.7" lb/ft Type 563

