



COMPLETION SERVICES

## SECTION 5

# Production Packers



## **PRODUCTION PACKERS**

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## CompPro™ Elite Packer

The Superior Completion Services **CompPro™ Elite Retrievable Production Packer** is a family of workstring conveyed, hydraulic-set, retrievable, sealbore production packers. These packers are designed specifically for high-pressure high-temperature (HPHT) environment and are qualified to the most stringent API11D1 validation grade V0-H.

### APPLICATIONS

- Production packer
- Pass-thru packer for intelligent completion
- Horizontal and vertical wells
- Zonal isolation; production isolation

### Features and Benefits

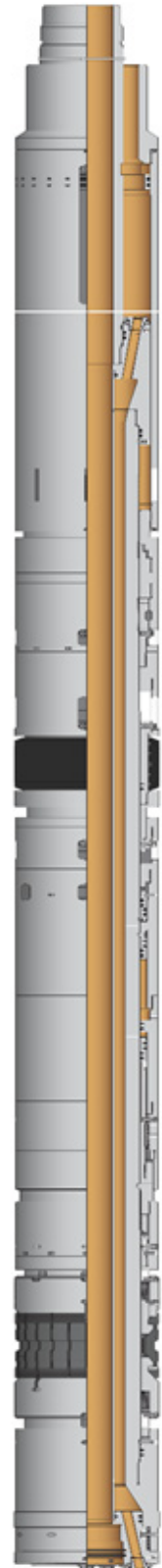
- Rated up to 17,500 psi (1207 bar) and 300°F (149°C)
- API 11D1 – V0H validation ensures gas-tight sealing in HPHT and severe downhole environment
- Primary cut-to-release with a secondary external retrieval option
- Consists of a dedicated primary and secondary cutting zones for contingency
- Single sealing packing element with proprietary backup for reliable performance under challenging conditions
- Proprietary slip design for 360-degree engagement and force distribution, withstand high tensile - compressive loads, and easy retrieval
- Active zero-motion feature to prevent unnecessary packer movement under extreme stress or differential unloads
- QTY 3x ½ in (12.7 mm), 4x ¼ in (6.35 mm) of maximum pass-throughs
- Seamless conversion to non-Pass-thru packer to meet the needs of various applications
- API 11D1 validation and SCS quality management system API Q1 certification allows for optional API monogram

### TECHNICAL DATA

Casing sizes	10 1/8 in., 9 7/8 in. and 7 3/4 in. (non PT). (257.2 mm, 250.8 mm and 196.85 mm)
Differential pressure rating	17,500 psi (1,207 bar)
Temperature rating	300°F (149°C)

### REFERENCES

Completion tools seal systems data sheet



## CompPro™ TIP Packer

The Superior Completion Services **CompPro™ Testable Isolation Production (TIP) Packer** is a versatile, hydraulically set, high-performance, tubing retrievable packer that includes several design features to enhance reliability. The packer is designed with dual high-pressure sealing elements to ensure a positive seal. The dual elements enable high-pressure integrity tests without exposing liner tops or casing strings to test pressures. This configuration also provides a means of pressure testing the packer when positioned between producing intervals.

The packer is also designed with no mandrel movement during setting, allowing multiple packers to be set simultaneously. The TIP packer is certified to handle 10,000 psi (68.9 MPa) differential pressures in both oil and gas environments. The packer is retrievable, and several release options are available.

### APPLICATIONS

- High-pressure, high-temperature wells
- Multizone completions

### Features and Benefits

- Multiple release options available, including straight pull and cut-to-release
- One-piece mandrel prevents movement during setting
- Dual high-pressure and self-energizing sealing elements enhance packer seal and differential rating
- Unique pressure-sensitive interlock feature prevents premature setting
- Bidirectional slips
- Rotationally locks in running, set and release positions
- Pressure-assisted seals: above, internal and below
- Gauge ring positioned at lower end of packer
- Maximum slip area for high loads and pressure differentials



## CompPro™ TIP Packer

### TECHNICAL DATA

Differential pressure rating 10,000 psi (68.9 MPa)  
Temperature rating 350°F (177°C)

CompPro™ TIP Packer									
Casing Size		Tool Size		Casing Weight Range		Maximum OD		Minimum ID	
inch	mm	lb	kg	inch	mm	Inch	mm	Inch	mm
7	177.8	7.000 x 3.00	177.8 x 76.2	20.0-26.0	29.7-38.6	6.07	154.0	2.98	75.6
		7.000 x 3.00	177.8 x 88.9	32.0	47.6	5.88	149.4	2.93	74.2
		7.000 x 3.00	177.8 x 88.9	35.0-41.0	52.1-61.0	5.63	142.9	2.97	75.4
7 5/8	193.6	7.625 x 3.00	193.6 x 76.2	29.7-39.0	44.2-58.0	6.44	163.5	2.99	75.8
7 3/4	196.8	7.750 x 3.00	196.8 x 76.2	46.1	68.5	6.42	162.9	2.68	67.9
		9.625 x 3.00	244.4 x 76.2	53.5	79.6	8.31	211.0	2.97	75.4
		9.625 x 3.75	244.4 x 95.2	53.5	79.6	8.31	211.0	3.72	94.4
9 5/8	244.54	9.625 x 4.00	244.4 x 101.6	53.5	79.6	8.31	211.0	3.94	100.1
		9.875 x 3.00	250.8 x 76.2	62.8-65.1	93.4-96.8	8.42	213.9	2.86	72.6
9 7/8	250.8	9.875 x 3.75	250.8 x 95.2	62.8	93.4	8.42	213.9	3.72	94.4
		10.125 x 3.00	257.1 x 76.2	79.20	117.8	8.42	213.9	2.97	75.4

## CompPro™ Dual Packer

The Superior Completion Services **CompPro™ Dual Packer** is a hydraulic-set, dual string production packer. The packer is constructed on a short rigid frame with the sealing elastomers and a setting chamber positioned between opposing slips. Both production tubing strings are installed as the packer is deployed. Tubing hangers are normally landed and tested prior to packer setting. The packer is V-3 certified for service up to 5,500 psi according to API 11D1 specifications. An adjustable mechanical release requires tension on the long string to shear release the long string mandrel from the lower slip cone.

### APPLICATIONS

- Deviated and horizontal wells
- High-volume instrumented applications
- Well monitoring, gas venting, chemical injection and hydraulic-line access
- Multizone isolation

### Features and Benefits

- Stackable for multizone applications
- Three element sealing system
- Secondary Setting: Applied Hydraulic Pressure Long String Internal
- Setting Chamber below packer elements; extends production sealing life
- No mandrel movement during setting; ideal for setting after wellhead installation
- Pressure assisted internally and on the above annulus during production
- Release: Adjustable predetermined Long String Over-Pull with Sequential Upper Slip disengagement (Optional: Scoop Head with J-Latch and various types of seals)



## CompPro™ Dual Packer

### TECHNICAL DATA

CompPro™ Dual Packer									
CASING SIZE					PACKER				
		ID		Gauge OD	Long String		Short String		String Set
OD	LBS	Min	Max	Max	Size/ID Min	Conn/Cust	Size ID Min	Conn/Cust	
7.00	17-23	6.284	6.629	6.181	2.375/1.930	2.375/4.7#	2.375/1.930	2.375/4.7#	Short
7.00	26-32	5.990	6.380	5.938					
7.625	24-29	6.781	7.129	6.672	2.875/2.370	2.875/6.5#	2.375/1.930	2.375/4.7#	Short
7.625	33-39	6.510	6.882	6.410					
9.625	43-47	8.562	8.892	8.465	3.500/2.872	3.500/9.3#	3.500/2.872	3.500/9.3#	Short
9.625	46-53	8.404	8.822	8.310					

## ComPlete™ MST System Isolation Packer

The Superior Completion Services **ComPlete™ MST System Isolation Packer** is an integral part of Superior Completion's multizone singletrip (MST) system, providing zonal isolation between reservoirs. This hydraulically set packer is frac-rated and provides two elements with a testable feature to confirm the packer is fully set. If required, the packer can be retrieved with straight pull. The FlowSafe™ WR Safety Valve can be installed as a primary safety valve landed in a hydraulic nipple. It can also be used to remediate a failed Tubing-Retrieveable (TR) Safety Valve.

The ComPlete MST System Isolation Packer is adapted from other field-proven production and service packer designs. The packer allows multiple reservoirs to be isolated and treated in a single trip.

### APPLICATIONS

- Multizone reservoirs
- Zonal isolation
- Deepwater
- Sand control

### Features and Benefits

- Hydraulically set
- Dual elements with a testable feature
- Hold down buttons for frac rating
- Straight-pull retrieval
- Allows isolation and treatment of multiple zones in a single trip
- Additional time savings as multiple packers can be set and tested at once





## ComPlete™ MST System Isolation Packer

### TECHNICAL DATA

ComPlete™ MST System Isolation Packer									
Casing Size		Weight Range		Minimum ID		Pressure Rating		Minimum Test Pressure	
inch	mm	lb	kg	inch	mm	psi	MPa	psi	MPa
7	177.8	23.0	10.4	2.75	69.9	10,000	69.0	3,500	24.1
7	177.8	26.0	11.8	2.75	69.9	10,000	69.0	3,500	24.1
7	177.8	26-32	13.2-14.5	2.75	69.9	10,000	69.0	3,500	24.1
7	177.8	32-38	14.5-17.2	2.75	69.9	10,000	69.0	3,500	24.1
7 5/8	193.7	29.7	13.5	2.75	69.9	10,000	69.0	3,500	24.1
9 5/8	244.5	47-53.5	21.4-24.3	3.75	95.3	10,000	69.0	3,500	24.1
9 5/8	244.5	47-53.5	21.4-24.3	5.13	130.2	10,000	69.0	3,500	27.6
9 7/8	250.8	62.800	28.5	3.75	95.3	10,000	69.0	3,500	24.1
10 1/8	257.2	72.900	33.1	3.75	95.3	10,000	69.0	3,500	24.1

### REFERENCES

ComPlete™ MST system data sheet