

# COMPLETION OIL TOOLS

## WIRELINE SET DRILLABLE BRIDGE PLUG

□ CT-WBP | CT95501

## MECHANICAL SET BRIDGE PLUG

□ CT-MBP | CT95506

## MECHANICAL SET CEMENT RETAINER

□ CT-MCR | CT95706

## WIRE LINE SET CEMENT RETAINER

□ CT-WCR | CT95502

### DESCRIPTION:

These are field-proven modular designed high performance drillable bridge plugs, commonly used for zonal isolation during stimulation or cementing jobs, or for temporary and permanent abandonments.

This can easily be converted to a Cement Retainer. A modified version of this Bridge Plug is available for use primarily in gas well applications.

Simple design allows the upper portion of the body and the bridging plug to be drilled out, generating pressure equalization across the tool before drilling out the upper slips.

Cement retainer ideal for most remedial cementing applications. It is designed to function as a drillable squeeze packer which after cementing acts as a plug trapping to squeeze pressure on the cement below the retainer and isolating the newly cemented area from the hydrostatic pressures above the cement retainer.

Changing the upper slip enable the bridge plug to be set mechanically or on a wire line setting tool assembly. It is easily converted to a cement retainer.

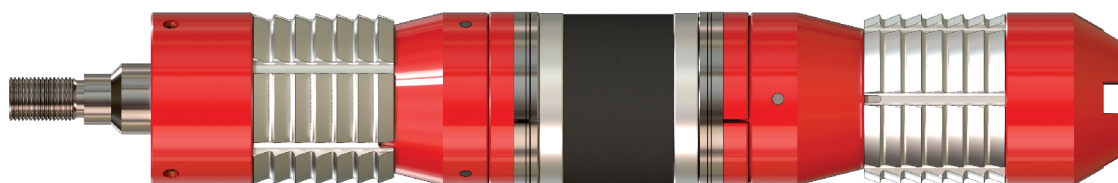
### FEATURES & BENEFITS:

- ✓ Choices in setting such as wire line, mechanical or hydraulic.
- ✓ High Performance - 10,000 psi and 400° F.
- ✓ Superior running characteristic i.e. enormous annulus clearance for faster & safer run-in.
- ✓ With simple kit Cement Retainer easily converted to bridge plug.
- ✓ Body Lock Ring: Traps setting force in element to maintain pack-off during pressure reversals.
- ✓ The rotationally locked, cast-iron components enable a fast & easy drill out to save rig time.



## TECHNICAL SPECIFICATIONS FOR TUBING SIZE (CT-WBP) :

Casing Specification				Bridge Plug Specification			
Casing /Tubing		Preferred Casing ID Range		Product Size	Max. OD ( In.)		Diff. Presure Ratings (PSI)
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)		Max. OD (in.)	Top End Connection	
2 3/8	4.0-5.8	1.78	2.074	P1	1.75	11/16 OD, 16 TPI National RH Thread	6000
2 7/8	11.0-11.65						
	7.9-10.7	2.091	2.323	P2	1.968		
	6.4-6.5	2.34	2.525	P3	2.22		
3 1/2	15.68-16.81						
	10.2-13.3	2.602	2.988	P4	2.562		
4	22.8						
3 1/2	5.75-10.2	2.867	3.258	P5	2.75		
4	14.8-19.0						
4 1/2	26.5						
4	5.6-14	3.34	3.732	P6	3.14		
4 1/2	17.7-24.6						



TUBING SIZE BRIDGE PLUG

### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

## TECHNICAL SPECIFICATIONS FOR TUBING SIZE (CT-WCR) :

Casing /Tubing		Preferred Casing ID Range		Product Size	Cement Retainer			Diff. Presure Ratinsgs (PSI)	
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)		Max. OD (in.)	Top End Connection	Seal ID (In)		
2 3/8	4.0-5.8	1.78	2.074	P1	1.75	11/16 OD, 16 TPI National RH Thread	0.715	6000	
2 7/8	11.0-11.65						0.813	10000	
	7.9-10.7	2.091	2.323	P2	1.968				
	6.4-6.5	2.34	2.525	P3	2.22				
3 1/2	15.68-16.81								
	10.2-13.3	2.602	2.988	P4	2.562				
4	22.8								
3 1/2	5.75-10.2	2.867	3.258	P5	2.75				
4	14.8-19.0								
4 1/2	26.5								
4	5.6-14	3.34	3.732	P6	3.14				
4 1/2	17.7-24.6								

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## TECHNICAL SPECIFICATIONS (CT-WBP/ CT-MBP) :

Casing Specification				Bridge Plug Specification				
Casing /Tubing		Preferred Casing ID Range		Product Size	Max. OD ( In.)		Diff. Presure Ratinsgs (PSI)	API Validation Grade
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)		Max. OD (in.)	Top End Connection		
4 1/2	9.5-15.1	3.826	4.09	X1	3.593	2", 6 TPI Special Buttress Straight & Left Hand Box Thread	10000	V3-R
5	11.5-20.8	4.154	4.56	Y1	3.937			
5 1/2	26.0-32.3			X2	4.312			
	13-23	4.67	5.044					
5 3/4	27.09	4.805		Y2	4.937			
6	18-26	5.14	5.552					
7	49.5			X3	5.41			
6 5/8	17-32	5.595	6.135	Y3	5.687			
7	32-44							
	17-38	5.92	6.538	X4	6.312			
7 5/8	45.3							
	20-39	6.625	7.125	X5	7.125			
7 3/4	46.1							
8 5/8	24-49	7.511	8.097	Y6	9			
8 3/4	49.7							
9 5/8	29.3-58.4	8.435	9.063	X6	8.125	8000		
9 3/4	59.2					5000		
9 7/8	62.8					4000		
10 3/4	60.7-81	9.25	9.66	Y6	9	2 7/8, 6 TPI Special Buttress Straight & Left Hand Box Thread	5000	
	32.75-60.7	9.66	10.192	X7	9.437			
11 3/4	60.0-83.0	10.192	10.772	Y7	9.937		4000	
	42-60	10.772	11.15	X8	10.437			
13 3/8	85-102	11.633	12.159	Y8	11.562	3000		
	48-80.7	12.175	12.715	X9	12			
13 1/2	81.4							
13 5/8	88.2							
16	109.0-146.0	14	14.75	X11	13.915	2000		
	55.0-84.0	14.7	15.4	Y11	14.585			
18 5/8	76-96.5	17.648	17.86	X18	17.25			
20	94-133	18.73	19.124	Y20	18.375			

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.





## TECHNICAL SPECIFICATIONS (CT-WCR/ CT-MCR) :

Casing Specification				Cement Retainer Specification						
Casing /Tubing		Preferred Casing ID Range		Product Size	Cement Retainer			Diff. Presure Ratinsgs (PSI)		
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)		Max. OD (in.)	Top End Connection	Seal ID (In)			
4 1/2	9.5-15.1	3.826	4.09	X1	3.593	2", 6 TPI Special Buttress Straight & Left Hand Box Thread	1.345	10000		
5	11.5-20.8	4.154	4.56	Y1	3.937					
5 1/2	26.0-32.3								4.67	5.044
	13-23									
5 3/4	27.09	4.805		Y2	4.937					
6	18-26	5.14	5.552							
7	49.5									
6 5/8	17-32	5.595	6.135	X3	5.41	2 7/8, 6 TPI Special Buttress Straight & Left Hand Box Thread	2.000			
7	32-44								5.92	6.538
	17-38									
7 5/8	45.3	6.625	7.125	X4	6.312					
	20-39									
7 3/4	46.1	7.511	8.097	X5	7.125					
8 5/8	24-49									
8 3/4	49.7									
9 5/8	29.3-58.4	8.435	9.063	X6	8.125			8000		
9 3/4	59.2							5000		
9 7/8	62.8							4000		
10 3/4	60.7-81	9.25	9.66	Y6	9			2 7/8, 6 TPI Special Buttress Straight & Left Hand Box Thread	2.000	
	32.75-60.7	9.66	10.192	X7	9.437					
11 3/4	60.0-83.0	10.192	10.772	Y7	9.937					4000
	42-60	10.772	11.15	X8	10.437					3000
13 3/8	85-102	11.633	12.159	Y8	11.562					
	48-80.7	12.175	12.715	X9	12					
13 1/2	81.4									
13 5/8	88.2									
16	109.0-146.0	14	14.75	X11	13.915	2000				
	55.0-84.0	14.7	15.4	Y11	14.585					
18 5/8	76-96.5	17.648	17.86	X18	17.25					
20	94-133	18.73	19.124	Y20	18.375					

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## TOP SET WIRELINE DRILLABLE BRIDGE PLUG

### CT-WTBP | CT95515

#### DESCRIPTION:

This Wire line Adapter Kit is used to set bridge plug and cement retainers (CT-WBP or CT-WCR) by coupling them with wire line pressure setting assembly while set thru wire line and with hydraulic setting tool while by drill pipe or tubing string in the well bore.

#### FEATURES:

The Model CT-WBP-AK Wire line Adapter Kit is used to couple a wire line pressure setting assembly or hydraulic setting tool to the CT-WBP or CT-WCR.



CT95515

## TECHNICAL SPECIFICATIONS (CT-WTBP) :

Casing Specification				Bridge Plug Specification			
Casing /Tubing		Preferred Casing ID Range		Product Size	Max. OD ( In.)		Diff. Presure Ratings (PSI)
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)		Max. OD (in.)	Top End Connection	
2 3/8	4.0-5.8	1.78	2.074	P1	1.75	11/16 OD, 16 TPI National RH Thread	6000
2 7/8	11.0-11.65						10000
	7.9-10.7	2.091	2.323	P2	1.968		
	6.4-6.5	2.34	2.525	P3	2.22		
3 1/2	15.68-16.81						
	10.2-13.3	2.602	2.988	P4	2.562		
4	22.8						
3 1/2	5.75-10.2	2.867	3.258				
4	14.8-19.0			P5	2.75		
4 1/2	26.5						
4	5.6-14	3.34	3.732				
4 1/2	17.7-24.6			P6	3.14		

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## WIRELINE ADAPTER KIT

### □ CT-WAK | CT95606

#### DESCRIPTION:

This Wire line Adapter Kit is used to set bridge plug and cement retainers (CT-WBP or CT-WCR) by coupling them with wire line pressure setting assembly while set thru wire line and with hydraulic setting tool while by drill pipe or tubing string in the well bore.

#### FEATURES:

The Model CT-WBP-AK Wire line Adapter Kit is used to couple a wire line pressure setting assembly or hydraulic setting tool to the CT-WBP or CT-WCR.



CT95606

## TECHNICAL SPECIFICATIONS (CT-WAK) :

Casing/ TubingSpecification		BP/CR Specification		Wire Line Adapter Kit		
OD (in.)	PPF Range	Product Size	Max OD (in.)	Product Size	Setting Sleeve OD (in.)	Model “E-4” Pressure Setting Assembly
2 3/8	4.0-5.8	P1	1.75	P1	1.75	5
2 7/8	11.0- 11.65					
	7.9- 10.7	P2	1.968	P2	1.968	
	6.4-6.5	P3	2.22	P3	2.22	
3 1/2	15.68-16.81					
	10.2-13.3	P4	2.562	P4-P5	2.75	
4	22.8					
3 1/2	5.75-10.2	P5	2.75			
4	14.8-19.0					
4 1/2	26.5			P5-P6	3.000	
4	5.6-14	P6	3.14			
4 1/2	17.7-24.6					
4 1/2	9.5 – 15.1	X1	3.593	X1	3.5	10
5	11.5 - 20.8	Y1	3.937	Y1-X2	3.812	
5 1/2	13 - 23	X2	4.312			
6	14 - 26	Y2	4.937	Y2	4.937	
	10.5 - 12					
6 5/8	17-32	X3	5.41	X3-Y3	5.375	
7	32 - 44					
	17-38					
7 5/8	20 - 39	X4	6.312	X4	6.312	
8 5/8	24 - 49	X5	7.125	X5	7	
9 5/8	29.3 – 58.4	X6	8.125	X6	8	
10 3/4	60.7 - 81	Y6	9	Y6	8.875	
	32.75 - 60.7	X7	9.437	X7	9.437	
11 3/4	60.0 - 83.0	Y7	9.937	Y7	9.93	
	42 - 60	X8	10.437	X8	10.437	
13 3/8	85 - 102	Y8	11.562	Y8	11.5	
	48 – 80.7	X9	12	X9	11.75	
16	109.0 - 146.0	X11	13.915	X11	13.9	
	55.0 - 84.0	Y11	14.585	Y11	14.125	
18 5/8	76-96.5	X18	17.25	X18	17.125	
20	94-133	Y20	18.375	Y20	17.375	

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



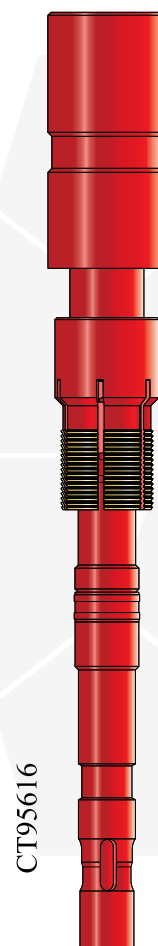
## SNAP LATCH STINGER SUB

□ CT-SSB | CT95616

### DESCRIPTION:

The COT Model CT-SSB Stinger Sub is used with COT Model Wire line Set Cement Retainers. It features a snap-in, snap-out-type latch that provides a surface indication of the stinger being landed in the cement retainer (giving assurance that the sleeve valve is open) or the stinger sub being removed from the cement retainer (and the sleeve valve closed).

A model CT-CU Control Unit is made up above the Stinger Sub and provides a centering device for entering the retainer bore.



CT95616



## TECHNICAL SPECIFICATIONS (CT-SSB) :

Casing/ TubingSpecification		CR Specification		Snap Latch Stinger Sub		
OD (in.)	PPF Range	Product Size	Max OD (in.)	Product Size	Max. OD (in.)	*Top End Connection
2 3/8	4.0-5.8	P1	1.75	P1-P2	1.75	1.050, 10RD EU BOX UP
2 7/8	11.0- 11.65		P2			
	7.9- 10.7					
	6.4-6.5					
3 1/2	15.68-16.81	P3	2.22	P2-P6	2.22	
	10.2-13.3	P4	2.562			
4	22.8					
3 1/2	5.75-10.2	P5	2.75			
4	14.8-19.0					
4 1/2	26.5					
4	5.6-14	P6	3.14			
4 1/2	17.7-24.6					
4 1/2	9.5 – 15.1	X1	3.593			X1-Y2
5	11.5 - 20.8	Y1	3.937			
5 1/2	13 - 23	X2	4.312			
6	14 - 26	Y2	4.937			
	10.5 - 12					
6 5/8	17-32	X3	5.41	X3-Y20	3.668	2 7/8, 6.5 PPF EU Box Up
7	32 - 44					
	17-38					
7 5/8	20 - 39	X4	6.312			
8 5/8	24 - 49	X5	7.125			
9 5/8	29.3 – 58.4	X6	8.125			
10 3/4	60.7 - 81	Y6	9			
	32.75 - 60.7	X7	9.437			
11 3/4	60.0 - 83.0	Y7	9.937			
	42 - 60	X8	10.437			
13 3/8	85 - 102	Y8	11.562			
	48 – 80.7	X9	12			
16	109.0 - 146.0	X11	13.915			
	55.0 - 84.0	Y11	14.585			
18 5/8	76-96.5	X18	17.25			
20	94-133	Y20	18.375			

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## CONTROL UNIT

### □ CT-CU | CT95701

#### DESCRIPTION:

The Model CT-CU Control Unit is made up above the stinger sub and provides a centring device for entering the retainer bore.

#### TECHNICAL SPECIFICATIONS (CT-CU) :

Casing/ TubingSpecification		CR Specification		CONTROL UNIT				
OD (in.)	PPF Range	Product Size	Max OD (in.)	Product Size	Max. OD (in.)	Min. ID (in.)	End Connection	
4 1/2	9.5 – 15.1	X1	3.593	41	5.25	0.875	2 3/8, 4.7 PPF EU Box Up x Pin Down	
5	11.5 - 20.8	Y1	3.937					
5 1/2	13 - 23	X2	4.312	45	6.188			
6	14 - 26	Y2	4.937					
	10.5 - 12							
6 5/8	17-32	X3	5.41	47	7.688	2 7/8, 6.5 PPF EU Box Up x Pin Down		
7	32 - 44							Y3
	17-38							
7 5/8	20 - 39	X4	6.312	49A			1.312	3 1/2, 9.3 PPF EU Box Up x Pin Down
8 5/8	24 - 49	X5	7.125	49B	8.313			
9 5/8	29.3 – 58.4	X6	8.125	51	10			
10 3/4	60.7 - 81	Y6	9	53	13.109			
	32.75 - 60.7	X7	9.437					
11 3/4	60.0 - 83.0	Y7	9.937	55				
	42 - 60	X8	10.437					
13 3/8	85 - 102	Y8	11.562	57	14.625			
	48 – 80.7	X9	12					
16	109.0 - 146.0	X11	13.915	59A	17.266			
	55.0 - 84.0	Y11	14.585	59B	17.766			
18 5/8	76-96.5	X18	17.25	61	20			
20	94-133	Y20	18.375	63	21.25			

#### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
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CT95701

# COMPLETION OIL TOOLS

## SNAP LATCH SETTING TOOL

□ CT-SLST | CT95703

### DESCRIPTION:

The Snap Latch Setting Tool is a mechanical setting tool used to set the Bridge Plugs and Cement Retainers.

It possess a built-in snap-latch feature which allows the setting tool to be latched to the product with set-down weight and released with up strain and rotation after setting the product. This essentially allows the setting tool to function as a snap latch stinger sub which provides an upward stop as the tubing is raised. At this stop the valve is closed but the stinger sub seal is still in the bore of the retainer. At this position in the running string internal pressure test could be carried out.

### FEATURES & BENEFITS:

- ✓ Allows single run for squeeze work
- ✓ Locked to cement retainer or bridge plug to avoid premature setting or loss
- ✓ Top slips partially covered to protect from accidental damage
- ✓ Modular design
- ✓ Can set other manufacture cement retainers or bridge plugs



BRIDGE PLUG & CEMENT RETAINER

CT95703



## TECHNICAL SPECIFICATIONS (CT-SLST) :

Casing/ TubingSpecification		Bridge Plug / Cement Retainer Specification			Snap Latch Setting Tool			
OD (in.)	PPF Range	Product Size	Seal Bore (In)	Max OD (in.)	Poduct Size	Setting Sleeve OD (in.)	Max. OD (in.)	Min. ID (in.)
4 1/2	9.5 – 15.1	X1	1.345	3.593	X1 - Y1	3.593	5 1/4	0.875
5	11.5 - 20.8	Y1		3.937				
5 1/2	13 - 23	X2		4.312	X2	4.312	6 3/16	
6	14 - 26	Y2		4.937	Y2	4.937	6 13/16	
	10.5 - 12							
6 5/8	17-32	X3	2.000	5.41	X3	5.375	7 11/16	1.312
7	32 - 44			Y3	5.687			
	17-38	X4			6.312	X4	6.312	
7 5/8	20 - 39	X5		7.125	X5	7.125	9 9/16	
8 5/8	24 - 49	X6		8.125	X6	8.125	10	
10 3/4	60.7 - 81	Y6		9	Y6	8.875	13 7/64	
	32.75 - 60.7	X7		9.437	X7	9.437		
11 3/4	60.0 - 83.0	Y7		9.937	Y7	9.93		
	42 - 60	X8		10.437	X8	10.437		
13 3/8	85 - 102	Y8		11.562	Y8	11.562	14 5/8	
	48 – 80.7	X9		12	X9	12		
16	109.0 - 146.0	X11		13.915	X11	13.9	17 17/64	
	55.0 - 84.0	Y11		14.585	Y11	14.57	17 49/64	
18 5/8	76-96.5	X18		17.25	X18	17.25	20	
20	94-133	Y20		18.375	Y20	18.373	21 1/4	

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## WIRELINE SET RETRIEVABLE BRIDGE PLUG

□ CT-WRBP | CT95503

□ CT-WRBP-2 | CT95512

### DESCRIPTION:

This is a wire line set, retrievable plug capable of holding differential pressure from above or below. The plug may be set on conventional wire line or hydraulic packer-setting tools. The short design is easy to retrieve on tubing, coil tubing or sand line, using the appropriate retrieval tool.

When the retrieving tool engages the top of the bridge plug, the equalizing valve opens before the bridge plug is released, preventing the bridge plug from moving with differential pressure.

### FEATURES & BENEFITS:

- ✓ Wire line, hydraulic or coiled tubing set.
- ✓ Caged bi-directional carbide/carburized slips for long life and durability.
- ✓ Also available in barrel Slip design.
- ✓ Straight pull and Rotational safety release mechanism.
- ✓ Optional sand line or coiled tubing retrieval.
- ✓ Compact design for tight doglegs, short lubricators.
- ✓ Simple, rig-friendly operation.



BRIDGE PLUG & CEMENT RETAINER



## TECHNICAL SPECIFICATIONS (CT-WRBP & CT-WRBP-2) :

Casing Specification				Bridge Plug Specification			
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)	Max. OD (in.)	Top End Connection	Differential Pressure Ratings (psi)	API Validation Grade
3 1/2	7.7-9.2	2.992	3.068	2.867	1.900, 2.9 PPF EU Pin Down	7,500	V0-R / V3-R
4 1/2	12.6-15.1	3.826	3.958	3.58	2 7/8, 6.5 PPF EU Pin Down		
	9.5-13.5	3.92	4.09	3.771			
5	15-18	4.276	4.408	4.125			
	11.5-15	4.408	4.56	4.25			
5 1/2	20-23	4.67	4.778	4.5	3 1/2, 9.3 PPF EU Pin Down		
	15.5-20	4.778	4.95	4.641			
	13-15.5	4.95	5.038	4.781			
7	32-35	6.004	6.094	5.812	4 1/2, 12.75 PPF EU Pin Down		
	26-29	6.184	6.276	5.968			
	23-26	6.276	6.366	6.078			
9 5/8	47-53.5	8.535	8.681	8.218		5,000	
	40-47	8.681	8.835	8.437			

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.





# COMPLETION OIL TOOLS

## WIRELINE ADAPTER KIT

□ CT-WRBP-AK | CT95605

### DESCRIPTION:

The Model **CT-WRBP-AK** Wire line Adapter Kit is used to couple an electric line or hydraulic setting, tool assembly to the CT-WBP or CT-WCR.

### TECHNICAL SPECIFICATIONS (CT-WRBP-AK) :

Casing Specification				Adapter Kit
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)	Setting Sleeve OD (in.)
4 1/2	12.6-15.1	3.826	3.958	3.58
	9.5-13.5	3.92	4.09	
5	15-18	4.276	4.408	4.125
	11.5-15	4.408	4.56	
5 1/2	20-23	4.67	4.778	4.5
	15.5-20	4.778	4.95	
	13-15.5	4.95	5.044	
7	32-35	6.004	6.094	4.5
	26-29	6.184	6.276	
	23-26	6.276	6.456	
9 5/8	47-53.5	8.535	8.681	7.815
	40-47	8.681	8.835	



CT95605

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
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## RETRIEVING TOOL WITH WASHOVER SHOE

### □ CT-WRBP-RT | CT95601

#### DESCRIPTION:

This RTV<sup>®</sup> tool is used to retrieve wire line set retrievable bridge plug by running sufficient weight above the jars to prevent premature tool release when unloading pressure from below. If high differential pressure from below is expected, retrieval should not be attempted on wire line or sand line.

An Emergency Release is also provided for use when retrieving the tool on sand line or wire line in the event the tool will not release in the normal manner. Continued upward jarring will shear 50,000 lb Shear sub and allow retrieval of the tool string and retrieving head.

#### TECHNICAL SPECIFICATIONS (CT-WRBP-RT) :

Casing Specification				Retrieving Tool	
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)	Max. OD (in.)	Top End Connection
4 1/2	12.6-15.1	3.826	3.958	3.58	2 3/8, 4.7 PPF EU Box Up
	9.5-13.5	3.92	4.09	3.67	
5	15-18	4.276	4.408	4.125	
	11.5-15	4.408	4.56		
5 1/2	20-23	4.67	4.778	4.5	2 7/8, 6.5 PPF EU Box Up
	15.5-20	4.778	4.95		
	13-15.5	4.95	5.044		
7	32-35	6.004	6.094	5.51	
	26-29	6.184	6.276		
	23-26	6.276	6.456		
9 5/8	47-53.5	8.535	8.681	8.2	
	40-47	8.681	8.835		

#### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## MECHANICAL SET RETRIEVABLE BRIDGE PLUG

□ CT-MRBP | CT95504

### DESCRIPTION:

The Mechanical Set RTV<sup>®</sup> Bridge Plug is a high-pressure mechanical bridge plug used for multiple zone and selective single- zone treating and testing operations such as acidizing, fracturing, cementing, and testing. The retrievable bridge plug is designed with a large internal by-pass to reduce swabbing when running and retrieving. The by-pass closes during the setting of the plug and opens prior to releasing the upper slips to equalize pressure when un-setting. The by-pass is located directly below the upper slips to help debris wash when the by-pass is open. The Retrievable Bridge Plug has the added feature of being able to set and pack off the element in tension, making it ideal for setting shallow to test well head equipment and also deep, high pressure wells.

### FEATURES & BENEFITS:

- ✓ The one-quarter right turn to set the plug and one-quarter right turn to release it provide reliable operation, especially in applications with limited rotational movement
- ✓ The large, internal bypass equalizes pressure before releasing the upper slips for safe plug retrieval.
- ✓ Wellhead testing, Treating and testing multiple, selected zones
- ✓ Deep, high-pressure testing, Fracturing, Temporary zonal isolation.



BRIDGE PLUG & CEMENT RETAINER



## TECHNICAL SPECIFICATIONS (CT-MRBP) :

Casing Specification				Bridge Plug Specification			
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)	Max. OD (in.)	End Connection	Differential Pressure Ratings (psi)	API Validation Grade
4 1/2	9.5-13.5	3.920	4.090	3.750	1.900, 2.75 PPF NU Pin Down	7,500	V3-R
5	11.5-15	4.408	4.560	4.125			
	18-20.8	4.156	4.276	4.000			
5 1/2	14-20	4.778	5.012	4.625			
	20-23	4.670	4.778	4.500			
6 5/8	24-32	5.675	5.921	5.500	2 7/8, 6.4 PPF NU Pin Down	5,000	
7	20-26	6.276	6.456	6.000			
	26-32	6.094	6.276	5.875			
7 5/8	24-29.7	6.875	7.025	6.672			
	33.7-39	6.625	6.765	6.453			
8 5/8	28-40	7.725	8.017	7.531	3 1/2, 9.3 PPF EU Pin Down	4,000	
9 5/8	32.0-43.5	8.755	9.001	8.500			
	40-53.5	8.535	8.835	8.250			
10 3/4	32.75-51	9.850	10.192	9.625			
	51-65.7	9.560	9.850	9.312			
11 3/4	42-71	10.586	11.084	10.375	4 1/2, 12.75 PPF EU Pin Down	3,000	
13 3/8	48-54.5	12.615	12.715	12.375			
	54.5-72	12.347	12.615	12.000			

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## RETRIEVING TOOL FOR MECHANICAL SET BRIDGE PLUG

### CT-MRBP-RT | CT95602

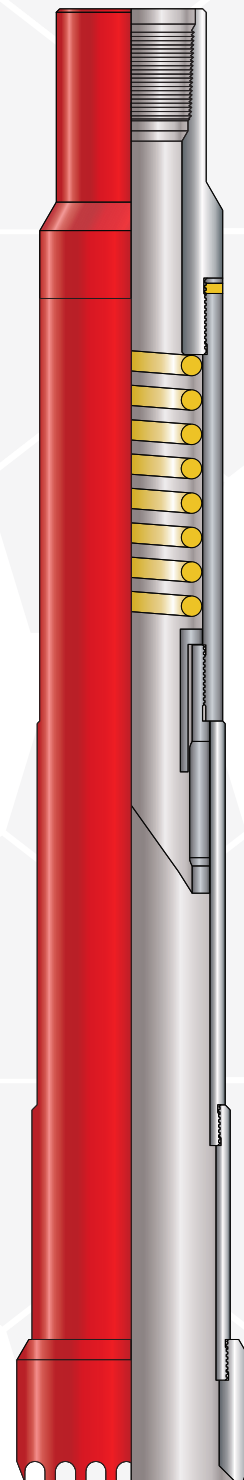
#### DESCRIPTION:

COT® CT-MRBP-RT retrieving tool for mechanical set retrievable bridge plug runs and retrieves the CT-MRBP mechanical set retrievable bridge plug.

A one-quarter left turn of the tool releases the plug. The field-proven tool design minimizes the risk of its breaking away from the plug during retrieval. The running J-pins can exit the tool only after the spring force is overcome.

#### FEATURES & BENEFITS:

- ✓ The simple four-part tool automatically attaches to the plug during weight set-down and requires only a one-quarter turn for release, making the tool easy to run and redress.
- ✓ The spring-loaded design minimizes tool separation from the plug, reducing the possibility that the plug breaks away during running and retrieval.
- ✓ The one-quarter left turn for plug release provides reliable setting in applications with limited rotational movement.
- ✓ The plug locks in place on the J-track with the heavy-duty spring and positive loading, preventing premature plug release and miss runs and saving time.
- ✓ The strong compression spring keeps the plug J-pins securely locked in the tool jay until enough weight collapses the spring, enabling Tool removal.



CT95602

BRIDGE PLUG & CEMENT RETAINER



## TECHNICAL SPECIFICATIONS (CT-MRBP-RT) :

Casing Specification	Tool Specification	
Casing Size OD (in.)	Max. OD (in.)	Top End Connection
4	3.125	2 3/8, 4.7 PPF EU Box Up
4 1/2	3.75	
5	4	
5 1/2	4.5	2 7/8, 6.5 PPF EU Box Up
6 5/8	5.438	
7	5.875	
7 5/8	6.25	
8 5/8	7.5	
9 5/8	8	3 1/2, 9.3 PPF EU Box Up
10 3/4	9.312	
11 3/4	10.37	
13 3/8	12	4 1/2 IF Box Up

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.





## COT HYDRO MECHANICAL BRIDGE PLUG

□ CT-HMBP | CT95513

### DESCRIPTION:

COT<sup>®</sup> Hydro-Mechanical Bridge Plug is a drillable bridge plug, which utilizes a built-in hydraulic chamber to begin the setting process.

### FEATURES & BENEFITS:

- ✓ Hydraulic actuated mechanical set.
- ✓ Slim line design.
- ✓ Full tubing ID after releasing, if rotationally released.
- ✓ Tubing released by right hand rotation (primary) or shear
- ✓ Fast and easy PDC drillable.
- ✓ The setting mechanism and control are contained in the bridge plug eliminating the need for a complex mechanical setting tool.
- ✓ Eliminates the expense of wire line setting tool and equipment.
- ✓ Full tubing bore is available for unobstructed passage of fluids and wire line run perforating and logging equipment after the plug is set and tubing released.
- ✓ Can be run and set in tandem with retrievable production packers or squeeze packers.



CT95513

BRIDGE PLUG & CEMENT RETAINER



## TECHNICAL SPECIFICATIONS (CT-HMBP) :

Casing Specification				Hydro Mechanical Bridge Plug Specification				
Casing /Tubing		Preferred Casing ID Range		Max. OD (in.)	Top End Connection	Ball Dia. (in.)	Diff. Pressure Ratings (PSI)	API Validation Grade
OD (In.)	PPF Range	Min. ID (in.)	Max. ID (in.)					
4 1/2	9.5-15.1	3.826	4.09	3.593	2-3/8, 4.7 PPF EU Pin Thread	1 1/16	10,000	V3-R
5	11.5-20.8	4.154	4.56	3.937				
5 1/2	13.0- 23.0	4.67	5.044	4.312				
6 5/8	17.0-32.0	5.675	6.135	5.41	2-7/8, 6.5 PPF EU Pin Thread	1 1/4	8000 3000	V3-R
7	17.0-38.0	5.92	6.538	5.687				
7 5/8	20.0-39.0	6.625	7.125	6.312				
9 5/8	29.3-58.4	8.435	9.063	8.125				
13 3/8	48.0-80.7	12.215	12.715	12				

BRIDGE PLUG & CEMENT RETAINER

### NOTES:

- ❑ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❑ Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.



## HYDRAULIC SETTING TOOL

### □ CT-HST | CT95807

#### DESCRIPTION:

This Hydraulic Setting Tools of Completion Oil Tools is used to set Seal Bore Packer and bridge Plug. The packer is run with wireline adapter kit attached to setting tool on the drill pipe or tubing to setting depth. A ball is dropped to the ball seat in the setting tool. Sufficient tubing pressure is then applied to set and pack off the packer. The pressure or combined pressure and tubing tension, parts the release stud in the adapter kit and frees the setting assembly from the packer to retrieve.

It is manufactured to withstand high tensile loads and may be run with high temperature seals rated at 400° F.

#### FEATURES & BENEFITS:

- ✓ It avoids the premature setting by means of a shear screw in the cross link sleeve.
- ✓ Hydraulic setting tool is useful for setting packer in deviated wells or wells where it is difficult to set a wireline set packer.

BRIDGE PLUG & CEMENT RETAINER

CT95807

#### NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theoretical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

