



REBCO OIL TOOLS

EXCEEDING EXPECTATIONS ONE
TOOL AT A TIME

'BHP' Instrument Hangers & Accessories Equipment



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

PRODUCT DESCRIPTION: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

'BHP' (Bottom Hole Pressure) is a vital part of Wireline Operations. Monitoring the 'BHP' requires specialty tools. This Section identifies these Tools for the Wireline Operator.

Table of content

'BHP' INSTRUMENT HANGERS and ACCESSORIES	PRODUCT CODE	PAGE
A - For LANDING NIPPLES:		VI-0-23
'ROTFSB'	33	VI-1
'ROTFWB'	33	VI-2
'ROTRZB'	33	VI-3
'ROH' and 'RNH'	33	VI-5-6-7
'XNH' and 'XOH'	33	VI-8-9-10
'ROTRNS'	33	VI-11
'ROTXNS'	33	VI-12-13
ACCESSORIES		VI-14-23
COLLAR STOPS and SLIP STOPS	110, 164	VI-14
COLLAR LOCK	33	VI-14
HOOK CONNECTORS - Type 'RQHS'	114	VI-15-16
'BW' INSTRUMENT CARRIER (BOMBWELL)	113	VI-17
'J' UNLATCHING TOOLS	111	VI-18
HOLD DOWNS	110	VI-19-20
SHOCK ABSORBERS	115	VI-21
CENTRALIZERS: Type - 'A' 'B' 'C' 'AD' 'AR' 'AT'	118	VI-22
BELLY SPRING CENTRALIZERS: Type 'BA' 'BS'	116	VI-23



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTFSB' Instrument Hanger Assembly: 2 3/8" - 4 1/2"

Rebco Type 'ROTFSB' Instrument Hanger is used to land and lock geophysical instruments in Type 'BF' Landing Nipples respectively, to allow recording of reservoir data.

The Instrument Hanger Assembly consists of Type 'ROTS-1/2' Lock Mandrel Sub-Assembly and a Hanger Sub; offered with Amerada (3/4" - 16) Box connection and/or Sucker Rod (15/16" - 10) Box connection.

Product Code: 33

TECHNICAL DATA						
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	HANGER SUB	
		BOX THREAD			BOX THREAD	
		w/3/4" - 16	w/15/16" - 10		3/4" - 16	15/16" - 10
2 3/8"	1.781"	33251401217800	33251401217801	10142202370	330117810	330117800
	1.813"	33251401218100	33251401218101		330118110	330118100
	1.875"	33251401218700	33251401218701		330118710	330118700
2 7/8"	2.250"	33251401222500	33251401222501	10142202870	330122510	330122500
	2.313"	33251401223100	33251401223101		330123110	330123100
3 1/2"	2.562"	33251401225600	33251401225601	10142202560	330125610	330125600
	2.750"	33251401227500	33251401227501		330127510	330127500
	2.813"	33251401228100	33251401228101		330128110	330128100
4 1/2"	3.688"	33251401136800	33251401136801	10141204500	330136810	330136800
	3.750"	33251401137500	33251401137501		330137510	330137500
	3.813"	33251401138100	33251401138101		330138110	330138100





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTFWB' Instrument Hanger Assembly: 2 3/8" - 4 1/2"

Rebco Type 'ROTFWB' Instrument Hanger is used to land and lock geophysical instruments in Type 'BF' Landing Nipples respectively, to allow recording of reservoir data.

The Instrument Hanger Assembly consists of Type 'ROTW-1/2' Lock Mandrel Sub-Assembly and a Hanger Sub; offered with Amerada (3/4" - 16) Box connection and/or Sucker Rod (15/16" - 10) Box connection.



TECHNICAL DATA

NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	HANGER SUB	
		BOX THREAD			BOX THREAD	
		w/3/4" - 16	w/15/16" - 10		3/4" - 16	15/16" - 10
2 3/8"	1.781"	33251701217800	33251701217801	10172202370	330117810	330117800
	1.813"	33251701218100	33251701218101		330118110	330118100
	1.875"	33251701218700	33251701218701	10172201870	330118710	330118700
2 7/8"	2.250"	33251701222500	33251701222501	10172202250	330122510	330122500
	2.313"	33251701223100	33251701223101	10172202310	330123110	330123100
3 1/2"	2.562"	33251701225600	33251701225601	10172202560	330125610	330125600
	2.750"	33251701227500	33251701227501	10172202750	330127510	330127500
	2.813"	33251701228100	33251701228101	10172202810	330128110	330128100
4 1/2"	3.688"	33251701136800	33251701136801	10171203680	330136810	330136800
	3.750"	33251701137500	33251701137501	10171203750	330137510	330137500
	3.813"	33251701138100	33251701138101	10171203810	330138110	330138100



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTRZB' Instrument Hanger Assembly: 2 3/8" - 4 1/2"

Rebco Type 'ROTRZB' Instrument Hanger is used to land and lock geophysical instruments in Type 'BR' Landing Nipples respectively, to allow recording of reservoir data.

The Instrument Hanger Assembly consists of Type 'ROTZ-1/2' Lock Mandrel Sub-Assembly and a Hanger Sub; offered with Amerada (3/4" - 16) Box connection and/or Sucker Rod (15/16" - 10) Box connection.

TECHNICAL DATA						
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	HANGER SUB	
		BOX THREAD			BOX THREAD	
		w/3/4" - 16	w/15/16" - 10		3/4" - 16	15/16" - 10
2 3/8"	1.781"	33132201217800	33132201217801	10222202370	330117810	330117800
	1.813"	33132201218100	33132201218101		330118110	330118100
	1.875"	33132201218700	33132201218701		330118710	330118700
2 7/8"	2.250"	33132201222500	33132201222501	10222202870	330122510	330122500
	2.313"	33132201223100	33132201223101		330123110	330123100
3 1/2"	2.562"	33132201225600	33132201225601	10222202560	330125610	330125600
	2.750"	33132201227500	33132201227501	10222203500	330127510	330127500
	2.813"	33132201228100	33132201228101	10222203500	330128110	330128100
4 1/2"	3.688"	33132201136800	33132201136801	10221204500	330136810	330136800
	3.750"	33132201137500	33132201137501		330137510	330137500
	3.813"	33132201138100	33132201138101		330138110	330138100



NOTE: **Rebco** Type 'ROTFSB', 'ROTFWB' and 'ROTRZB' Instrument Hangers are available in Sizes not shown and variety of Materials suitable for the Well Conditions.

Rebco Type 'ROTTSB' Instrument Hanger Assembly is available in Sizes not shown and variety of Materials suitable for the Well Conditions.



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

ACCESSORIES for INSTRUMENT HANGERS

RUNNING and PULLING ACCESSORIES for 'ROTFSB' and 'ROTTSB' Instrument Hanger

NOM SIZE	SEAL BORE SIZE	RUNNING (NO-GO LOCATING)			PULLING	
		'ROTC-1'	LOCATING RING	'ROTA' SHANK	'ROTA' PROBE *1	PULLING TOOL *2
2 3/8"	1.781"	41021202370	1680117900	4901196764	4100022370	4013012000
	1.813"		1680118000			
	1.875"		1680118100			
2 7/8"	2.250"	41021202870	1680118200	4901196765	4100022870	4013012500
	2.313"		1680118300			
3 1/2"	2.562"	41021202870	1680119100	4901221645	4100022870	4013012500
	2.750"	41021203500	1680118400	4901196766	4100023500	4013013000
	2.813"		1680118500			
4 1/2"	3.688"	41021204500	2200194500	4901221646	4100024500	4013014000
	3.750"		2200194510			
	3.813"		2200194600			

RUNNING and PULLING ACCESSORIES for 'ROTFWB' and 'ROTZRZB' Instrument Hanger

NOM SIZE	SEAL BORE SIZE	RUNNING (NO-GO LOCATING)		
		'ROTC-1' *3	'BB' PROBE *4	Pulling Tool *2
2 3/8"	1.781" - 1.875"	41021202370	4101012371	4013012000
2 7/8"	2.250"	41021202870	4101012871	4013012500
	2.313"			
3 1/2"	2.562"	41021202870	4101012560	4013012500
	2.750"	41021203500	4101013501	4013013000
	2.813"			
4 1/2"	3.688" - 3.813"	41021204500	4101014500	4013014000

NOTES:

- *1 - 'ROTA' or 'ROTAC' can be used
- *2 - 'ROTTRB', 'ROTTSB', and 'ROTJDC' Pulling Tools can be used
- *3 - To run 'ROTFWB' and 'ROTZRZB' Instrument Hangers, 'ROTC-1' Running Tool should be with Thread Protector
- *4 - 'BB' Probe comes in two lengths (Short and Long) to composite for some Lock Mandrel Sub-Assemblies which are available with different lengths of the Fishing Neck.

For Accessories shown above, see Sections where these Tools are listed.



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'RNH' and 'ROH' Instrument Hanger Assembly: 2 3/8" - 5 1/2"

Rebco Type 'RNH' Instrument Hanger Assembly is used to land and lock geophysical instruments in Type 'ROTRN' Landing Nipples respectively, to allow recording of reservoir data.

Rebco Type 'ROH' Instrument Hanger Assembly is used to land and lock geophysical instruments in Type 'ROTR' Landing Nipples respectively, to allow recording of reservoir data.

The Instrument Hanger Assembly consists of Lock Mandrel Assembly (DET 1), Protector Sleeve (DET 3) and a Hanger Sub (DET 2); offered with Amerada (3/4" - 16) Box connection and/or Sucker Rod (15/16" - 10) Box connection.

Product Code: 33

NOTE: Lock Mandrel does not require Seal Stack or 'O' Ring Seal; instead, a Protector Sleeve is supplied to minimize the damage to the Packing Mandrel.

A list of Assembly Sizes shown are not limited to the availability of other Sizes required, or Materials to suit well conditions. Please specify when ordering.

RUNNING AND PULLING TOOLS REQUIRED:

Select by Nominal Size - Seal Bore Size

Running Tool: Type 'ROTR', Section III, Product Code 41, Page 5, 6, 7

Pulling Tool: Type 'ROTGR', Section IV, Product Code 40, Page 20, 21



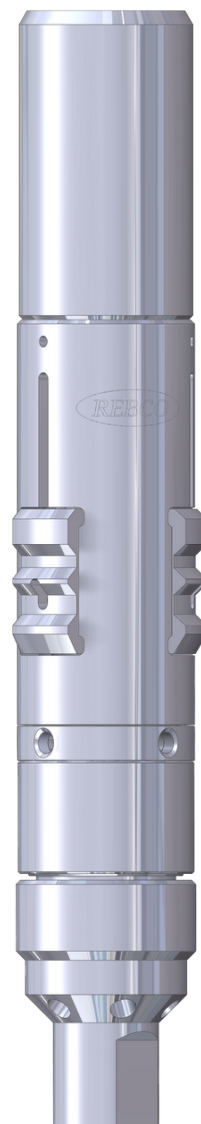
SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'RNH' Instrument Hanger Assembly

TECHNICAL DATA							
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	PROTECTOR SLEEVE	HANGER SUB	
		BOX THREAD				BOX THREAD	
		w/3/4" - 16	w/15/16" - 10			3/4" - 16	15/16" - 10
2 3/8"	1.781"	3313100617830	3313100617831	10131017830	33004	33201317830	33201317831
	1.875"	3313100618730	3313100618731	18131018730	33006	33201318730	33201318731
	2.125"	3313100621230	3313100621231	10131021230	33007	33201321230	33201321231
2 7/8"	2.188"	3313100621830	3313100621831	10131021830	33008	33201321830	33201321831
	2.313"	3313100623130	3313100623131	18131023130	330010	33201323130	33201323131
3 1/2"	2.562"	3313100625630	3313100625631	10131025630	330011	33201325630	33201325631
	2.750"	3313100627530	3313100627531	10131027530	330012	33201327530	33201327531
	2.813"	3313100628130	3313100628131	10131028130	330012	33201328130	33201328131
4" 4 1/2"	3.437"	3313100634330	3313100634331	18131034330	330020	33201334330	33201334331
	3.688"	3313100636830	3313100636831	18131036830	330014	33201336830	33201336831
	3.813"	3313100638130	3313100638131	18131038130	330015	33201338130	33201338131
5" 5 1/2"	4.313"	3313100643130	3313100643131	18131043130	330017	33201343130	33201343131
	4.562"	3313100645630	3313100645631	18131045630	330018	33201345630	33201345631

Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Parts for Lock Mandrels are available ,see [Section XIV](#)

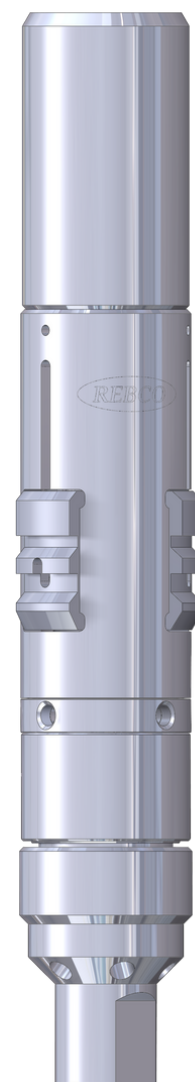




SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROH' Instrument Hanger Assembly

TECHNICAL DATA							
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	PROTECTOR SLEEVE	HANGER SUB	
		BOX THREAD				BOX THREAD	
		w/3/4" - 16	w/15/16" - 10			3/4" - 16	15/16" - 10
2 3/8"	1.781"	3313200617830	3313200617831	10132017830	33004	33201317830	33201317831
	1.875"	3313200618730	3313200618731	18132018730	33006	33201318730	33201318731
	2.125"	3313200621230	3313200621231	10132021230	33007	33201321230	33201321231
2 7/8"	2.188"	3313200621830	3313200621831	10132021830	33008	33201321830	33201321831
	2.313"	3313200623130	3313200623131	18132023130	330010	33201323130	33201323131
3 1/2"	2.562"	3313200625630	3313200625631	10132025630	330011	33201325630	33201325631
	2.750"	3313200627530	3313200627531	10132027530	330012	33201327530	33201327531
	2.813"	3313200628130	3313200628131	10132028130	330012	33201328130	33201328131
4" 4 1/2"	3.437"	3313200634330	3313200634331	18132034330	330020	33201334330	33201334331
	3.688"	3313200636830	3313200636831	18132036830	330014	33201336830	33201336831
	3.813"	3313200638130	3313200638131	18132038130	330015	33201338130	33201338131
5" 5 1/2"	4.313"	3313200643130	3313200643131	18132043130	330017	33201343130	33201343131
	4.562"	3313200645630	3313200645631	18132045630	330018	33201345630	33201345631



Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Parts for Lock Mandrels are available ,see [Section XIV](#)



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'XNH' and 'XOH' Instrument Hanger Assembly: 2 3/8" - 5 1/2"

Rebco Type 'XNH' Instrument Hanger Assembly is used to land and lock geophysical instruments in Type 'ROT~~TX~~N' Landing Nipples respectively, to allow recording of reservoir data.

Rebco Type 'XOH' Instrument Hanger Assembly is used to land and lock geophysical instruments in Type 'ROT~~TX~~' Landing Nipples respectively, to allow recording of reservoir data.

The Instrument Hanger Assembly consists of Lock Mandrel Assembly (DET 1), Protector Sleeve (DET 3) and a Hanger Sub (DET 2); offered with Amerada (3/4" - 16) Box connection and/or Sucker Rod (15/16" - 10) Box connection.

Product Code: 33

NOTE: Lock Mandrel does not require Seal Stack or 'O' Ring Seal; instead, a Protector Sleeve is supplied to minimize the damage to the Packing Mandrel.

A list of Assembly Sizes shown are not limited to the availability of other Sizes required, or Materials to suit well conditions. Please specify when ordering.

RUNNING AND PULLING TOOLS REQUIRED:

Select by Nominal Size - Seal Bore Size

Running Tool: Type 'ROT~~TX~~', Section III, Product Code 41, Page 15, 16, 17

Pulling Tool: Type 'ROTGR', Section IV, Product Code 40, Page 27, 28



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'XNH' Instrument Hanger Assembly

TECHNICAL DATA							
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	PROTECTOR SLEEVE	HANGER SUB	
		BOX THREAD				BOX THREAD	
		w/3/4" - 16	w/15/16" - 10			3/4" - 16	15/16" - 10
1.900"	1.500"	3318100615030	3318100615031	10181015030	33001	33201815030	33201815031
2 1/16"	1.625"	3318100616230	3318100616231	10181016230	33002	33201816230	33201816231
2 3/8"	1.875"	3318100618730	3318100618731	10181018730	33005	33201818730	33201818731
2 7/8"	2.313"	3318100623130	3318100623131	10181023130	33009	33201823130	33201823131
3 1/2"	2.750"	3318100627530	3318100627531	10181027530	330012	33201827530	33201827531
	2.813"	3318100628130	3318100628131	10181028130	330012	33201828130	33201828131
	2.875"	3318100628730	3318100628731	10181028730	330012	33201828730	33201828731
4"	3.313"	3318100633130	3318100633131	18181033130	330013	33201833130	33201833131
4 1/2"	3.813"	3318100638130	3318100638131	18181038130	330015	33201838130	33201838131
5"	4.313"	3318100643130	3318100643131	18181043130	330017	33201843130	33201843131
5 1/2"	4.562"	3318100645630	3318100645631	18181045630	330018	33201845630	33201845631

Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Parts for Lock Mandrels are available ,see [Section XIV](#)

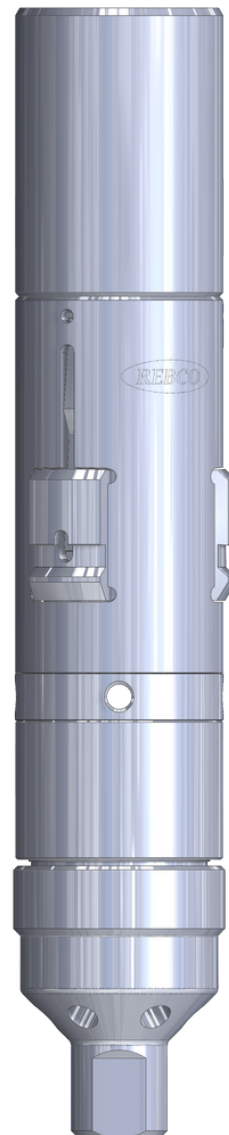




SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'XOH' Instrument Hanger Assembly

TECHNICAL DATA							
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER		LOCK MANDREL SUB-ASS'Y	PROTECTOR SLEEVE	HANGER SUB	
		BOX THREAD				BOX THREAD	
		w/3/4" - 16	w/15/16" - 10			3/4" - 16	15/16" - 10
1.900"	1.500"	3318200615030	3318200615031	10182015030	33001	33201815030	33201815031
2 1/16"	1.625"	3318200616230	3318200616231	10182016230	33002	33201816230	33201816231
2 3/8"	1.875"	3318200618730	3318200618731	10182018730	33005	33201818730	33201818731
2 7/8"	2.313"	3318200623130	3318200623131	10182023130	33009	33201823130	33201823131
3 1/2"	2.750"	3318200627530	3318200627531	10182027530	330012	33201827530	33201827531
	2.813"	3318200628130	3318200628131	10182028130	330012	33201828130	33201828131
	2.875"	3318200628730	3318200628731	10182028730	330012	33201828730	33201828731
4"	3.313"	3318200633130	3318200633131	18182033130	330013	33201833130	33201833131
4 1/2"	3.813"	3318200638130	3318200638131	18182038130	330015	33201838130	33201838131
5"	4.313"	3318200643130	3318200643131	18182043130	330017	33201843130	33201843131
5 1/2"	4.562"	3318200645630	3318200645631	18182045630	330018	33201845630	33201845631



Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Parts for Lock Mandrels are available ,see [Section XIV](#)



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTRNS' Soft Set Bomb (Instrument) Hanger Assembly: w/3/4" - 16 Box Thread

Rebco Type 'ROTRNS' Soft Set Bomb (Instrument) Hanger is designed to set Instruments into Type 'ROTR' and Type 'ROTRN' Landing Nipples of the same size. The Soft Set Bomb (Instrument) Hanger does not require jarring to be set into the Landing Nipple.

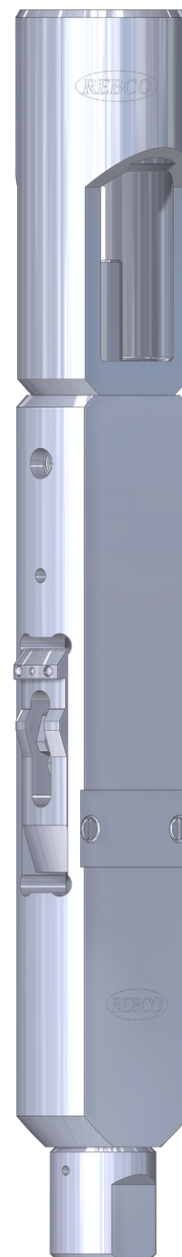
Two types of Running Tools are offered: Hydraulic or Mechanical. The choice is determined by the Operator or the Well conditions.

Product Code: 33

TECHNICAL DATA						
NOM SIZE	SEAL BORE SIZE	ASSEMBLY NUMBER	RUNNING TOOL		PULLING TOOL	PULLING PRONG
			HYDRAULIC	MECHANICAL		
			Type 'ROTHR'	Type 'ROTMR'	Type 'ROTGR'	
2 3/8"	1.875"	3313101418730	4106132000	4109131870	40051318700	49111211
	2.125"	3313101421230				
2 7/8"	2.188"	3313101421830	4106132500	4109132310	40051321800	49111212
	2.313"	3313101423130			40051323100	
3 1/2"	2.562"	3313101425630	4106132500	4109132310	40051323100	49111212
	2.750"	3313101427530	4106132000	4109132750	40051327500	49111213
	2.813"	3313101428130	4106132000			
4 1/2"	3.688"	3313101436830	4106133500	4109133500	40051331202	49111380
	3.813"	3313101438130	4106134500	4109134500	40051336804	49111231

Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

NOTE: Rebco Type 'ROTRNS' Instrument Hangers are available in Sizes not shown and variety of Materials suitable for the Well Conditions.





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTXNS' Soft Set Bomb (Instrument) Hanger Assembly: w/3/4" - 16 Box Thread

Rebco Type 'ROTXNS' Soft Set Bomb (Instrument) Hanger is designed to set Instruments into Type 'ROTX' and Type 'ROTXN' Landing Nipples of the same size. The Soft Set Bomb (Instrument) Hanger does not require jarring to be set into the Landing Nipple.

Two types of Running Tools are offered: Hydraulic or Mechanical. The choice is determined by the Operator or the Well conditions.

Product Code: 33

NOTE: Rebco Type 'ROTXNS' Instrument Hangers are available in Sizes not shown and variety of Materials suitable for the Well Conditions.

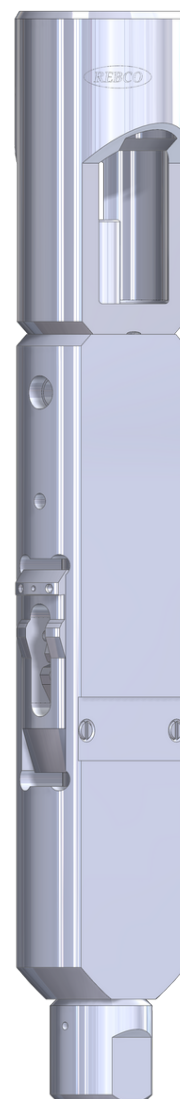
TECHNICAL DATA				
NOMINAL SIZE	2"	2 1/2"	3"	3"
NIPPLE SEAL BORE SIZE	1.875"	2.313"	2.750"	2.813"
ASSEMBLY NUMBER	3318101418730	3318101423130	3318101427530	3318101428130
ENGINEERING DATA:				
MAXIMUM OD – No-Go	1.865"	2.307"	2.745"	2.807"
BOTTOM THREAD CONNECTION	3/4" - 16	3/4" - 16	3/4" - 16	3/4" - 16
FISHING NECK ID	1.38"	1.81"	2.31"	2.31"
LENGTH	15.5"	15.75"	17.18"	17.18"
MATERIAL*	Norm Alloy*	Norm Alloy*	Norm Alloy*	Norm Alloy*

ACCESSORIES:

Running Tool	Mechanical - Type 'ROTMR'	4109131870	4109132310	4109132750	4109132750
	Hydraulic - Type 'ROTHR'	4106132000	4106132500	4106133000	4106133000
Pulling Tool – Type 'ROTGR'		40051318700	40051323100	40051327500	40051327500
Pulling Prong		49111211	49111212	49111213	49111213

Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Note: Bottom thread connection with 15/16" - 10 available, please specify.





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'ROTXNS' Soft Set Bomb (Instrument) Hanger Assembly:

TECHNICAL DATA

NOMINAL SIZE	4 1/2"
NIPPLE SEAL BORE SIZE	3.813"
ASSEMBLY NUMBER	3318101438130

ENGINEERING DATA:

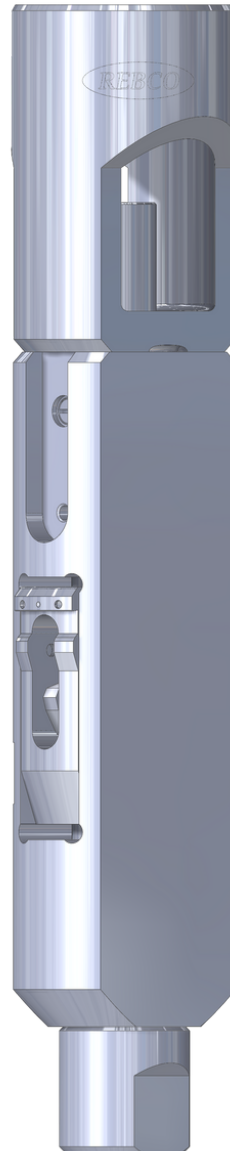
MAXIMUM OD – No-Go	3.807"
BOTTOM THREAD CONNECTION	3/4" - 16
FISHING NECK ID	3.12"
LENGTH	19.25"
MATERIAL*	Norm Alloy*

ACCESSORIES:

Running Tool	Mechanical - Type 'ROTM ^R '	4109134500
	Hydraulic - Type 'ROTHR'	4106134500
Pulling Tool – Type 'ROTGR'		40051336804
Pulling Prong		49111231

Material - Norm Alloy (NACE MR-01-75, 1980 Rev.)

Note: Bottom thread connection with 15/16" - 10 available, please specify.





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

'BHP' ACCESSORIES:

Type 'FO' Collar Stop Tool Assembly as a Stop: 1 1/4" – 4 1/2"

Rebco Type 'FO' Collar Stop Tool is designed to locate in the collar recess of the API Upset and Non-upset Tubing. The instruments can be set on top.

The Collar Stop is lowered in the tubing to the desired depth; by lifting upwards, the springs are tripped, allowing the Collar Stop Collet to expand into the collar recess.

Downward jarring on the Fishing Neck will free the Running Tool and at the same time force the body to lock the Collet in place.

The special feature of **Rebco's** Type 'FO' Collar Stop is that there is no welding. The Collet is machined from one piece of stock material.

Product Code: 110

See [Section II](#), Service Tools, Page II-23 for Selection.



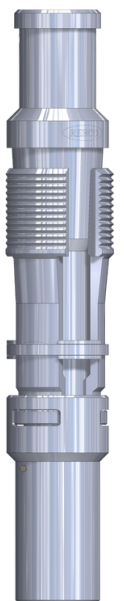
Type 'SS' Tubing Slip Stop Assembly as a Stop: 1 1/4" – 4 1/2"

Rebco Type 'SS' Tubing Slip Stop is designed to be set in the API or Premium Tubing. The instruments can be set on top.

The Slip Stop is lowered in the tubing to the desired depth; a rapid downward movement expands the Slips and sets the Stop. Downward jarring drives the serrated Slips against the tubing wall and releases the Running Tool.

Product Code: 164

See [Section II](#), Service Tools, Page II-24 for Selection.



Type 'DO' Collar Lock Assembly as a Stop: 2" – 3"

Rebco Type 'DO' Collar Lock is set into the Tubing Collar to act as an anchor for instruments and other tools to rest upon.

Running Tools and Retrieving Tools are available, please enquire.

Product Code: 33





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'RQHS' Hook Type Quick Lock System

Rebco Type 'RQHS' Hook Type Quick Lock System was primarily designed to be a convenience Tool. Using these Tools eliminates the conventional makeup of the Tool String.

The Hook(s) feature can be considerable time savers when several wells in the field are to be surveyed.

Product Code: 114

Type 'A' – 15/16" – 10 PIN to 'RQHS' and 3/4" – 16 PIN to 'RQHS'

PART NUMBER	ENGINEERING				
	MAX OD	PIN CONNECTION	FISHING NECK	LENGTH	MATERIAL
114002	1.25"	15/16" – 10	1.187"	5.00"	Stainless
114005					Alloy
1140020					Inconel®
114003	1.25"	3/4" – 16 (Amerada)	1.187"	5.00"	Stainless
114004					Alloy
1140021					Inconel®



Type 'B' – 15/16" – 10 BOX to 'RQHS' and 3/4" – 16 BOX to 'RQHS'

PART NUMBER	ENGINEERING				
	MAX OD	BOX CONNECTION	FISHING NECK	LENGTH	MATERIAL
114001	1.25"	15/16" – 10	None	4.00"	Stainless
114009					Alloy
1140022					Inconel®
114006	1.25"	3/4" – 16 (Amerada)	None	4.00"	Stainless
114007					Alloy
1140023					Inconel®





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'RQHS' Hook Type Quick Lock System:

Type 'A' & 'B' – 15/16" – 10 to 'RQHS' and 3/4" – 16 to 'RQHS'

ASS'Y NUMBER	ENGINEERING				
	MAX OD	PIN to BOX CONNECTION	FISHING NECK	LENGTH	MATERIAL
11406201215	1.25"	15/16" – 10	1.187"	5.00"	Stainless
11406201210					Alloy
11406201218					Inconel®
11406201225	1.25"	3/4" – 16 (Amerada)	1.187"	5.00"	Stainless
11406201220					Alloy
11406201228					Inconel®

Note: Any combination is available, also, 3/4" to 1 1/4" Nominal Size Stem can be ordered with 'RQHS' Connection in various lengths.

CAUTION: Recommended MAXIMUM PULL to be less than shown; before the Hook stretches to failure. Jarring should be avoided.

Stainless	1,600 lbs (725 kgs)
Alloy	2,100 lbs (952 kgs)
Inconel®	2,700 lbs (1,225 kgs)





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'BW' Bomb Well (Instrument Carrier) Assembly

Type 'BW' Bomb Well (Instrument Carrier) Assembly is designed to protect the instruments from being damaged. The spring in the Bomb Well gives the instrument (Suspended) added protection from jarring and impact during wireline operation.

When ordering it is important to know the OD and the length of the Instrument.

Product Code: 113





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'JO' Unlatching Tool Assembly with 'J' Head

Type 'JO' Unlatching Tool Assembly with 'J' Head is used to set instruments into the well bore on top of pre-set Stop.

To RUN: Attach the 'J' Head to the Instrument, or Instrument Carrier (Bomb Well). The running tool's 'JAY' slot allows the 'J' Head to be unlatched by the weight of the tool string and left down hole. 'J' Head's fishing neck is used to retrieve the instruments at later date with appropriate Pulling Tool.

TECHNICAL DATA

NOMINAL SIZE	2"	
ASSEMBLY NUMBER For 2 3/8" - 3 1/2" Tubing Size	4107202000	4107202001

ENGINEERING DATA: RUNNING TOOL * (DET 1-6)

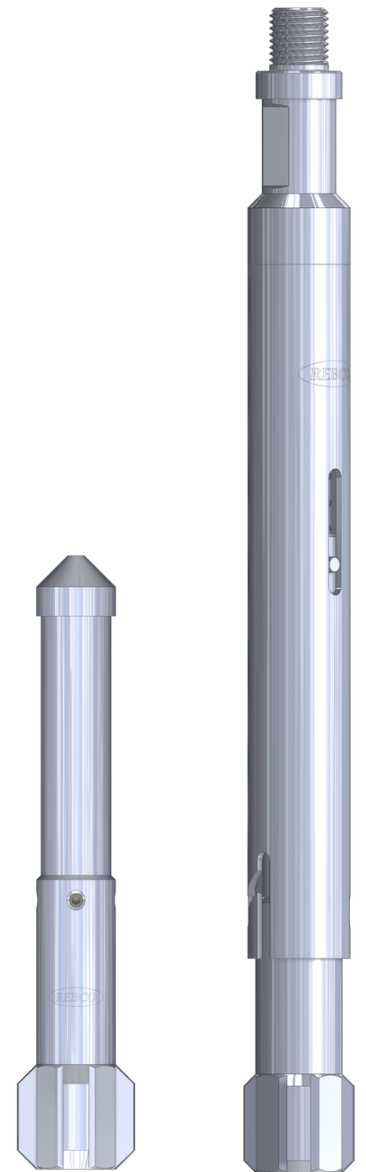
MAXIMUM OD	1.50"	1.62"
PIN THREAD CONNECTION	15/16" - 10	15/16" - 10
FISHING NECK	1.375"	1.375"
LENGTH	15.19"	15.19"
MATERIAL	Alloy	Alloy

Running Tool: See Section III, Page III-16 for selection of Sizes

ENGINEERING DATA: RUNNING TOOL * (DET 1-6)

FISHING NECK	1.187"	1.375"
MAXIMUM OD	1.75"	1.75"
LENGTH	9.12"	9.12"
BOX THREAD CONNECTION	3/4" - 16	3/4" - 16

'J' Heads with 15/16" - 10 Box Thread are available.



'J' Head

Assembly



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'HD' Hold-Down (No-Blow) Tool Assembly: 1 1/2" – 5 1/2" with Amerada Connections

Rebco Type 'HD' Hold-Down Tool, or sometimes called No-Blow Tool, stops the instruments from being blown up the tubing when the well is flowing. The Tool also reduces the number of Stems required to keep the instruments in place.

Product Code: 110

TECHNICAL DATA

NOMINAL SIZE	1 1/2"	2 3/8"	2 7/8"	3 1/2"
ASSEMBLY NUMBER	11006032060	11006031870	11006032870	11006033500

ENGINEERING DATA:

MAXIMUM OD	BODY	1.25"	1.25"	1.25"	1.25"
	DOGS RETRACTED	1.25"	1.28"	1.29"	1.49"
	DOGS EXPANDED	1.81"	2.30"	2.51"	3.27"
PIN-BOX THREAD CONNECTION		3/4" - 16	3/4" - 16	3/4" - 16	3/4" - 16
LENGTH	DOGS RETRACTED	15.49"	15.49"	15.84"	15.85"
	DOGS EXPANDED	14.86"	14.86"	14.86"	14.86"
WEIGHT REQUIRED TO RETRACT DOGS - lbs (kg)		9.0 (4.08)	9.0 (4.08)	10.0 (4.54)	11.0 (4.99)
MATERIAL		Stainless	Stainless	Stainless	Stainless

TECHNICAL DATA

NOMINAL SIZE	4 1/2"	5 1/2"
ASSEMBLY NUMBER	11006034500	11006035500

ENGINEERING DATA:

MAXIMUM OD	BODY	1.75"	1.75"
	DOGS RETRACTED	1.92"	1.97"
	DOGS EXPANDED	4.29"	5.22"
PIN-BOX THREAD CONNECTION		3/4" - 16	3/4" - 16
LENGTH	DOGS RETRACTED	26.2"	26.2"
	DOGS EXPANDED	24.5"	24.5"
WEIGHT REQUIRED TO RETRACT DOGS - lbs (kg)		25-30 (11.4)	25-30 (11.4)
MATERIAL		Stainless	Stainless



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'HD' Hold-Down (No-Blow) Tool Assembly: 1 1/2" – 5 1/2" with 15/16" - 10 Connections

TECHNICAL DATA

NOMINAL SIZE	1 1/2"	2 3/8"	2 7/8"	3 1/2"
ASSEMBLY NUMBER	11006032061	11006031871	11006032871	11006033501

ENGINEERING DATA:

MAXIMUM OD	BODY	1.25"	1.25"	1.25"	1.25"
	DOGS RETRACTED	1.25"	1.28"	1.29"	1.49"
	DOGS EXPANDED	1.81"	2.30"	2.51"	3.27"
PIN-BOX THREAD CONNECTION		15/16" - 10	15/16" - 10	15/16" - 10	15/16" - 10
LENGTH	DOGS RETRACTED	17.51"	17.51"	17.86"	17.87"
	DOGS EXPANDED	16.88"	16.88"	16.88"	16.88"
WEIGHT REQUIRED TO RETRACT DOGS - lbs (kg)		9.0 (4.08)	9.0 (4.08)	10.0 (4.54)	11.0 (4.99)
MATERIAL		Stainless	Stainless	Stainless	Stainless



TECHNICAL DATA

NOMINAL SIZE	4 1/2"	5 1/2"
ASSEMBLY NUMBER	11006034501	11006035501

ENGINEERING DATA:

MAXIMUM OD	BODY	1.75"	1.75"
	DOGS RETRACTED	1.92"	1.97"
	DOGS EXPANDED	4.29"	5.22"
PIN-BOX THREAD CONNECTION		15/16" - 10	15/16" - 10
LENGTH	DOGS RETRACTED	26.32"	26.32"
	DOGS EXPANDED	24.62"	24.62"
WEIGHT REQUIRED TO RETRACT DOGS - lbs (kg)		25-30 (11.4)	25-30 (11.4)
MATERIAL		Stainless	Stainless





SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

Type 'AO' Shock Absorber Assembly: 1 1/4" – 1 1/2"

Rebco Type 'AO' Shock Absorber is used to suppress the shock transmitted to the instruments while being run into the well to be set.

Shock Absorber Assembly connections can vary to suit application. The Materials and other Sizes are available, please specify when ordering.

Product Code: 115

TECHNICAL DATA					
NOM SIZE	ASSEMBLY NUMBER		ENGINEERING DATA:		
	PIN - BOX CONNECTION		MAX OD	FN OD	LENGTH
	3/4" - 16	15/16" - 10			
1 1/4"	115002012501	115002012500	1.250"	1.187"	18.75"
1 1/2"	115002015001	115002015000	1.500"	1.375"	19.0"

NOTE: Shock Absorber Connections with Rebco 'RQLD' are available.





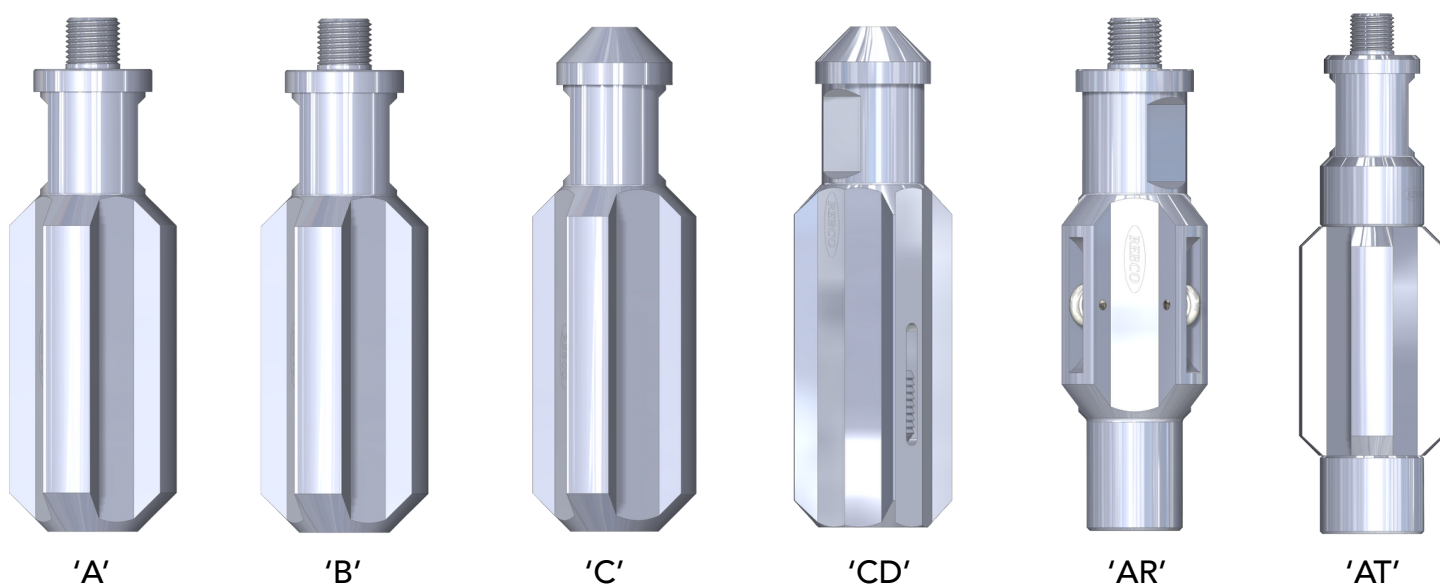
SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

CENTRALIZERS

Centralizers are used to keep the Tool String centered, and also as a No-Go stop when used to set the Instrumentation.

Rebco offers several Types of Centralizers: Size Range (OD) up to 7" (177.8 mm)

Product Code: 118



How to ORDER: Type, as shown above. Part Number and number of flutes is determined by Type of Centralizer (No-Go), and OD to three decimal places. Material is Alloy, unless specified.

TYPE	PART NO.	DESCRIPTION
'A'	11800-	Blind Bottom with Pin, Fishing Neck
'B'	11801-	Top and Bottom Thread, Fishing Neck
'C'	11802-	Blind Fishing Neck, Bottom Box
'CD'	1180203-	Blind Fishing Neck with 'RQLD' Female
'AR'	1180013-	Roller OD, with Pin-Box, Fishing Neck
'AT'	1180015-	Teflon® Sleeve, Pin-Box, Fishing Neck



SECTION VI: 'BHP' INSTRUMENT HANGERS and ACCESSORIES

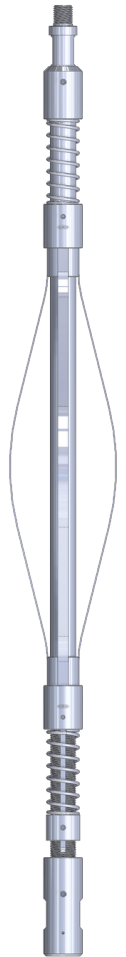
Product Code: 22

Type 'BA' Adjustable Belly Spring Centralizer Assembly: 1 1/2" - 1 7/8"

Rebco Type 'BA' Adjustable Belly Spring Centralizer keeps the instrumentation centered for easier retrieval.

Centralizer Body is Stainless Steel, and the Springs - (Coil, 2) (Belly, 3) are Inconel®.

TECHNICAL DATA						
NOM SIZE	ASSEMBLY NUMBER	ENGINEERING DATA:				
		CONNECTION	MAX OD	RANGE OD	FN OD	LENGTH
1 1/2"	116010015060	15/16" - 10	1.500"	1 1/2" - 8 1/2"	1.375"	45.7"
1 7/8"	116010018760	15/16" - 10	1.875"	1 7/8" - 9"	1.375"	45.7"



Type 'BS' Fixed OD Range Belly Spring Centralizer Assembly: 1 1/2"

Rebco Type 'BS' Belly Spring Centralizers are non-adjustable, therefore, the OD Range needs to be specified.

The Assembly is shorter in design; length, compared to Type 'BA'.

Type 'BS' Belly Spring Centralizers are available with 3 or 6 Belly Springs.

Thread connections can be with Amerada (3/4" - 16) or 15/16" - 10. To suit Instrumentation.

Please specify when ordering.

Reference Assembly Number - [1160114_](#)

