

GLOBAL PRODUCT CATALOGUE

REVERSE CIRCULATION TOOLS

MARCH 2009



TABLE OF CONTENTS

About Our Products...... 3

Reverse Circulation Tools

Rods	5
Swivels	8
Swivel Accessories	9
Subs	12



To receive updates to this catalogue, please email: catalogue@boartlongyear.com or visit our website.

ABOUT OUR PRODUCTS

Boart Longyear is the industry's only integrated drilling services and products provider, combining 24-hour engineering excellence, global manufacturing facilities and the most experienced drilling services group in the business. Our customers rely on our unique ability to develop, field test, and deliver any combination of drilling consumables, capital equipment, and expertise direct to any corner of the world.

Exploration Drilling Products

Boart Longyear is globally recognized as the leader in exploration drilling technology. From the rig to the drill string to the record-breaking Stage3 diamond coring bit at the bottom of the hole, our customers trust us to deliver the most innovative, advanced, and complete solution available.



DIAMOND PRODUCTS

- Surface set bits
- Impregnated bits
- Reamers
- **Casing shoes**
- PCD bits
- Carbon bits

WIRELINE COMPONENTS

- Core barrel assemblies
- Water swivels and hoisting plugs
- Subs and adaptors
- **Overshots and recovery tools**
- Wrenches

RODS AND CASING

- Q[®] and Patented RQ[®] Drill Threads
- **Coring Rod**
- Casing

RC CONSUMABLES

- Rod
- Swivels
- **Swivel Accessories**
- Subs

EXPLORATION DRILL RIGS

- Surface core drills
- Underground core drills
- Multi-purpose drills
- **Reverse circulation drills**



Copyright © 2009 Boart Longyear. All Rights Reserved.

ABOUT OUR PRODUCTS

In addition to our exploration drilling technology, Boart Longyear also engineers and manufactures world-class drill rigs and consumables for construction, overburden and percussive drilling.

Construction Drill Rigs

- DeltaBase[®] Site investigation and sampling drills
- DeltaBase[®] Multi-purpose drills
- DeltaBase[®] Foundation and construction drills

Construction Drilling Consumables

- DeltaTools[™] rods and casing
- DeltaTools[™] Bits and casing shoes
- DeltaTools[™] Jet grouting tools
- DeltaTools[™] Ground freezing tools

Percussive

- Production drill rigs
- Rock drills and breakers
- HRT consumables Threaded bits, rods, couplings, and shank adaptors Tapered bits and rods Integral drill steel Down the hole hammer bits

Aftermarket Support

- Genuine spare parts
- Spare parts kits
- First-aid drill repair boxes
- Maintenance programs











To receive updates to this catalogue, please email: catalogue@boartlongyear.com or visit our website.

Copyright © 2009 Boart Longyear. All Rights Reserved

REVERSE CIRCULATION RODS

METZKE-TYPE RODS6REMET-TYPE RODS7

BOART LONGYEAR GLOBAL PRODUCT CATALOGUE | REVERSE CIRCULATION TOOLS | 3-2009

CAT-009.indd 5

RODS: METZKE TYPE

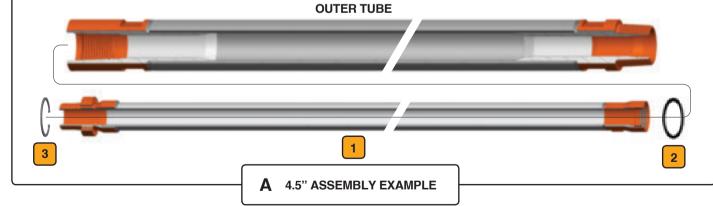
High grade alloy tool joints and inner tube assemblies.

Boart Longyear type inner tube joints that allow stabilization with minimal flow restriction.

Easy inner tube replacements through the use of Circlips.

ID #	PART #	DESCRIPTION									
	5500013	Rod RC 3-1/2" x 1.5m Long Metzke	5500013)							
	5500015	Rod RC 3-1/2" x 3m Long Metzke		5500015							
	5500018	Rod RC 3-1/2" x 6m Long Metzke			5500018						
	5500025	Rod RC 4" x 1.5m Long Metzke				5500025					
A	5500027	Rod RC 4" x 3m Long Metzke					5500027]			
	5500030	Rod RC 4" x 6m Long Metzke						5500030			
	5500037	Rod RC 4-1/2" x 1.5m Long Metzke							5500037)	
	5500039	Rod RC 4-1/2" x 3m Long Metzke								5500039)
	5500042	Rod RC 4-1/2" x 6m Long Metzke									5500042
	5500109	Inner Tube RC 3-1/2" x 1.5m Metzke	\lor		X/////////////////////////////////////	\//////////////////////////////////////	V///////	X/////////////////////////////////////	\ ////////////////////////////////////	V/////////////////////////////////////	X////////
	5500111	Inner Tube RC 3-1/2" x 3m Metzke	V///////		<u> </u>		V///////	X/////////////////////////////////////	X///////	V/////////////////////////////////////	<u> </u>
	5500114	Inner Tube RC 3-1/2" x 6m Metzke	¥////////	X/////////////////////////////////////			X////////	X/////////////////////////////////////	X/////////////////////////////////////	V///////	<i>\//////</i>
	5500121	Inner Tube RC 4" x 1.5m Metzke	\ ////////////////////////////////////	\ ////////////////////////////////////	¥////////		///////////////////////////////////////	X/////////////////////////////////////	\ ////////////////////////////////////	V///////	X///////
1	5500123	Inner Tube RC 4" x 3m Metzke	<u> </u>	X/////////////////////////////////////	X/////////////////////////////////////			<u> </u>	¥////////	V/////////////////////////////////////	¥//////
	5500126	Inner Tube RC 4" x 6m Metzke	¥///////	X/////////////////////////////////////	¥/////////////////////////////////////	V/////////////////////////////////////	V///////		<u> </u>	V/////////////////////////////////////	<i>\//////</i>
	5500133	Inner Tube RC 4-1/2" x 1.5m Metzke	<u> </u>	\ ////////////////////////////////////	X/////////////////////////////////////		V/////////////////////////////////////	<u> </u>		(//////////////////////////////////////	¥//////
	5500135	Inner Tube RC 4-1/2" x 3m Metzke	\/////	X/////////////////////////////////////	\ ////////////////////////////////////		X/////////////////////////////////////	\ ////////////////////////////////////	¥/////////////////////////////////////		
	5500138	Inner Tube RC 4-1/2" x 6m Metzke	<u> </u>	<u> </u>	X/////////////////////////////////////	V/////////////////////////////////////	V///////	<u>X////////////////////////////////////</u>	\ ////////////////////////////////////	<i>\////////</i>	
	5500566	O-Ring, 3 1/2" Metzke/Remet					<u> </u>	<u> </u>	¥////////	V/////////////////////////////////////	¥//////
2	5500568	O-Ring, 4" Metzke	¥///////	<u> </u>	¥/////////////////////////////////////				<u> </u>	///////////////////////////////////////	<u> </u>
	5500569	O-Ring, 4 1/2" Metzke/Remet	<u> </u>	<u> </u>	¥/////////////////////////////////////		V////////	<u> </u>			
	5500557	Circlip, 3 1/2" Metzke/Remet				<u>/////////////////////////////////////</u>	¥////////	X/////////////////////////////////////	X/////////////////////////////////////	V/////////////////////////////////////	<i>\//////</i>
3	5500559	Circlip, 4" Metzke	\ ////////////////////////////////////	\ ////////////////////////////////////	¥////////				<u> </u>		
	5500561	Circlip, 4 1/2" Metzke/Remet	V///////	X/////////////////////////////////////	<u> </u>	V/////////////////////////////////////	X/////////////////////////////////////	N////////			





NOTES:

O-Ring (2) is located at inner-tube pin end on 3.5" Metzke-type assemblies.

Additional lengths/materials may be available upon request. Contact your local sales representative .

🇞 BOART LONGYEAR[™]

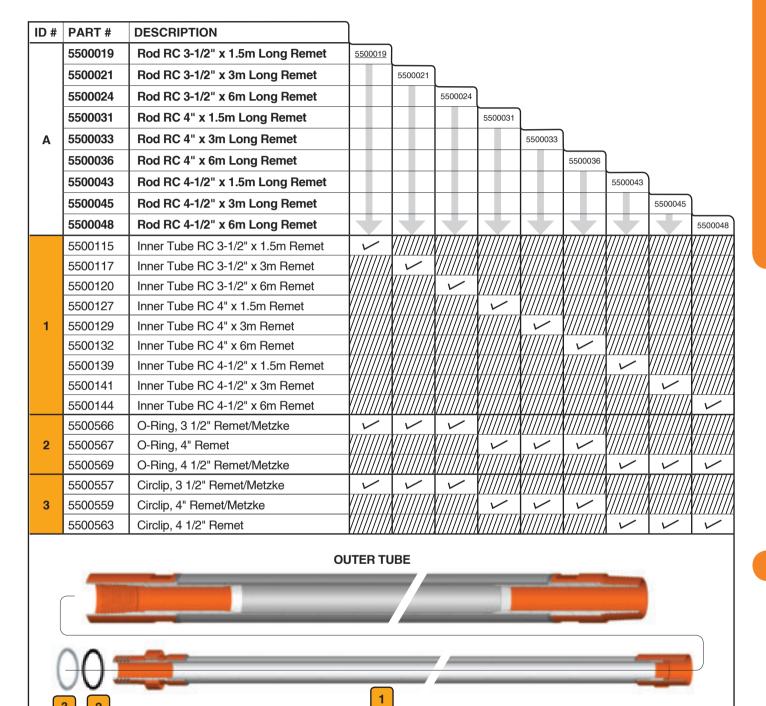
www.boartlongyear.com

RODS: REMET TYPE

High grade alloy tool joints and inner tube assemblies.

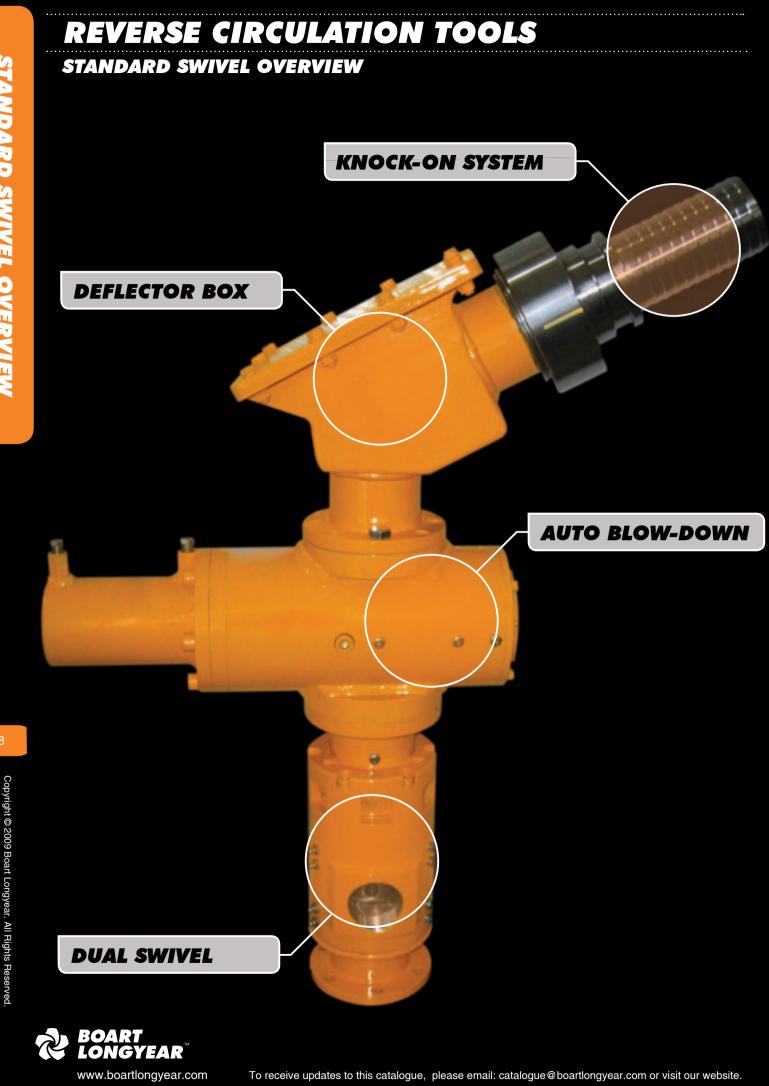
Boart Longyear type inner tube joints that allow stabilization with minimal flow restriction.

Easy inner tube replacements through the use of Circlips.



NOTES:

Additional lengths/materials may be available upon request. Contact your local sales representative .



STANDARD DUAL SWIVEL



ID #	PART #	DESCRIPTION	QTY
Α	5501054	Standard Dual Swivel	
1	5501091	O-Ring	1
2	5501057	Spindle, Standard Dual Swivel	1
3	5501083	O-Ring	3
4	5501080	Bearing, Tapered Roller	1
5	5501084	O-Ring	1
6	5501159	Fitting, Grease Relief Fitting	4
7	5501078	Main Body, Dual Swivel	1
8	5501089	Quad Ring	4
9	5501081	Bearing, Tapered Roller	1
10	5501087	Tag Washer, 75mm	2
11	5501079	LH Locknut, Dual Swivel	2
12	5501085	O-Ring	1
13	5501075	Dust Cap, Standard Dual Swivel	1
14	5501160	Screw, Skt. Set 5/16-24UNF X 1/2"L	2
15	5501086	O-Ring	1
16	5501158	Fitting, Grease	7
17	5501069	Adjuster, Std. Dual Swivel V-Pack	1
18	5501088	V-Packing, Standard Swivel	1
19	5501072	Spacer, Standard Dual Swivel V-Pack	1
20	5501060	Top Cap, Standard Dual Swivel	1
21	5501162	Screw, HHCS 5/16-24UNF X 1.5"L	3
22	5501161	Screw, SHCS 3/8-24UNF X 2"L	6

DEFLECTOR BOX



ID #	PART #	DESCRIPTION	QTY
Α	5501106	Deflector Box	
1	5501108	Wear Plate, D/Box	2
2	5501109	Ceramic Wear Insert, D/Box	1
3	5501111	Insert, Std D/Box Outlet	1
4	5501112	Insert, D/Box Inlet	1
5	5501123	Flange, D/Box Inlet	1
6	5501124	Spigot, Std D/Box Outlet - 3" Acme	1
ID #	PART #	DESCRIPTION	QTY
Α	5501125	Knockon System - 3"	
1	5501126	Nut Assy, Knockon - 3" Acme	1
2	5501129	Hose Tail, 3" Knockon	1
3	5501130	Collar, 3" Knockon Hose Tail	1

& BOART LONGYEAR™

CAT-009.indd 10

AUTO BLOW-DOWN



.....

ID #	PART #	DESCRIPTION	QTY
Α	5501131	Auto Blow-Down	
		·	

REVERSE CIRCULATION SUBS

REMET-TYPE SAVER SUBS	13
METZKE-TYPE SAVER SUBS	14
DIGOUT SUBS	15
BLOW DOWN SUBS	16
BLOW BACK SUBS	17
ADAPTER SUB ASSEMBLY	18
ADAPTER SUB INNER TUBE	18
ADAPTER SUB OUTER TUBE	18
O-RINGS	18
CIRCLIPS	18



To receive updates to this catalogue, please email: catalogue@boartlongyear.com or visit our website.

.....

REMET-TYPE SAVER SUBS

ID #	PART #	DESCRIPTION	ן							
	5501192	75mm Remet Saver Sub x 90mm Lg	5501192)						
	5501193	78mm Remet Saver Sub x 90mm Lg		5501193)					
	5501194	3.5" Remet Saver Sub x 150mmLg			5501194)				
	5501195	4.0" Remet Saver Sub x 150mm Lg				5501195)			
Α	5501196	4.5" Remet Saver Sub x 150mm Lg					5501196)		
	5501203	3.5" Remet Saver Sub x 300mmLg						5501203)	
	5501204	4.0" Remet Saver Sub x 300mm Lg							5501204)
	5501205	4.5" Remet Saver Sub x 300mm Lg								5501205
	5501230	75mm Remet Saver Sub I/Tube x 90mm Lg	~							
1	5501231	78mm Remet Saver Sub I/Tube x 90mm Lg								
	5501212	75mm Remet Saver Sub O/Tube x 90mm Lg								
2	5501213	78mm Remet Saver Sub O/Tube x 90mm Lg		~						
	5501232	3.5" Remet Saver Sub I/Tube x 150mm Lg			~					
3	5501233	4.0" Remet Saver Sub I/Tube x 150mm Lg				~				
	5501234	4.5" Remet Saver Sub I/Tube x 150mm Lg					~			
	5501241	3.5" Remet Saver Sub I/Tube x 300mm Lg						~		
4	5501242	4.0" Remet Saver Sub I/Tube x 300mm Lg							\checkmark	
	5501243	4.5" Remet Saver Sub I/Tube x 300mm Lg								
	5501214	3.5" Remet Saver Sub O/Tube x 150mm Lg								
5	5501215	4.0" Remet Saver Sub O/Tube x 150mm Lg								
	5501216	4.5" Remet Saver Sub O/Tube x 150mm Lg								
	5501222	3.5" Remet Saver Sub O/Tube x 300mm Lg								
6	5501223	4.0" Remet Saver Sub O/Tube x 300mm Lg							\checkmark	
	5501224	4.5" Remet Saver Sub O/Tube x 300mm Lg	<u> </u>			\/////	\/////			
	5500565	O-Ring, 75mm/78mm Remet			V///////	\//////	V///////	<i>\////////////////////////////////////</i>	\//////	<i>\//////</i>
7	5500566	O-Ring, 3 1/2" Remet/Metzke	¥////////	V///////		¥///////	\//////		<i> </i>	V//////
	5500567	O-Ring, 4" Remet	<i>\///////</i>	V///////	V///////	1	¥//////	<i>\////////////////////////////////////</i>		<i>\//////</i>
	5500569	O-Ring, 4 1/2" Remet/Metzke	<u> </u>	V///////	<i>\////////////////////////////////////</i>	V///////		V//////	<i>\///////</i>	
	5500553	Circlip, 75mm Remet		<u>/////////////////////////////////////</u>	V//////	X////////	V//////	V////////		V///////
	5500555	Circlip, 78mm Remet	<i>\////////////////////////////////////</i>		V///////	\//////	X/////////////////////////////////////	<i>[////////////////////////////////////</i>	\//////	V//////
8	5500557	Circlip, 3 1/2" Remet/Metzke	¥///////	V///////		¥///////	\//////		///////////////////////////////////////	V//////A
	5500559	Circlip, 4" Remet/Metzke	<i>\////////</i>	\/////	V///////	1	¥///////	<i>\////////////////////////////////////</i>		<i>\//////</i>
	5500563	Circlip, 4 1/2" Remet	<u> </u>	////////	<u> ////////////////////////////////////</u>	<u> ////////////////////////////////////</u>		///////////////////////////////////////	(//////////////////////////////////////	\checkmark

METZKE-TYPE SAVER SUBS

ID #	PART #	DESCRIPTION	ך					
	5501198	3.5" Metzke Saver Sub x 150mmLg	5501198)				
	5501199	4.0" Metzke Saver Sub x 150mm Lg		5501199)			
	5501201	4.5" Metzke Saver Sub x 150mm Lg			5501201			
A	5501207	3.5" Metzke Saver Sub x 300mmLg				5501207)	
	5501208	4.0" Metzke Saver Sub x 300mm Lg					5501208)
	5501210	4.5" Metzke Saver Sub x 300mm Lg						5501210
	5501236	3.5" Metzke Saver Sub I/Tube x 150mm Lg	~					
1	5501237	4.0" Metzke Saver Sub I/Tube x 150mm Lg		~				
	5501239	4.5" Metzke Saver Sub I/Tube x 150mm Lg			\checkmark			
	5501245	3.5" Metzke Saver Sub I/Tube x 300mm Lg				~		
2	5501246	4.0" Metzke Saver Sub I/Tube x 300mm Lg					\checkmark	
	5501248	4.5" Metzke Saver Sub I/Tube x 300mm Lg						~
	5501218	3.5" Metzke Saver Sub O/Tube x 150mm Lg	~					
3	5501219	4.0" Metzke Saver Sub O/Tube x 150mm Lg		~				
	5501220	4.5" Metzke Saver Sub O/Tube x 150mm Lg			\checkmark			
	5501226	3.5" Metzke Saver Sub O/Tube x 300mm Lg				~		
4	5501227	4.0" Metzke Saver Sub O/Tube x 300mm Lg					\checkmark	
	5501228	4.5" Metzke Saver Sub O/Tube x 300mm Lg						~
	5500566	O-Ring, 3 1/2" Remet/Metzke	~	<u> </u>	V////////		///////////////////////////////////////	
5	5500568	O-Ring, 4" Metzke	<u> </u>			V/////////////////////////////////////		
	5500569	O-Ring, 4 1/2" Remet/Metzke	<u> </u>	\//////		<u> </u>	V/////////////////////////////////////	
	5500557	Circlip, 3 1/2" Remet/Metzke		¥/////////////////////////////////////			///////////////////////////////////////	<i>\//////</i>
6	5500559	Circlip, 4" Remet/Metzke	- <u>{////////////////////////////////////</u>		///////	V/////////////////////////////////////		<i>µ//////</i>
	5500561	Circlip, 4 1/2" Metzke	<u> </u>	V/////////////////////////////////////		<u> </u>	V////////	

R BOART LONGYEAR

DIGOUT SUBS

ID #	PART #	DESCRIPTION]				
	5501258	3.5" Remet Digout Sub	5501258				
	5501259	4.0" Remet Digout Sub		5501259			
Α	5501260	4.5" Remet Digout Sub			5501260		
	5501263	4.0" Metzke Digout Sub				5501263	
	5501265	4.5" Metzke Digout Sub					5501265
	5501241	3.5" Remet Digout Sub I/Tube x 300mm Lg	~				
	5501242	4.0" Remet Digout Sub I/Tube x 300mm Lg		V			
2	5501243	4.5" Remet Digout Sub I/Tube x 300mm Lg			\checkmark		
	5501246	4.0" Metzke Digout Sub I/Tube x 300mm Lg				\checkmark	
	5501248	4.5" Metzke Digout Sub I/Tube x 300mm Lg					\checkmark
1	N/A	Replacement Digout Sub Blades	AV	AILABLE	E UPON	REQUE	ST

.

BLOW DOWN SUBS

ID #	PART #	DESCRIPTION]									
	5501268	75mm Remet Blow Down Sub	550	1268								
	5501269	78mm Remet Blow Down Sub			5501	269						
	5501270	3.5" Remet Blow Down Sub x 150mm Lg					5501270					
	5501271	4.0" Remet Blow Down Sub x 150mm Lg						5501271				
Α	5501272	4.5" Remet Blow Down Sub x 150mm Lg							5501272			
	5501274	3.5" Metzke Blow Down Sub x 150mm Lg								5501274		
	5501275	4.0" Metzke Blow Down Sub x 150mm Lg									5501275	
	5501276	4.5" Metzke Blow Down Sub x 150mm Lg										5501276
1	5501278	75mm Remet Blow Down Sub I/Tube	L			////	///////////////////////////////////////		\//////////////////////////////////////	V////////	X/////////////////////////////////////	\///////
<u> </u>	5501279	78mm Remet Blow Down Sub I/Tube	V///		V	/					\ ////////////////////////////////////	///////////////////////////////////////
	5501280	3.5" Remet Blow Down Sub I/Tube	V///				\checkmark			V/////////////////////////////////////	X/////////////////////////////////////	\/////////////////////////////////////
2	5501281	4.0"Remet Blow Down Sub I/Tube	V///					\checkmark			X/////////////////////////////////////	///////////////////////////////////////
	5501282	4.5" Remet Blow Down Sub I/Tube	V///	/////					\checkmark		V/////////////////////////////////////	(//////////////////////////////////////
	5501284	3.5" Metzke Blow Down Sub I/Tube	V///									///////////////////////////////////////
3	5501285	4.0" Metzke Blow Down Sub I/Tube	V///							V////////		
	5501286	4.5" Metzke Blow Down Sub I/Tube	V////				///////////////////////////////////////			///////////////////////////////////////	V///////	\checkmark
	5500565	O-Ring, 75mm/78mm Remet	1		V	_					X/////////////////////////////////////	///////////////////////////////////////
	5500566	O-Ring, 3 1/2" Remet/Metzke	<i>\////</i>	/////			\checkmark				V///////	///////////////////////////////////////
4	5500567	O-Ring, 4" Remet	V///					\checkmark	(//////////////////////////////////////	V///////	X/////////////////////////////////////	///////////////////////////////////////
	5500568	O-Ring, 4" Metzke	V///							V////////		
	5500569	O-Ring, 4 1/2" Remet/Metzke	V////				///////////////////////////////////////		\checkmark	///////////////////////////////////////	V/////////////////////////////////////	\checkmark
	5500553	Circlip, 75mm Remet	1					///////////////////////////////////////	V/////////////////////////////////////	V////////	X/////////////////////////////////////	////////
	5500555	Circlip, 78mm Remet	<i>\////</i>	/////	V		///////////////////////////////////////	///////////////////////////////////////	V////////	V/////////////////////////////////////	\ ////////////////////////////////////	///////////////////////////////////////
5	5500557	Circlip, 3 1/2" Remet/Metzke	V///				\checkmark		(//////////////////////////////////////		<u> </u>	///////////////////////////////////////
5	5500559	Circlip, 4" Remet/Metzke	V///					\checkmark		V/////////////////////////////////////		///////////////////////////////////////
	5500563	Circlip, 4 1/2" Remet	V////	/////		/////	///////////////////////////////////////			V////////	¥////////	///////////////////////////////////////
	5500561	Circlip, 4 1/2" Metzke	V///						V/////////////////////////////////////	V///////	X/////////////////////////////////////	V

R BOART LONGYEAR

.

BLOW BACK SUBS

ID #	PART #	DESCRIPTION	$\left[\right]$												
	5501288	75mm Remet Blow Back Sub	550	1288)										
	5501289	78mm Remet Blow Back Sub			55	01289									
	5501290	3.5" Remet Blow Back Sub					5501	290)						
	5501291	4.0" Remet Blow Back Sub							5501291						
Α	5501292	4.5" Remet Blow Back Sub								55012	292				
	5501294	3.5" Metzke Blow Back Sub										550	1294)	
	5501295	4.0" Metzke Blow Back Sub												5501295]
	5501296	4.5" Metzke Blow Back Sub													5501296
4	5501298	4.0" Metzke Blow Back Sub I/Tube	V///	1///	Ŵ//	/////	X ////	////	V////////	V////	////	V ///	/////	~	V/////////////////////////////////////
	5501299	4.5" Metzke Blow Back Sub I/Tube			\ //		\ ////		X/////////////////////////////////////	V////	////	\ ///		V/////////////////////////////////////	
2	5500568	O-Ring, 4" Metzke	\///	////	X //		X////	////	V////////	V////]]]]	X////	/////		V/////////////////////////////////////
2	5500569	O-Ring, 4 1/2" Remet/Metzke			X//		\ ////		V///////	V////		V///		X/////////////////////////////////////	
3	5500559	Circlip, 4" Remet/Metzke		/////	\mathbb{N}		\ ////		V/////////////////////////////////////	V////		X////	/////		(//////////////////////////////////////
3	5500561	Circlip, 4 1/2" Metzke	V///		X//	//////	\ ////	$\langle $	V/////////////////////////////////////	V////	////	\ ///	/////	V/////////////////////////////////////	
4	N/A	Blocked Off	L	/		~	V	/	~	V	-	L	/	V////////	V ////////////////////////////////////

.....

ADAPTER SUB ASSEMBLY

		\int	R	emet Bo	x		M	letzke Bo	x
ID #	DESCRIPTION	75mm	78mm	3.5"	4.0"	4.5"	3.5"	4.0"	4.5"
4	75mm Remet Pin	V/////////////////////////////////////	5501307	5501313		X/////////////////////////////////////		X/////////////////////////////////////	
<u> </u>	78mm Remet Pin	5501301	\//////////////////////////////////////	5501314		V/////////////////////////////////////	\/////////////////////////////////////	V/////////////////////////////////////	
2	3.5" Remet Pin	5501302	5501308			5501331	5501343	V/////////////////////////////////////	5501355
	4.0"Remet Pin	V/////////////////////////////////////	\//////////////////////////////////////			5501332	(//////////////////////////////////////	5501346	5501356
	4.5" Remet Pin	V/////////////////////////////////////	V/////////////////////////////////////		5501322	V/////////////////////////////////////	///////////////////////////////////////	5501347	5501357
3	3.5" Metzke Pin	V/////////////////////////////////////	\//////////////////////////////////////	5501315		V/////////////////////////////////////	V/////////////////////////////////////	X/////////////////////////////////////	
	4.0" Metzke Pin	\/////////////////////////////////////	V/////////////////////////////////////		5501323	5501333	(//////////////////////////////////////	V/////////////////////////////////////	5501358
	4.5" Metzke Blow Pin	V/////////////////////////////////////	V/////////////////////////////////////		5501324	5501334	///////////////////////////////////////	5501348	

ADAPTER SUB INNER TUBE

		Remet Box			Metzke Box				
ID #	DESCRIPTION	75mm	78mm	3.5"	4.0"	4.5"	3.5"	4.0"	4.5"
4	75mm Remet Pin	V/////////////////////////////////////	5501311	5501319		{//////////////////////////////////////	V/////////////////////////////////////		V/////////////////////////////////////
	78mm Remet Pin	5501305		5501320			///////////////////////////////////////		X/////////////////////////////////////
2	3.5" Remet Pin	5501306	5501312			5501339	5501345	\//////////////////////////////////////	5501363
	4.0"Remet Pin	V/////////////////////////////////////				5501340	V/////////////////////////////////////	5501352	5501364
	4.5" Remet Pin	\//////////////////////////////////////			5501328		V/////////////////////////////////////	5501353	5501365
3	3.5" Metzke Pin	V/////////////////////////////////////		5501321			V/////////////////////////////////////	\//////////////////////////////////////	V/////////////////////////////////////
	4.0" Metzke Pin	///////////////////////////////////////			5501329	5501341	(//////////////////////////////////////		5501366
	4.5" Metzke Blow Pin	<u> </u>			5501330	5501342		5501354	V/////////////////////////////////////

ADAPTER SUB OUTER TUBE

	J	R	emet Bo	x		M	etzke Bo	x
DESCRIPTION	75mm	78mm	3.5"	4.0"	4.5"	3.5"	4.0"	4.5"
75mm Remet Pin	///////////////////////////////////////	5501309	5501316		///////////////////////////////////////			
78mm Remet Pin	5501303	\//////////////////////////////////////	5501317			\/////////////////////////////////////		
3.5" Remet Pin	5501304	5501310			5501335	5501344		5501359
4.0"Remet Pin	V/////////////////////////////////////	V/////////////////////////////////////			5501336		5501349	5501360
4.5" Remet Pin	V/////////////////////////////////////	V/////////////////////////////////////		5501325		V/////////////////////////////////////	5501350	5501361
3.5" Metzke Pin	V/////////////////////////////////////	(//////////////////////////////////////	5501318			V/////////////////////////////////////	\//////////////////////////////////////	
4.0" Metzke Pin	\//////////////////////////////////////	V/////////////////////////////////////		5501326	5501337	\/////////////////////////////////////		5501362
4.5" Metzke Blow Pin	V/////////////////////////////////////	V/////////////////////////////////////		5501327	5501338		5501351	
	75mm Remet Pin 78mm Remet Pin 3.5" Remet Pin 4.0"Remet Pin 4.5" Remet Pin 3.5" Metzke Pin 4.0" Metzke Pin	75mm Remet Pin ////////////////////////////////////	75mm Remet Pin ////////////////////////////////////	75mm Remet Pin ////////////////////////////////////	75mm Remet Pin 75mm Remet Pin 78mm Remet Pin 5501303 5501316 ////////////////////////////////////	75mm Remet Pin 75mm 78mm Remet Pin 5501303 5501316 ////////////////////////////////////	75mm Remet Pin 75mm Remet Pin 78mm Remet Pin 5501303 5501316 ////////////////////////////////////	75mm Remet Pin 75mm Remet Pin 78mm Remet Pin 5501303 3.5" Remet Pin 5501303 4.0"Remet Pin 5501304 5501304 5501310 4.0"Remet Pin 5501304 5501305 5501310 4.5" Remet Pin 5501325 3.5" Metzke Pin 5501318 4.0" Metzke Pin 5501318

O-RINGS

ID #	PART	DESCRIPTION			
	5500565	O-Ring, 75mm/78mm Remet			
	5500566	O-Ring, 3 1/2" Remet/Metzke			
1	5500567	O-Ring, 4" Remet			
	5500568	O-Ring, 4" Metzke			
	5500569	O-Ring, 4 1/2" Remet/Metzke			
	*				

CIRCLIPS

ID #	PART	DESCRIPTION				
	5500553	Circlip, 75mm Remet				
	5500555	Circlip, 78mm Remet				
1	5500557	Circlip, 3 1/2" Remet/Metzke				
1 I I	5500559	Circlip, 4" Remet/Metzke				
	5500563	Circlip, 4 1/2" Remet				
	5500561	Circlip, 4 1/2" Metzke				

🗞 BOART LONGYEAR™

www.boartlongyear.com

WARRANTY

Limited Warranty.

- (a) <u>Consumables</u>. Boart Longyear warrants for a period of one (1) year after the date of shipment of the consumable products manufactured by it, or the performance of related services, under the Contract, that such consumable products are free from defects in materials and workmanship and such services are performed in a professional and workmanlike manner; provided, however, with respect to consumable products purchased through an authorized Boart Longyear distributor, the warranty period shall commence on the date of purchase by the end-user.
- (b) <u>Capital Equipment.</u> Boart Longyear warrants for a period equal to the lesser of (i) one (1) year after the date of shipment, or (ii) the initial 1,000 operating hours. Boart Longyear warrants for a period of six (6) months after the performance of related services that such services are performed in a professional and workmanlike manner.
- (c) General Terms. Boart Longvear further warrants that, to the extent applicable, as of the date of shipment or performance, all goods manufactured by it and services performed shall conform to the written specifications agreed between the parties. THIS IS BOART LONGYEAR'S ONLY WARRANTY. BOART LONGYEAR MAKES NO OTHER WARRANTY, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. As a condition to Boart Longyear's warranty obligations, any goods claimed to be defective under the foregoing warranty must be returned to the facility designated by Boart Longyear, which return shall be made promptly upon Purchaser's discovery of the alleged defect. With respect to consumable products purchased through an authorized Boart Longyear distributor, the party making the warranty claim must also deliver to Boart Longyear reasonable evidence of the date of purchase. Boart Longyear shall perform its examination of the goods so returned by Purchaser and shall report the results of its examination to Purchaser within thirty (30) days following its receipt of such goods from Purchaser, or, if longer time is required to complete such examination, within such time as would be required through the exercise of reasonable diligence. As a further condition to Boart Longvear's obligations hereunder for breach of warranty, Purchaser shall offer its reasonable cooperation and assist Boart Longyear in the course of Boart Longyear's review of any warranty claim. If requested by Purchaser, Boart Longyear will promptly repair or replace at Boart Longyear's expense. Goods that are non-conforming according to Boart Longyear's warranty as set forth herein. All removal and installation of goods shall be at Purchaser's expense. Boart Longyear reserves the right to reimburse Purchaser for an amount equal to the purchase price of any defective goods in lieu of providing repaired or replacement goods. Anything contained herein to the contrary notwithstanding, in no event shall Boart Longyear be liable for breach of warranty or otherwise in any manner whatsoever for: (i) normal wear and tear; (ii) corrosion, abrasion or erosion; (iii) any goods, components, parts, software or services which, following delivery or performance by Boart Longyear, has been subjected to accident, abuse, misapplication, modification, improper repair, alteration, improper installation or maintenance, neglect, or excessive operating conditions; (iv) defects resulting from Purchaser's specifications or designs or those of its contractors or subcontractors other than Boart Longyear; (v) defects associated with consumable parts or materials, the lifetime of which is shorter than the warranty period set forth in this Section; (vi) defects associated with Purchaser's specifications or designs or those of its contractors or subcontractors other than Boart Longyear; (vii) defects resulting from the manufacture, distribution, promotion or sale of Purchaser's own products; or (viii) accessories of any kind used by the Purchaser which are not manufactured by or approved by Boart Longyear.
- (d) <u>Sourced Goods.</u> If the defective parts or components are not manufactured by Boart Longyear, the guarantee of the manufacturer of those defective parts or components is accepted by the Purchaser and is the only guarantee given to the Purchaser in respect of the defective parts or components. Boart Longyear agrees to assign to the Purchaser on request made by the Purchaser the benefit of any warranty or entitlement to the defective parts or components that the manufacturer has granted to Boart Longyear under any contract or by implication or operation of law to the extent that the benefit of any warranty or entitlement is assignable.
- (e) Limitation on Liability. Except as provided for herein, in no event will Boart Longyear be liable for any indirect, incidental, special, consequential, punitive or similar damages including, but not limited to, lost profits, loss of data or business interruption losses. In no event will the total, aggregate liability of Boart Longyear under the Contract exceed the value of the Contract under which liability is claimed. The liability limitations shall apply even if Boart Longyear has been notified of the possibility or likelihood of such damages occurring and regardless of the form of action, whether in contract, negligence, strict liability, tort, products liability or otherwise. The parties agree that these limits of liability shall survive and continue in full force and effect despite any termination or expiration of any Contract. Any action by Purchaser against Boart Longyear must be commenced within one year after the cause of action has accrued. No employee or agent of Boart Longyear is authorized to make any warranty other than that which is specifically set forth herein. The provisions in any specification, brochure or chart issued by Boart Longyear are descriptive only and are not warranties.



GLOBAL PRODUCT CATALOGUE

REVERSE CIRCULATION TOOLS

Global Headquarters

Boart Longyear 10808 South River Front Parkway Suite 600 South Jordan, Utah 84095 United States of America info@boartlongyear.com

Tel: +1 801 972 6430 Fax: +1 801 977 3374

Latin America

Boart Longyear Las Dalias 2900 (Macul) Santiago, 6900959, Chile info@boartlongyear.com

Tel: +56 2 520 7900 Fax: +56 2 755 0722

Canada

Boart Longyear 1111 Main St. West North Bay, Ontario Canada P1B 8H6 info@boartlongyear.com

Tel: +1 705 474 2800 Fax: +1 705 474 2373

Europe

Boart Longyear Columbusweg 8 5928 LC Venlo The Netherlands infoEU@boartlongyear.com

Tel: +31 077 850 58 50 Fax: +31 077 850 58 51

Asia Pacific

Boart Longyear 919-929 Marion Road Mitchell Park South Australia 5043 info_aus@boartlongyear.com

Tel: +61 8 8375 8375 Fax: +61 8 8377 0539

Sub-Saharan Africa

Boart Longyear Cycad House, Constantia Office Park Cnr 14th Avenue and Hendrik Potgieter Weltevreden Park, 1709 Gauteng, South Africa infosa@boartlongyear.com

Tel: +27 11 767 9300 Fax: +27 11 767 9301



www.boartlongyear.com