## Sonic Soil & Groundwater Sampling geoprobe.com/sonic-sampling

geoprobe.com/sonic-sampling

Whether you're sampling soils in an environmental investigation, collecting geotechnical data for construction, penetrating rock for bedrock wells, or casing a hole for a geothermal project, you'll find the sonic tooling system required to successfully achieve the desired results. Our sonic soil sampling tooling offers you the widest array of bits and sampling systems available; from conventional telescoping soil coring to dual tubing and face flushing bits for rock coring.

With sonic rigs and tooling designed and manufactured as a holistic system, you'll benefit from a comprehensive, compatible offering that is:

- · Engineered and tested for maximum strength and durability during sonic drilling by folks who manufacture sonic drill rigs
- Manufactured with solid steel using an exclusive heat treatment process and a proprietary thread design for ease of make-up and break-out.
- · Supported by sonic drilling experts experienced with tooling in a variety of geologic settings who can advise you in tooling selection and sonic drilling application technique.

Geoprobe® sonic casing is available on the shelf in a variety of lengths, providing you many options and configurations for reliable and consistent sonic project results, such as:

- Conventional Sonic Sampling (4x6, 6x8, 8x10)
- Dual Tube Sonic Sampling (SDT45 & SDT60)
- · Single Casing System: Cased Hole w/o Sampling



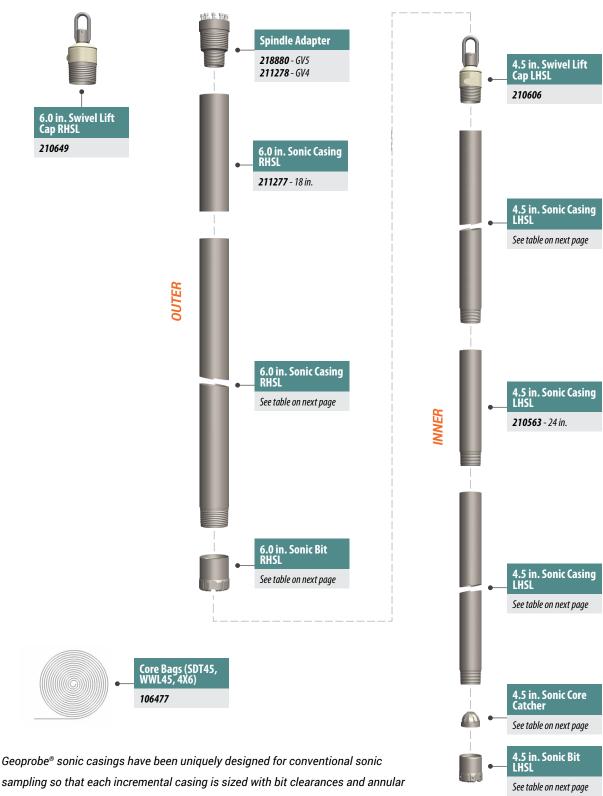












sampling so that each incremental casing is sized with bit clearances and annular space in mind. The 4x6 method is a well-established configuration that uses a 4-in. nominal core barrel over cased with a 6-in. casing.



#### OUTER

#### 6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### Bits

Components	Part	MN	Notes
	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL,  Dome Hardfaced	237966	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para Hardfaced	237967	6.45 in. OD 5.02 in. ID

## COMBINED COMPONENTS

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	

#### Subs / Adapters

Components	Part		Notes
THIRD OF THE PARTY	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver

#### Accessories

Component	:S	Part	MN	Notes
		6.0 in. Threadless Pin Sand Slip	216182	
	6.0 in. Swivel Lift Cap RHSL	210649	Pin	
	4.5 in. Swivel Lift Cap LHSL	210606	Pin	
	0	Rod Wiper Donut	600624	6.0 in.
		Rod Wiper Donut	600448	4.5 in.
		Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.
		Thread Compound	600729	1 Gallon

## INNER

#### 4.5 in. Sonic Casing LHSL

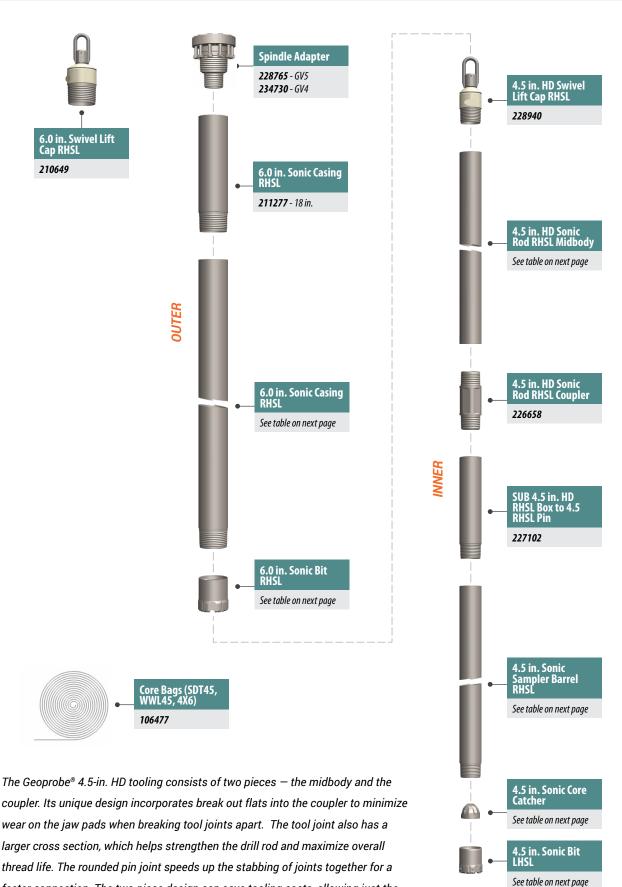
Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in.	3.75 in.
	210495	60 in.	82.5 lbs.		
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### Core Catchers

Components	Part	MN	Notes
	4.5 in. Sonic Core Catcher	209675	LH
	4.5 in. Sonic Core Catcher	231171	LH, Short
	4.5 in. Sonic Core Catcher	213151	LH, Thin

#### Bits

DILS			
Components	Part	MN	Notes
	4.5 in. Sonic Bit LHSL, Dome	210569	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit LHSL, Para	215168	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL,  Dome Hardfaced	237956	4.88 in. OD 3.53 in. ID
and the second	4.5 in. Sonic Bit LHSL, Para Hardfaced	237957	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para	212514	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut, Para Hardfaced	237961	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit LHSL Undercut ID Carbide, Para	213481	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit LHSL, Para	221895	4.75 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL CC	226269	4.50 in. OD 3.75 in. ID
	4.5 in. Sonic Bit LHSL Flapper Single	226328	4.75 in. 0D 3.75 in. ID
	4.5 in. Sonic Bit LHSL Flapper Double	224628	4.75 in. 0D 3.75 in. ID
	4.5 in. Sonic Bit LHSL Full Face, Para	215779	4.88 in. OD



faster connection. The two-piece design can save tooling costs, allowing just the

coupler to be replaced if the threads are damaged.

#### 6.0 in. Sonic Casing RHSL

**OUTER** 

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### Bits

Components	Part	MN	Notes
	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL,  Dome Hardfaced	237966	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para Hardfaced	237967	6.45 in. OD 5.02 in. ID

## **COMBINED COMPONENTS**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD

#### Subs / Adapters

Components	Part	MN	Notes
	4.5 HD Box x 6.0 RHSL Pin	226740	4.00 in. S-S
	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S
	4.5 HD Box x 4.5 HD Pin	229271	4.00 in. S-S Sub Saver

#### Accessories

Components		Part	MN	Notes
	6.0 in. Threadless Pin Sand Slip	216182		
	0	6.0 in. Swivel Lift Cap RHSL	210649	Pin
9	0	4.5 in. HD Swivel Lift Cap RHSL	228940	Pin
	0	Rod Wiper Donut	600624	6.0 in.
	Rod Wiper Donut	600448	4.5 in.	
	Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.	
	Thread Compound	600729	1 Gallon	

#### **INNER**

#### 4.5 in. HD Sonic Rod RHSL Midbody

Components	MN	Length	Weight	OD	ID
	226643	120 in.	189 lbs.		3.75 in.
	226634	60 in.	94.5 lbs.	4.5 in.	
	226641	24 in.	37.8 lbs.		

#### Coupler / Subs

Components	Part	MN	Notes
	4.5 in. HD Sonic Rod RHSL Coupler	226658	4.5 in. OD 3.0 in ID
	SUB 4.5 in. HD RHSL Box to 4.5 RHSL Pin	227102	

#### Sampler Barrel

Components	Part	MN	Notes
4.5 in. Sonic Sampler Barrel RHSL	227183	60 in.	
	•	223849	12 in.
	MIJE	229565	6 in.

#### Core Catchers

Components	Part	MN	Notes
	4.5 in. Sonic Core Catcher	227260	RH
	4.5 in. Sonic Core Catcher	231159	RH, Short

#### Bits

Components	Part	MN	Notes
	4.5 in. Sonic Bit RHSL, Dome	229575	4.88 in. OD 3.53 in. ID
	4.5 in. Sonic Bit RHSL, Para	229941	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL,  Dome Hardfaced	237958	4.88 in. OD 3.53 in. ID
To and	4.5 in. Sonic Bit RHSL, Para Hardfaced	237959	4.95 in. OD 3.52 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para	227193	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut, Para Hardfaced	237962	4.90 in. OD 3.32 in. ID
	4.5 in. Sonic Bit RHSL Undercut ID Carbide, Para	229606	4.90 in. OD 3.15 in. ID
	4.5 in. Sonic Bit RHSL Full Face, Para	229954	4.88 in. OD

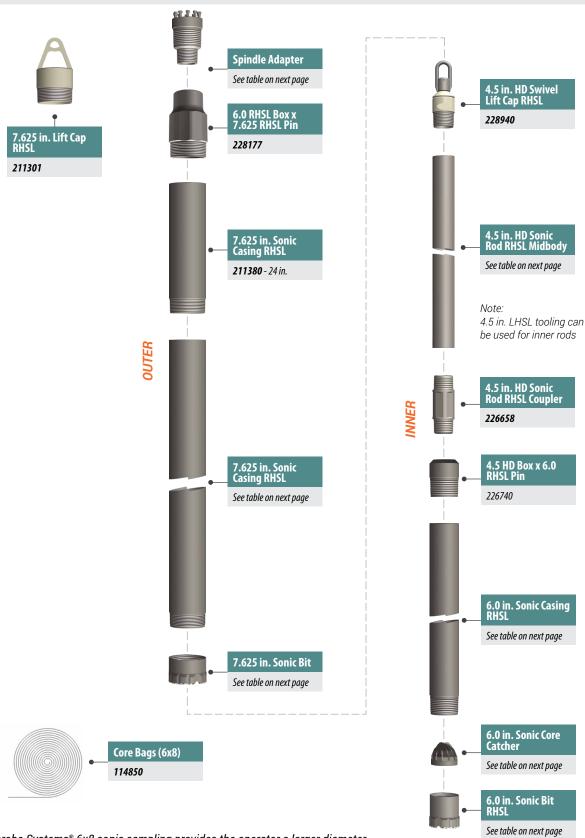
S-S (Shoulder to Shoulder)

## 4.5 in. HD Sonic Rods

geoprobe.com/4.5-sonic-hd



Go "Behind the Design" to find out the engineering perspective on our HD sonic tooling.



Geoprobe Systems® 6x8 sonic sampling provides the operator a larger diameter sample if desired, but this casing combination is typically used to provide a larger hole, such as to set a monitoring well.

#### OUTER

#### 7.625 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	211216	120 in.	337 lbs.	7.625 in.	6.765 in.
	211055	60 in.	168.5 lbs.		
	211380	24 in.	67.4 lbs.		

#### Bits

Components	Part	MN	Notes
	7.625 in. Sonic Bit RHSL, Dome	211056	8.07 in. 0D 6.73 in. ID
	7.625 in. Sonic Bit RHSL CC	226012	7.63 in. OD 6.88 in. ID

## **COMBINED COMPONENTS**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV5 ADPT 7.625 RHSL	229302	Bolt On
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD
	GV4 ADPT 7.625 RHSL	211060	Bolt On, Requires: 211154

#### Subs / Adapters

Components		Part	MN	Notes
	6.0 RHSL Box x 7.625 RHSL Pin	228177	10.50 in. S-S, Long	
	6.0 RHSL Box x 7.625 RHSL Pin	212218	4.00 in. S-S	
		4.5 HD Box x 6.0 RHSL Pin	226740	4.00 in. S-S
	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S	
	4.5 LHSL Box x 6.0 LHSL Pin	211647	11.00 in. S-S	

#### Accessories

Accessories			
Components	Part	MN	Notes
	7.625 in. Lift Cap RHSL	211301	Pin
	6.0 in. Swivel Lift Cap RHSL	210649	Pin
	4.5 in. HD Swivel Lift Cap RHSL	228940	Pin
	4.5 in. Swivel Lift Cap LHSL	210606	Pin
	Rod Wiper Donut	106478	7.625 in.
		600624	6.0 in.
		600448	4.5 in.
	Core Bags (6x8)	114850	10 in. flat x 725 ft.
	Thread Compound	600729	1 Gallon

#### S-S (Shoulder to Shoulder)

#### INNE

#### 4.5 in. HD

Components	MN	Length	We	ight	OD	ID
	226643	120 in.	189	lbs.		
	226634	60 in.	94.5	5 lbs.	4.5 in.	3.75 in.
W. C.	226641	24 in.	37.8	3 lbs.		
Components	Part			MN	Notes	
	4.5 in. HD Sonic Rod RHSL Coupler		226658	4.5 in. 0 3.0 in ID	-	

#### 4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.		3.75 in.
	210495	60 in.	82.5 lbs.	4.5 in.	
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### 6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.		5.25 in.
	210648	60 in.	112.5 lbs.	6.0 in.	
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### Sampler Barrel LHSL

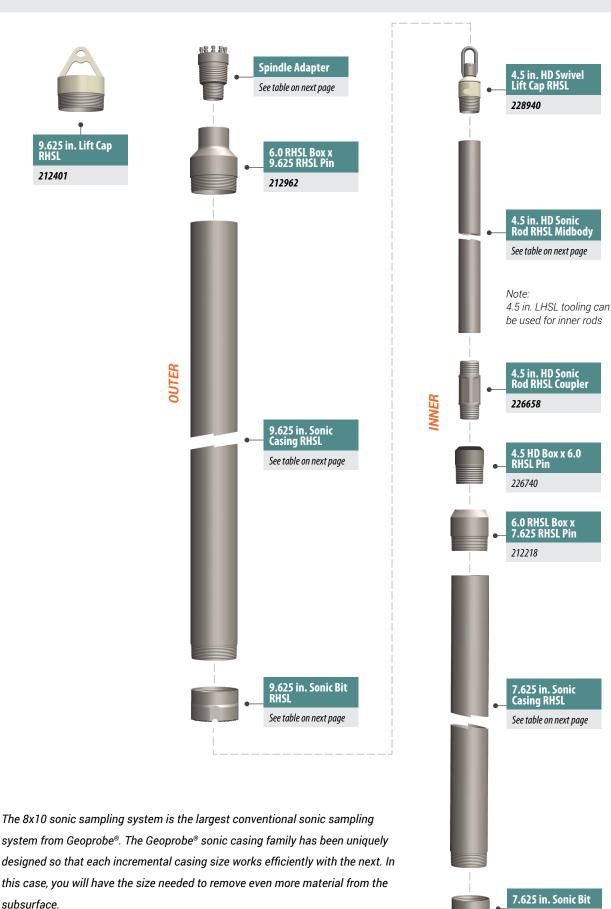
Components	Part	MN	Notes
	6.0 in. Sonic Sampler Barrel LHSL	211383	60 in.
	6.0 in. Sonic Sampler Barrel LHSL	222663	12 in.

#### Core Catchers

Components		Part	MN	Notes
	6.0 in. Sonic Core Catcher	211107	RH	
		6.0 in. Sonic Core Catcher	231193	RH, Short
	1446	6.0 in. Sonic Core Catcher	211746	LH
		6.0 in. Sonic Core Catcher	231202	LH, Short

### Bits

Components	Part	MN	Notes
<b>100</b>	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL,  Dome Hardfaced	237966	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para Hardfaced	237967	6.45 in. OD 5.02 in. ID
	6.0 in. Sonic Bit RHSL CC	226017	6.00 in. 0D 5.25 in. ID
33.13	6.0 in. Sonic Bit RHSL Full Face, Para	222884	6.35 in. OD
402	6.0 in. Sonic Bit LHSL, Dome	211409	6.38 in. OD 5.02 in. ID
	6.0 in. Sonic Bit LHSL ID Carbide, Dome	216273	6.38 in. OD 4.71 in. ID



See table on next page

#### **OUTER**

#### 9.625 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	212297	120 in.	435 lbs.		8.755 in.
	215137	60 in.	217.5 lbs.	9.625 in.	
	212296	24 in.	87 lbs.		

#### **Bits**

Components	Part	MN	Notes
	9.625 in. Sonic Bit RHSL, Dome	212298	9.90 in. OD 8.80 in. ID
	9.625 in. Sonic Bit RHSL CC	226010	9.63 in. OD 8.84 in. ID

## **COMBINED COMPONENTS**

#### Subs / Adapters

Components	Part	MN	Notes
	7.625 RHSL Box x 9.625 RHSL Pin	212620	10.00 in. S-S
	6.0 RHSL Box x 9.625 RHSL Pin	212962	10.00 in. S-S
	6.0 RHSL Box x 7.625 RHSL Pin	228177	10.50 in. S-S, Long
	6.0 RHSL Box x 7.625 RHSL Pin	212218	4.00 in. S-S
	4.5 HD Box x 6.0 RHSL Pin	226740	4.00 in. S-S
	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S
	4.5 LHSL Box x 7.625 LHSL Pin	212893	5.40 in. S-S

#### Accessories

Accessorie	5			
Component	S	Part	MN	Notes
	0	9.625 in. Lift Cap RHSL	212401	Pin
		7.625 in. Lift Cap RHSL	211301	Pin
	0	4.5 in. HD Swivel Lift Cap RHSL	228940	Pin
		4.5 in. Swivel Lift Cap LHSL	210606	Pin
			106768	9.625 in.
			106478	7.625 in.
		Rod Wiper Donut	600624	6.0 in.
	1 +		600448	4.5 in.
	TI	Thread Compound	600729	1 Gallon

S-S (Shoulder to Shoulder)

#### **INNER**

#### 4.5 in. HD

Components	MN	Length	We	ight	OD	ID
	226643	120 in.	189	lbs.		
	226634	60 in.	94.5	5 lbs.	4.5 in.	3.75 in.
	226641	24 in.	37.8	3 lbs.		
Components	Part			MN	Notes	
	4.5 in. HD Sonic Rod RHSL Coupler			226658	4.5 in. 0 3.0 in ID	

#### 4.5 in. Sonic Casing LHSL

Components		MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in.	3.75 in.	
	210495	60 in.	82.5 lbs.			
	210563	24 in.	33 lbs.			
	210602	12 in.	16.5 lbs.			

#### 7.625 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	211216	120 in.	337 lbs.	7.625 in.	6.765 in.
	211055	60 in.	168.5 lbs.		
	211380	24 in.	67.4 lbs.		

#### Sampler Barrel LHSL

Components	Part	MN	Notes
	7.625 in. Sonic Sampler Barrel LHSL	215250	60 in.

#### Bits

Components	Part	MN	Notes
	7.625 in. Sonic Bit RHSL, Dome	211056	8.07 in. OD 6.73 in. ID
addish	7.625 in. Sonic Bit RHSL CC	226012	7.63 in. OD 6.88 in. ID
	7.625 in. Sonic Bit LHSL, Dome	215252	8.07 in. OD 6.73 in. ID

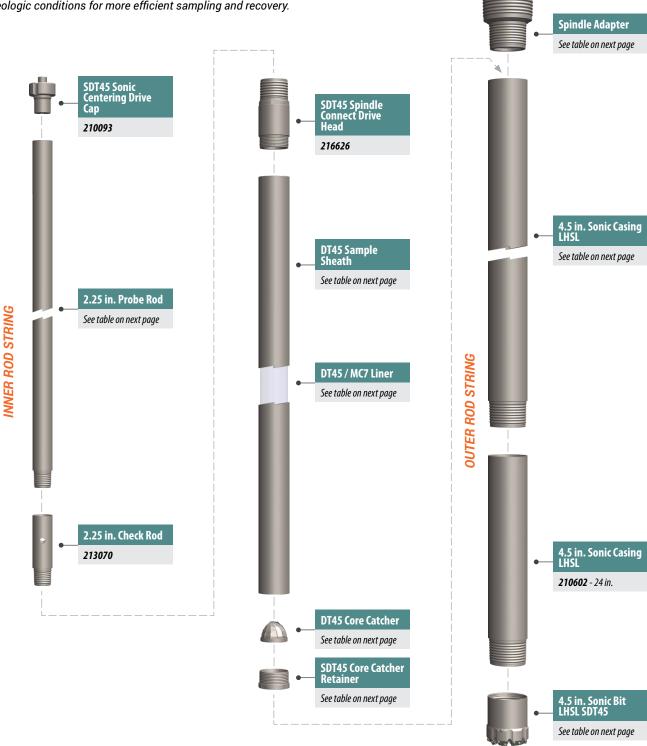
## **COMBINED COMPONENTS**

#### Spindle Adapters

Components	Part	MN	Notes
9	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV5 ADPT 7.625 RHSL	229302	Bolt On
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD
	GV4 ADPT 7.625 RHSL	211060	Bolt On, Requires: 211154

REAL FOR

The versatile SDT45 system can be used for environmental sampling, varying types of well installations, cased hole applications, geotechnical borings, and exploration projects. The 4.5-inch outer casing remains in the ground while the sample is retrieved with inner 2.25-inch. probe rods. The system provides optional bits based upon geologic conditions for more efficient sampling and recovery.



## **INNER ROD STRING**

#### Centering Drive Cap

Components	Part	MN	Notes
	SDT45 Sonic Centering Drive Cap	210093	

#### Probe Rods

2.25 in. Probe Rod	MN	Length	Weight	OD	ID
	204767	60 in.	37.5 lbs.	2.25 in.	1.5 in.
	204766	48 in.	30 lbs.		
	206588	24 in.	15 lbs.		
	204777	12 in.	7.5 lbs.		
	213070	6 in.	<b>2.25 in. Check Rod</b> ( <i>Nylon Ball: 101120, Spring Pin: 106971</i> )		Pin: 106971)

#### Spindle Connect Drive Heads

Components		Part	MN	Notes
		SDT45 Spindle Connect Drive Head	216626	
		WWL45 Spindle Connect Drive Head	220196	Endless Thread

#### Sample Sheath

Components	Part	MN	Notes
	DT45 Sample Sheath	205762	72 in.
		231581	72 in., Endless Thread
		205761	60 in.
		205760	48 in.

#### Liners

Components	Part	MN	Notes
	DT45 / MC7 Liner	600720	72 in., PVC, Built to Order, Quantity: 18
	DT45 / MC7 Liner	600719	60 in., PVC Quantity: 18
	DT45 / MC7 Liner	600721	48 in., PVC Quantity: 18

#### Core Catchers / Retainers

Components	Part	MN	Notes	
	DT45 Liner Retainer	212520		
	SDT45 Sonic Core Catcher	216554		
	DT45 Core Catcher	226134	Short	
	SDT45 Core Catcher Retainer	218304	Asm	
	SDT45 Core Catcher Retainer	217894	Asm, Endless Thread	
	SDT45 Core Catcher Retainer	226147	Asm, Endless Thread, Short	
	SDT45 Core Catcher Retaining Ring	217634		
9	DT45 Retainer / MC7 Cutting Shoe Wrench	205773		

## **OUTER ROD STRING**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
***	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	

#### 4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210495	60 in.	82.5 lbs.	4.5 in.	3.75 in.
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### Bits

Components		Part	MN	Notes
	0100	4.5 in. Sonic Bit LHSL SDT45, Dome	226395	4.93 in. OD 2.65 in. ID
		4.5 in. Sonic Bit LHSL SDT45, Para	210566	4.93 in. OD 2.65 in. ID

#### Subs / Adapters

Components	Part	MN	Notes
entitita)	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver

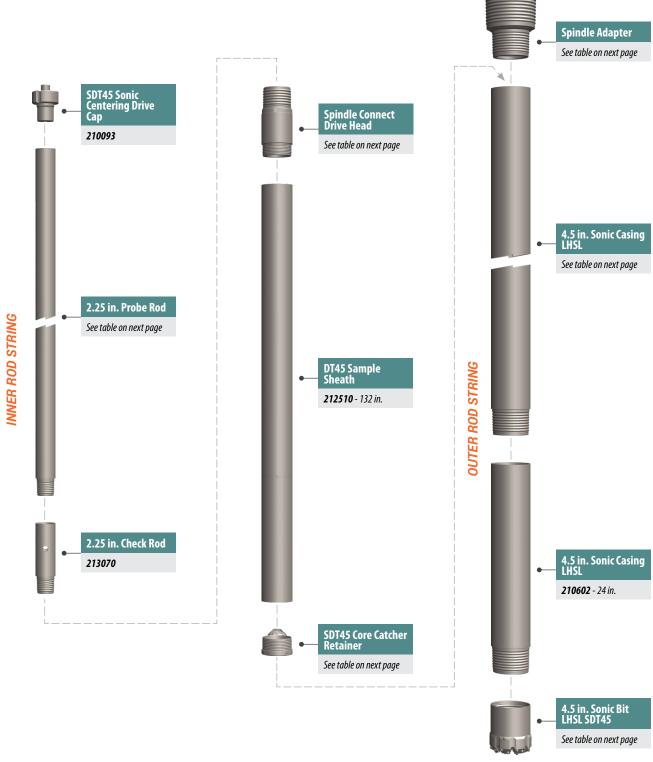
## **COMBINED COMPONENTS**

#### Replacement Parts / Accessories

Replacement Parts / Accessories			
Components	Part	MN	Notes
	1.25 in. Nylon Ball	101120	
	SDT45 Center Rod Guide	216614	
	4.5 in. Swivel Lift Cap LHSL	210606	Pin
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin
	Rod Wiper Donut	600448	4.5 in.
	DT45/MC7 Liner Cutter	206987	
	Liner Cutter Replacement Blades	600985	Quantity: 5
	Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.
	Thread Compound	600729	1 Gallon

REAL FOR

Save time and fatigue advancing an outer casing and inner soil sampler simultaneously using the unique and versatile Geoprobe Systems® Sonic Dual Tube 45 (SDT45) sampling system. Provide a 4.5-inch cased hole while working in consolidated and unconsolidated material while the sample is retrieved with inner 2.25-inch probe rod.



## **INNER ROD STRING**

#### Centering Drive Cap

Components	Part	MN	Notes
	SDT45 Sonic Centering Drive Cap	210093	

#### Probe Rods

2.25 in. Probe Rod	MN	Length	Weight	OD	ID
	204767	60 in.	37.5 lbs.	2.25 in.	1.5 in.
	204766	48 in.	30 lbs.		
	206588	24 in.	15 lbs.		
	204777	12 in.	7.5 lbs.		
	213070	6 in.	2.25 in. Check Rod		

#### Spindle Connect Drive Heads

Components	Part	MN	Notes
The state of the s	SDT45 Spindle Connect Drive Head	216626	
	WWL45 Spindle Connect Drive Head	220196	Endless Thread

#### Sample Sheath

Components	Part	MN	Notes
1	DT45 Sample Sheath	212510	132 in., Endless Thread

#### Core Catchers / Retainers

Components	Part	MN	Notes
	SDT45 Core Catcher Retainer	218304	Asm
	SDT45 Core Catcher Retainer	217894	Asm, Endless Thread
	SDT45 Core Catcher Retainer	226147	Asm, Endless Thread, Short
	SDT45 Sonic Core Catcher	216554	
	DT45 Core Catcher	226134	Short
	SDT45 Core Catcher Retaining Ring	217634	
B	DT45 Retainer / MC7 Cutting Shoe Wrench	205773	

## **OUTER ROD STRING**

#### Spindle Adapters

Components	5	Part	MN	Notes
	Talant II	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
		GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	

#### 4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in. 3.	3.75 in.
	210495	60 in.	82.5 lbs.		
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### **Bits**

Components		Part	MN	Notes
		4.5 in. Sonic Bit LHSL SDT45, Dome	226395	4.93 in. OD 2.65 in. ID
6.0		4.5 in. Sonic Bit LHSL SDT45, Para	210566	4.93 in. OD 2.65 in. ID

#### Subs / Adapters

Components	Part	MN	Notes
Annua.	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver

## **COMBINED COMPONENTS**

#### Replacement Parts / Accessories

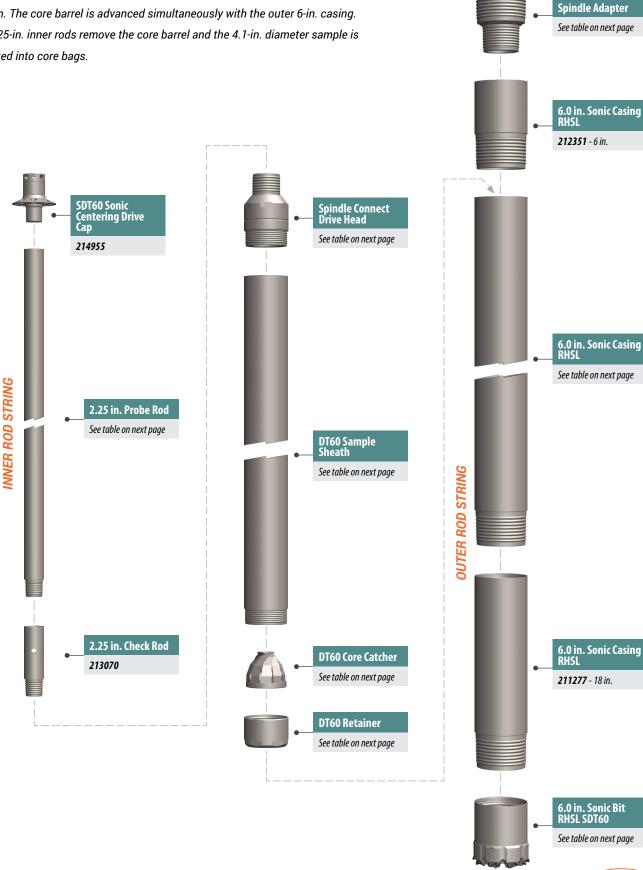
Components	Part	MN	Notes
	1.25 in. Nylon Ball	101120	
	SDT45 Center Rod Guide	216614	
	4.5 in. Swivel Lift Cap LHSL	210606	Pin
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin
	Rod Wiper Donut	600448	4.5 in.
	Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.
	Thread Compound	600729	1 Gallon

geoprobe.com (Geoprobe)

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785-825-1842

Increase productivity and minimize casing handling when advancing the dual tube system. The core barrel is advanced simultaneously with the outer 6-in. casing. Our 2.25-in. inner rods remove the core barrel and the 4.1-in. diameter sample is collected into core bags.



## **INNER ROD STRING**

#### Centering Drive Cap

Components	Part	MN	Notes
	SDT60 Sonic Centering Drive Cap	214955	

#### Probe Rods

2.25 in. Probe Rod	MN	Length	Weight	OD	ID
	204767	60 in.	37.5 lbs.	2.25 in.	1.5 in.
	204766	48 in.	30 lbs.		
	206588	24 in.	15 lbs.		
	204777	12 in.	7.5 lbs.		
	213070	6 in.	2.25 in. Check Rod (Nylon Ball: 101120, Spring Pin: 10		Pin: 106971)

#### Spindle Connect Drive Heads

Components	Part	MN	Notes
	SDT60 Spindle Connect Drive Head	212887	
	WWL60 Spindle Connect Drive Head	223253	Endless Thread

#### Sample Sheath

Components	Part	MN	Notes
	DT60 Sample Sheath	215043	72 in.
		215042	60 in.
		211621	12 in.
		213140	12 in. Endless Thread

#### Core Catchers / Retainers

Components	Part	MN	Notes
	DT60 Core Catcher	215016	
	SDT60 Sonic Core Catcher	223224	Short
	DT60 Retainer	211280	
	DT60 Retainer	213139	Endless Thread
P	DT60 Wrench	208080	

## **OUTER ROD STRING**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD

#### 6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### Bits

Component	s	Part	MN	Notes
	100 per 100 pe	6.0 in. Sonic Bit RHSL SDT60, Dome	226396	6.49 in. OD 4.10 in. ID
		6.0 in. Sonic Bit RHSL SDT60, Para	215162	6.49 in. OD 4.10 in. ID

## **COMBINED COMPONENTS**

#### Replacement Parts / Accessories

Components	Part	MN	Notes
	1.25 in. Nylon Ball	101120	
	SDT60 Center Rod Guide	218383	
	6.0 in. Swivel Lift Cap RHSL	210649	Pin
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin
	Rod Wiper Donut	600624	6.0 in.
	Core Bags (SDT60, WWL60)	700127	9 in. flat x 1000 ft.
	Thread Compound	600729	1 Gallon

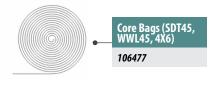
## Sonic SDT45 Weighted Wireline (WWL45)

geoprobe.com/dt45-wwl



785-825-1842

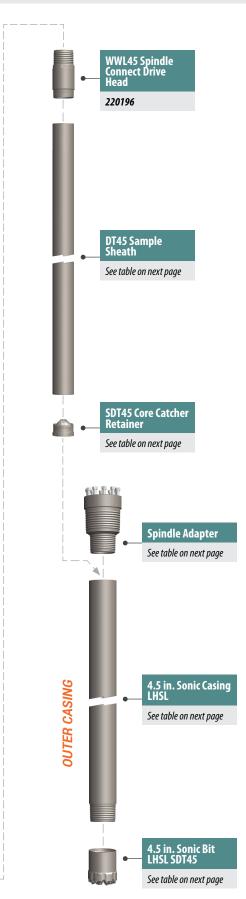
Designed to compliment standard SDT45 tooling, the core barrel uses a simple weight system to hold it in place at the bottom of the tool string rather than a mechanical latch. Makes for much faster trip times when utilized during 100-foot or greater depths in consolidated formations.











#### **OVERSHOT**

#### Accessories

Components	Part	MN	Notes
/	NWL WWL Overshot with Quick Change	223515	
	WWL Overshot Release Tube	220755	

## **WEIGHT / INNER CASING**

#### Accessories

Components	Part	MN	Notes
	WWL Weight Head	220023	
8	WWL Connector Pin	220325	
•	WWL Spearhead	220205	
m /	WWL Weight	220257	150 lb.
	WWL Spring Cushion	223493	Optional
30	WWL Slip Coupler	220739	2.25 in. Endless Thread
	1.25 in. Nylon Ball	101120	
	WWL45 Spindle Connect Drive Head	220196	Endless Thread

#### Sample Sheath

Components	Part	MN	Notes
NY.	DTAF Commis Charth	212510	132 in., Endless Thread
9	DT45 Sample Sheath	231581	72 in., Endless Thread

#### Core Catchers / Retainers

oore outeriers / rictainers				
Components	Part	MN	Notes	
	SDT45 Core Catcher Retainer	217894	Asm, Endless Thread	
	SDT45 Core Catcher Retainer	226147	Asm, Endless Thread, Short	
	SDT45 Sonic Core Catcher	216554		
	DT45 Core Catcher	226134	Short	
	SDT45 Core Catcher Retaining Ring	217634		
9	DT45 Retainer / MC7 Cutting Shoe Wrench	205773		

## **Sonic Weighted Wireline Overview**

geoprobe.com/wwl

## **OUTER ROD STRING**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	

#### 4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in.	3.75 in.
	210495	60 in.	82.5 lbs.		
	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### Bits

Components	Part	MN	Notes
, sloc	4.5 in. Sonic Bit LHSL SDT45, Dome	226395	4.93 in. OD 2.65 in. ID
	4.5 in. Sonic Bit LHSL SDT45, Para	210566	4.93 in. OD 2.65 in. ID

### Subs / Adapters

Components	Part	MN	Notes
Annuali.	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver

## **COMBINED COMPONENTS**

#### Accessories

Components	Part	MN	Notes
	4.5 in. Swivel Lift Cap LHSL	210606	Pin
	3.5 in. Swivel Lift Cap LHSL	209503	Вох
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin
	Rod Wiper Donut	600448	4.5 in.
	DT45/MC7 Liner Cutter	206987	
	Liner Cutter Replacement Blades	600985	Quantity: 5
	Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.
	Thread Compound	600729	1 Gallon



This video looks at the speed of the sonic weighted wireline system.

## Sonic SDT60 Weighted Wireline (WWL60)

geoprobe.com/dt60-wwl

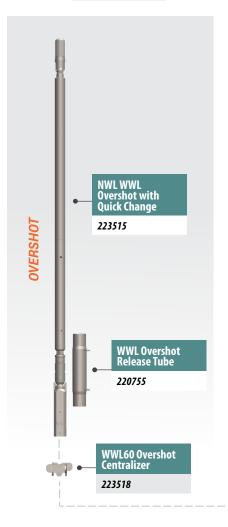


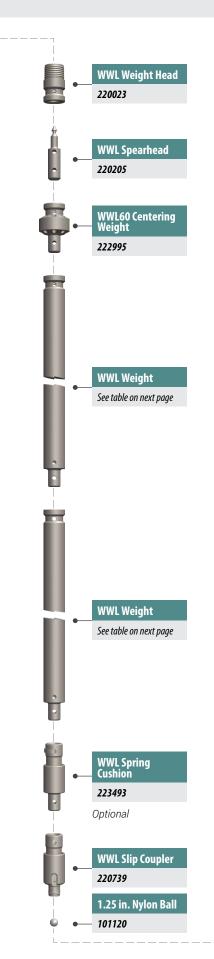
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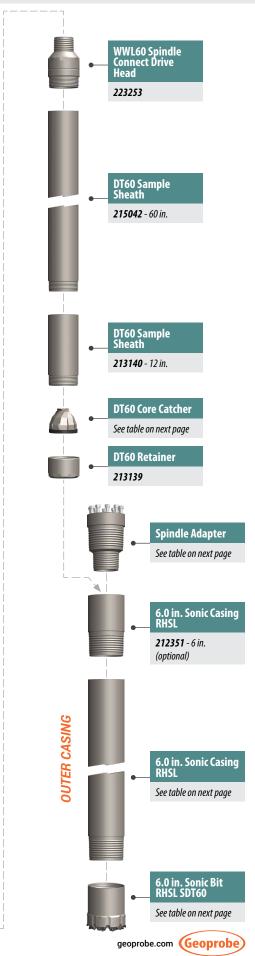
Designed and available exclusively through Geoprobe® and able for use under most sonic rigs, WWL60 makes for much faster trip times when utilized during 100-foot or greater depths in consolidated formations. Complimenting standard SDT60 tooling, the core barrel uses a weight system to hold it in place at the bottom of the tool string rather than a mechanical latch.











# VIDEO

#### **OVERSHOT**

#### Accessories

Components	Part	MN	Notes
	NWL WWL Overshot with Quick Change	223515	
	WWL60 Overshot Centralizer	223518	
	WWL Overshot Release Tube	220755	

## **WEIGHT / INNER CASING**

#### Accessories

Components	Part	MN	Notes
9	WWL Weight Head	220023	
<b>S</b> <u>C</u>	WWL Connector Pin	220325	
•	WWL Spearhead	220205	
	WWL60 Centering Weight	222995	
	WWL Weight	220257	150 lb.
	WWL Weight	223797	300 lb.
	WWL Spring Cushion	223493	Optional
	WWL Slip Coupler	220739	2.25 in., endless thread
	1.25 in. Nylon Ball	101120	
	WWL60 Spindle Connect Drive Head	223253	Endless Thread

#### Sample Sheath

	Components	Part	MN	Notes
			215042	60 in.
		DT60 Sample Sheath	213140	12 in., Endless Thread

#### Core Catchers / Retainers

Components		Part	MN	Notes
		DT60 Core Catcher	215016	
		SDT60 Sonic Core Catcher	223224	Short
		DT60 Retainer	213139	Endless Thread
	D	DT60 Wrench	208080	

## **OUTER ROD STRING**

#### Spindle Adapters

Components	Part	MN	Notes
	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
E daments	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD

#### 6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### **Bits**

Components	Part	MN	Notes
(30 gs) 6 <sub>75 gs</sub>	6.0 in. Sonic Bit RHSL SDT60, Dome	226396	6.49 in. OD 4.10 in. ID
	6.0 in. Sonic Bit RHSL SDT60, Para	215162	6.49 in. OD 4.10 in. ID

## **COMBINED COMPONENTS**

#### Accessories

710000007100			
Components	Part	MN	Notes
0	6.0 in. Swivel Lift Cap RHSL	210649	Pin
	3.5 in. Swivel Lift Cap LHSL	209503	Вох
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin
•	Rod Wiper Donut	600624	6.0 in.
	Core Bags (SDT60, WWL60)	700127	9 in. flat x 1000 ft.
	Thread Compound	600729	1 Gallon

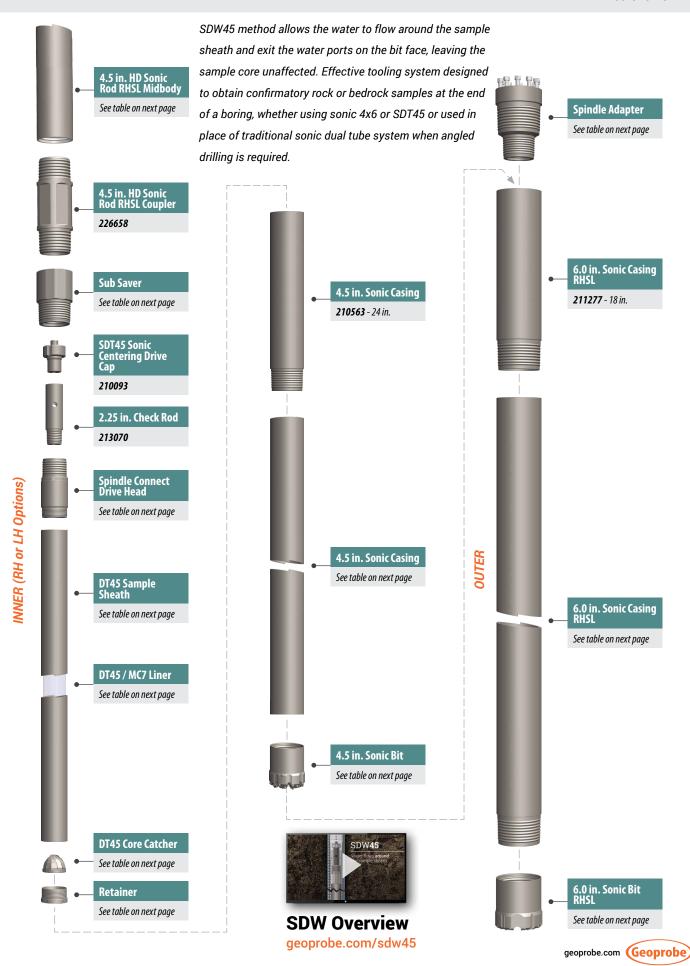
## **Sonic Weighted Wireline Overview**

geoprobe.com/wwl



See how the sonic weighted wireline system makes trip out times much faster than traditional sonic sampling.





#### INNEF

#### Accessories

Components	Part	MN	Notes
	SDT45 Sonic Centering Drive Cap	210093	
	2.25 in. Check Rod	213070	6 in.
	SDT45 Spindle Connect Drive Head	216626	
	WWL45 Spindle Connect Drive Head	220196	Endless Thread

#### Sample Sheath

Components	Part	MN	Notes
DT45 Sample Sheath	212510	132 in., Endless Thread	
	205762	72 in.	
	•	231581	72 in., Endless Thread
	Sileatii	205761	60 in.
		205760	48 in.

#### Liners

Components	Part	MN	Notes
13	DT45 / M67	600720	72 in., PVC, Built to Order, Qty: 18
	DT45 / MC7 Liner	600719	60 in., PVC, Qty: 18
The same of the sa	Liner	600721	48 in., PVC, Qty: 18

#### Core Catchers / Retainers

Core Catchers / netainers					
Components	Part	MN	Notes		
	DT45 Liner Retainer	212520			
	SDT45 Sonic Core Catcher	216554			
	DT45 Core Catcher	226134	Short		
	SDT45 Core Catcher Retainer	218304	Asm		
	SDT45 Core Catcher Retainer	217894	Asm, Endless Thread		
	SDT45 Core Catcher Retainer	226147	Asm, Endless Thread, Short		
	SDT45 Core Catcher Retaining Ring	217634			
8	DT45 Retainer / MC7 Cutting Shoe Wrench	205773			

#### 4.5 in. Sonic Casing LHSL

Components	MN	Length	Weight	OD	ID
	210172	120 in.	165 lbs.	4.5 in.	3.75 in.
	210495	60 in.	82.5 lbs.		
The state of the s	210563	24 in.	33 lbs.		
	210602	12 in.	16.5 lbs.		

#### 4.5 RHSL

Components	Part	MN	Notes
	4.5 in. Sonic Sampler Barrel RHSL	227183	60 in.
		223849	12 in.
		229565	6 in.
	SUB 4.5 in. HD RHSL Box to 4.5 RHSL Pin	227102	

#### Bits

Components	Part	MN	Notes
C900	4.5 in. Sonic Bit RHSL SDT45,	7 731316	4.93 in. OD
	Dome		2.65 in. ID
(3)	4.5 in. Sonic Bit RHSL	223864	4.93 in. OD
4995	SDT45, Para	223004	2.65 in. ID
	4.5 in. Sonic Bit LHSL SDT45,	<b>4.5 in. Sonic Bit LHSL SDT45,</b> Dome 226395	4.93 in. OD
100	Dome		2.65 in. ID
6 3	4.5 in. Sonic Bit LHSL SDT45,	210566	4.93 in. OD
	Para	210300	2.65 in. ID

#### **OUTER**

#### 6.0 in. Sonic Casing RHSL

Components	MN	Length	Weight	OD	ID
	210979	120 in.	225 lbs.	6.0 in.	5.25 in.
	210648	60 in.	112.5 lbs.		
	211174	24 in.	45 lbs.		
	211277	18 in.	33.75 lbs.		
	212350	12 in.	22.5 lbs.		
	212351	6 in.	11.25 lbs.		

#### Bits

Components	Part	MN	Notes
allin	6.0 in. Sonic Bit RHSL, Dome	210749	6.38 in. OD
	6.0 In. Sonic Bit KHSL, Dome		5.02 in. ID
	6.0 in. Sonic Bit RHSL, Para	213325	6.45 in. OD
and a			5.02 in. ID
6.0 in. Sonic Bit RHSL CC	226017	6.00 in. OD	
	0.0 III. SUIIIC DIL KASL CC	220017	5.25 in. ID

## **COMBINED COMPONENTS**

#### Spindle Adapters

Components	Part	MN	Notes
9	GV5 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	218880	
	GV5 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	228765	HD
	GV4 ADPT 6.0 RHSL x 4.5 LHSL x 3.5 LHSL	211278	
	GV4 ADPT 6.0 RHSL x 4.5 HD x 3.5 LHSL	234730	HD

#### Accessories

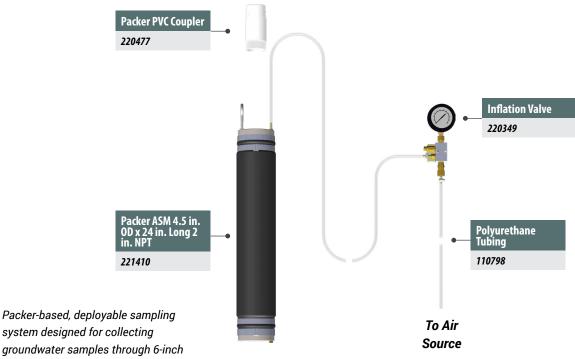
Accessories				
Components	Part	MN	Notes	
	1.25 in. Nylon Ball	101120		
	6.0 in. Swivel Lift Cap RHSL	210649	Pin	
	4.5 in. HD Swivel Lift Cap RHSL	228940	Pin	
	4.5 in. Swivel Lift Cap LHSL	210606	Pin	
	2.25 in. Spring Assisted Swivel Lift Cap	217609	Pin	
	Rod Wiper Donut	600624	6.0 in.	
	Rod Wiper Donut	600448	4.5 in.	
	DT45/MC7 Liner Cutter	206987		
	Liner Cutter Replacement Blades	600985	Quantity: 5	
	Core Bags (SDT45, WWL45, 4X6)	106477	8 in. flat x 725 ft.	
	Thread Compound	600729	1 Gallon	

#### Subs / Adapters

Components	Part	MN	Notes
Amount (Manager)	4.5 HD Pin x 6.0 RHSL Box	226741	8.50 in. S-S
	4.5 HD Box x 4.5 HD Pin	229271	4.00 in. S-S Sub Saver
	4.5 LHSL Box x 4.5 LHSL Pin	212679	4.00 in. S-S Sub Saver

S-S (Shoulder to Shoulder)

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system designed for collecting groundwater samples through 6-inch casing. Packer is inflated via flexible tubing, inflation valve assembly, and air supply (not included). The 8150LS on-board air, manual air pumps or a small air tank are common sources for compressed air to inflate packer. Can be used with multiple direct push and sonic sampling systems such as SDT60, 4X6, DT60 or 6X8 to name a few.

#### **Key Features**

- deployed inside 6-inch casing with standard 2-inch schedule 40 PVC
- helps ensure groundwater being sampled is representative of that particular interval
- prevents the screen section from being exposed to the water inside the casing
- modular design allows multiple packers to be used for different isolation options

2.0 in. Male NPT SS Screen

#### Sampling Components

Components	Part	MN	Notes
	PVC Riser	104378	2 in. x 60 in.
	Packer PVC Coupler	220477	
ALCO STORY	Inflation Valve	220349	
100 ft.	Polyurethane Tubing	110798	3/8 in. 0D x 1/4 in. ID x 100 ft.
	Packer ASM 4.5 in. OD x 24 in. Long 2 in. NPT	221410	
	2.0 in. Male NPT SS Screen	110516	5 ft.