# ROCK HOG Drilling Products

# PRODUCT CATALOG



# **Table of Contents**

<b>DTH Hammer Introduction</b>	3
Available DTH Hammer Models	4
DTH Hammer Models 4" Model 4.5" Model 5" Model 5.5" Model 6" Model 6.5" Model 8" Model 8" Model 5" Reverse Circulation Series	5
DTH Bit Features & Benefits	13
DTH Bit Shank Identification Cha	rt 14
DTH Bit Face Styles	17
DTH Bit Part Number Breakdown	19
DTH Bit Specification and Orderin	ng 20
DTH Bit Head/Shank Part Number 2" Series Bits (Bits for 2" Hammand 3.5" Series Bits (Bits for 3.5" Hammand 4" Series Bits (Bits for 4" Hammand 5" Series Bits (Bits for 5" Hammand 6" Series Bits (Bits for 6" Hammand 8" Series Bits (Bits for 8" Hammand 8" Bits (Bits f	ners) ners) ners) ners) ners) ners) ners)
Threaded Button Bits	29
Warranty Information	30

### **Rock Hog DTH Hammers**

- Rock Hog's new line of High Performance "HP" DTH hammers were introduced in early 2010. They have been field tested in a variety of drilling applications around the world and have continually proven to be the industry leader. Contact your Rock Hog Sales Representative for further details.
- A valveless pneumatic percussion DTH hammer for drilling in all rock formations.
- DTH hammers are suited for any type of drilling application including, water wells, quarries, open pit and underground mining, construction, blasting, environmental, oil and gas.
- All models incorporate one moving part, the piston, making the hammers very reliable.
- All external parts are hardened to resist wear while all critical internal parts are also hardened for maximum service life.
- The designs also make the hammers easy to maintain and service.
- Available in 4, 4.5, 5, 5.5, 6, 6.5, and 8 inch series
- Available for use with most popular DTH shank bits
- Various models available for different air supplies
- Various drill pipe thread connections available







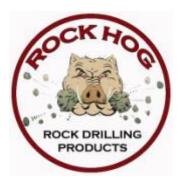
Below is a list of the current models in production. Ask your Rock Hog representative about:

- + LV models for use on smaller air supplies
- + optional drill pipe connections
- + backout buttons
- + older DTH hammer models and parts

DTH	CK HOG HAMMER DEL No.	Bit Shank Style	Low Volume	Heavy Duty	Regular API Pin-Up Thread Connection
4"	RH4i9	340A			2-3/8
4.5"	RH45R9HP	340A			2-3/8
5"	RH50Q1HP	QL50			
J	RH50R1HP	350R			3-1/2
5.5"	RH55Q1HP	QL50			3 1/2
6"	RH61Q1HP	QL60			3-1/2
*ALL 5 1	*ALL 5 1/2" 6" AND 6 1/2" COME STANDARD WITH (4) BACKOUT BUTTONS				
6.5"	RH65Q1HP	QL60			3-1/2
0.5	RH65QHD1HP	QL60		Χ	3-1/2
	RH8i3	000			
0"	RH8iLV3	380	Χ		4-1/2
8"	RH8Q3	01.00			4-1/2
	RH8QLV3	QL80	Χ		
RC Hammer					
	RH5RC11	R50			4-1/2 METZKE
5"	RH5RC12	R50			4-1/2 REMET
	RH5RC13	R50			4-1/2 MATRIX
	contact you	ur rep for det	ails o	n this	hammer

# 4" DTH Hammer Model

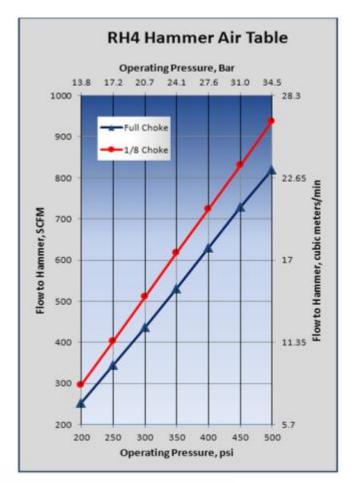
with 2-3/8 Reg API Pin-up connection



RH4i9 - uses the 340A shank DTH bit

This hammer is designed for drilling 4" and larger holes.

	English	Metric
Outside Dia	3.63 in	92.2 mm
Overall Length Without Bit	41.9 in	1064 mm
Operating Length API shoulder to Bit Face	41.9 in	1064 mm
Total Weight	82 lbs	37 kg
Bore Size	2.95 in	75 mm
Piston Weight	20 lbs	9 kg
Drillpipe Connect	2-3/8 Reg API Pin Up others available upon request	
Wrench Flats	2.95 in	75 mm
Hole Size Range	4 in to 5 1/8 in	
Hole Size Range	127 mm to 152 mm	
Bit Shank Required	340A	
Minimum Air Volume Required	150 cfm	4.5 cmm
Maximum Operating Pressure	500 psi	34 bar





# 4.5" DTH "HP" Hammer Model

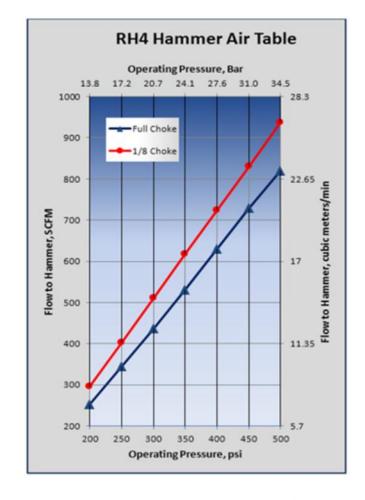
with 2-3/8 Reg API Pin-up connection

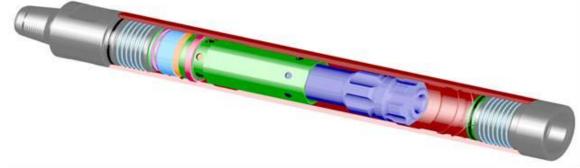


RH45R9HP - uses the 340A shank DTH bit

This hammer is designed for drilling 4 1/2" and larger holes.

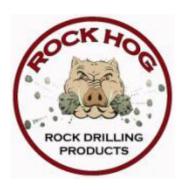
	English	Metric
Outside Dia	4.00 in	101.6 mm
Overall Length Without Bit	40.7 in	1034 mm
Operating Length API shoulder to Bit Face	40.9 in	1039 mm
Total Weight	112 lbs	50 kg
Bore Size	3.28 in	83.3 mm
Piston Weight	22 lbs	10 kg
Drillpipe Connect	2-3/8 Reg API Pin Up others available upon request	
Wrench Flats	2.95 in	75 mm
Halo Sizo Dango	4 1/2 in to 5 1/8 in	
Hole Size Range	114 mm to 152 mm	
Bit Shank Required	340A	
Minimum Air Volume Required	150 cfm	4.5 cmm
Maximum Operating Pressure	500 psi	34 bar





# 5" DTH "HP" Hammer Models

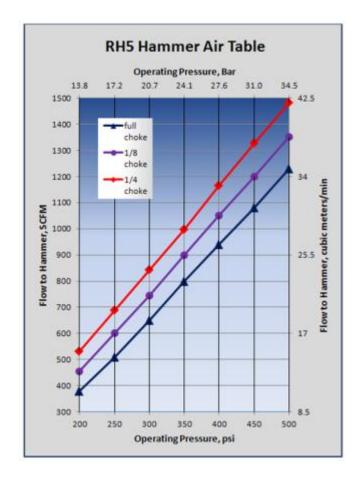
with 3-1/2 Reg API Pin-up connection

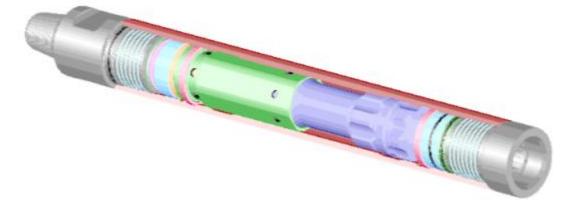


RH50Q1HP – uses the QL50 shank DTH bit RH50R1HP – uses the 350R shank DTH bit

This hammer is designed for drilling 5" and larger holes.

<b></b>				
	English	Metric		
Outside Dia	4.53 in	115 mm		
Overall Length Withou	t Bit			
RH50Q models	47.2 in	1199 mm		
RH50R models	48.2 in	1222 mm		
Operating Length API	shoulder to Bit I	Face		
RH50Q models	47.1 in	1196 mm		
RH50R models	48.1 in	1222 mm		
Total Weight	143 lbs	64.8 kg		
Bore Size	3.71 in	94.2 mm		
Piston Weight	30 lbs	13.6 kg		
Drillpipe Connect	3-1/2 Reg API Pin Up others available upon request			
Wrench Flats	3.5 in	88.9 mm		
Hole Size Range	5 in to 6 in			
noie Size Range	127 mm to 1	52 mm		
Bit Shank Required	Bit Shank Required			
RH50Q models	QL50			
RH50R models	350R			
Minimum Air Volume Required	250 cfm	7 cmm		
Maximum Operating Pressure	500 psi	34 bar		





# 5.5" DTH "HP" Hammer Model

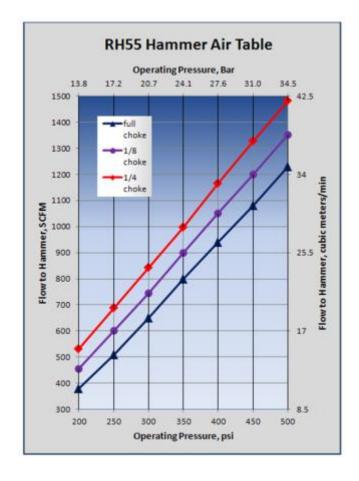
with 3-1/2 Reg API Pin-up connection

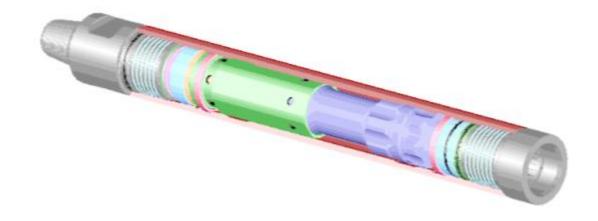


RH55Q1HP – uses the QL50 shank DTH bit

This hammer is designed for drilling 5-1/2" and larger holes.

	English	Metric
Outside Dia	5.0 in	127 mm
Overall Length Without Bit	44.7 in	1135 mm
Operating Length API shoulder to Bit Face	44.6 in	1133 mm
Total Weight	148 lbs	67.1 kg
Bore Size	4.1 in	104 mm
Piston Weight	31 lbs	14 kg
Drillpipe Connect	3-1/2 Reg API Pin Up others available upon request	
Wrench Flats	3.5 in	88.9 mm
Uala Siza Danga	5-1/2 in to 6 in	
Hole Size Range	140 mm to 1	52 mm
Bit Shank Required	QL50	
Minimum Air Volume Required	250 cfm	7 cmm
Maximum Operating Pressure	500 psi	34 bar





# 6" DTH "HP" Hammer Model

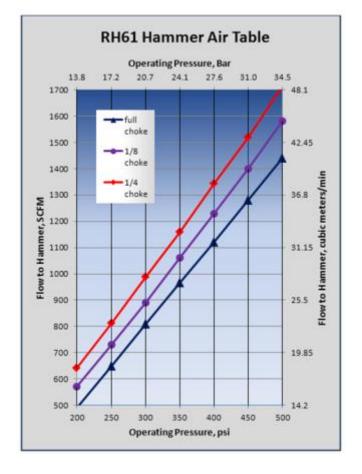
with 3-1/2 Reg API Pin-up connection

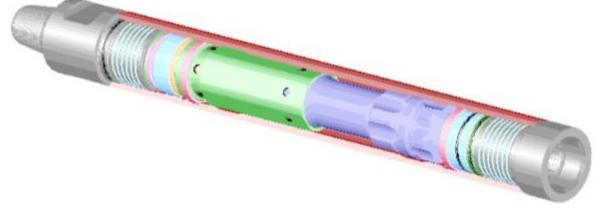


RH61Q1HP – uses the QL60 shank DTH bit

This hammer is designed for drilling 6" and larger holes.

	English	Metric
Outside Dia	5.46 in	139 mm
Overall Length Without Bit	48.1 in	1222 mm
Operating Length API shoulder to Bit Face	48.5 in	1232 mm
Total Weight	215 lbs	97.5 kg
Bore Size	4.5 in	102 mm
Piston Weight	43 lbs	19.5 kg
Drillpipe Connect	3-1/2 Reg API Pin Up others available upon request	
Wrench Flats	4 in	102 mm
Hala Siza Banga	6 in - 7 in	
Hole Size Range	152 mm to 1	78 mm
Bit Shank Required	QL60	
Minimum Air Volume Required	450 cfm	13 cmm
Maximum Operating Pressure	500 psi	34 bar





# 6.5" DTH "HP" Hammer Model

with 3-1/2 Reg API Pin-up connection

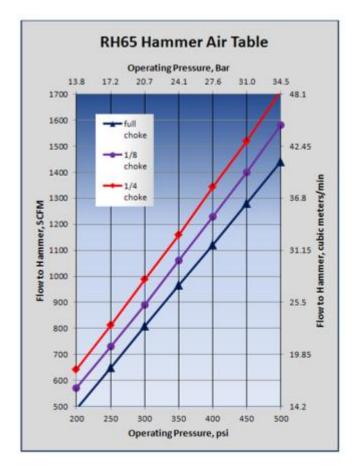


RH65Q1HP – uses the QL60 shank DTH bit

Also available in Heavy Duty (HD) models

This hammer is designed for drilling 6 1/2" and larger holes.

	English	Metric
Outside Dia	5.75 in	146 mm
Overall Length Without Bit	46.8 in	1189 mm
Operating Length API shoulder to Bit Face	47.2 in	1198 mm
Total Weight	251 lbs	113.8 kg
Bore Size	4.75 in	121 mm
Piston Weight	45 lbs	20.4 kg
Drillpipe Connect	3-1/2 Reg API Pin Up others available upon request	
Wrench Flats	4 in	102 mm
Hole Size Range	6-1/2 in to 7 in 165 mm to 178 mm	
Bit Shank Required	QL60	
Minimum Air Volume Required	450 cfm	13 cmm
Maximum Operating Pressure All Models	500 psi	34 bar



### 8" DTH Hammer Models

with 4-1/2 Reg API Pin-up connection



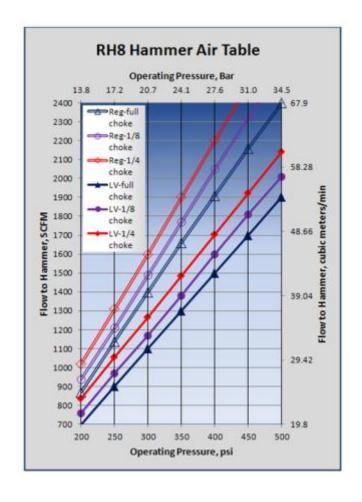
RH8i3 – uses the 380 shank DTH bit

RH8Q3 - uses the QL80 shank DTH bit

Also available in low-air (LV) models

This hammer is designed for drilling 7 7/8" and larger holes.

	English	Metric		
Outside Dia	7.10 in	180 mm		
Overall Length Without	Bit	•		
RH8i Models	60.7 in	1542 mm		
RH8q Models	60.0 in	1524 mm		
Operating Length API s	houlder to Bit Fac	ce .		
RH8i Models	60.8 in	1544 mm		
RH8q Models	60.1 in	1526 mm		
Total Weight	390 lbs	177 kg		
Bore Size	5.8 in	148 mm		
Piston Weight	82 lbs	37 kg		
Drillpipe Connect	4-1/2 Reg API Pin Up others available upon request			
Wrench Flats	5.9 in	150 mm		
Hole Size Range	7-7/8 in to 10	) in		
All Models	200 mm to 2	54 mm		
Bit Shank Required	•			
RH8i Models	380			
RH8q Models	QL80	QL80		
Minimum Air Volume R	Minimum Air Volume Required			
RH8 Models	900 cfm	26 cmm		
RH8LV Models	500 cfm	14 cmm		
Maximum Operating Pressure All Models	500 psi	34 bar		





### **Reverse Circulation Hammers**

RH5RC11 – 4 ½" Metzke box up thread connection.

RH5RC12 – 4 ½" Remet box up thread connection.

RH5RC13 – 4 ½" Matrix box up thread connection.

All Use Rock Hog's R50 shank bit

# ROCK DRILLING PRODUCTS

### **General Description**

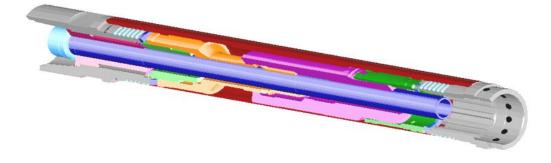
The RH5RC reverse circulation hammer is a valveless pneumatic percussion hammer for drilling in all rock formations. It is designed for exploration drilling of 5 ¼" to 5 ¾" holes. The RH5RC incorporates one moving part, the piston, making the hammer very reliable. The hammer is designed to run with Rock Hog's R50 shank bit.

### **Features**

- 1-piece sample tube that pulls out from the top. The hammer does not need to be disassembled to replace the tube. Just disconnect the drill pipe and pull.
- Sample tube's material and heat treat are designed to give maximum service life
- Piston cycle produces high penetration rates.
- The wear sleeve is reversible.
- Bit shrouds are easily replaced when changing bits and lock onto and rotate with the chuck.
- The shroud aids in producing an excellent sample with minimal contamination.
- Unique design makes the hammer easy to maintain and service.

**Specifications** 

	English	Metric
Outside Dia	4.73 in	120.1 mm
Overall Length Without Bit	51 in	1295 mm
Total Weight	150 lbs	68 kg
Bore Size	3.87 in	98.3 mm
Piston Weight	28 lbs	12.7 kg
Drillpipe Connect	4-1/2 Remet 4-1/2 Metzke 1/2 Matrix	
Wrench Flats	3.95 in	100.3 mm
Hole Size Range	5-1/4 in to 5-3/4 in	
Bit Shank Required	R50	
Minimum Air Volume Required	750 cfm	21 cmm
Recommended Maximum Operating Pressure	500 psi	34.0 bar



# **ROCK HOG®DTH BITS**



**Rock Hog** has designed and manufactured a complete line of fast penetrating and rock pulverizing down-the-hole bits for the worldwide drilling industry. By combining Rock Hog's aggressive

down-the-hole bits with Rock Hog's down-the-hole hammers, our products have become a price and performance leader for the drilling industry.

**Rock Hog** bits are suited for any type of drilling application including, water wells, quarries, open pit and underground mining, construction, blasting, environmental, oil and gas.

### **Features & Benefits**

- Rock Hog engineers have developed proprietary raw material & metal treatment processes for DTH bits that are used in extremely abrasive drilling applications. These new proprietary processes for DTH bits have proven time after time to be the industry leader for extremely abrasive drilling conditions. Contact your Rock Hog Sales Representative for further details.
- Rock Hog bits are designed, engineered, and manufactured, for superior penetration while mantaining maximum cleaning action at the face of the bit, thus extending the working life of the product.
- Rock Hog bits are field tested to stringent quality requirements to provide consistent performance results in the field.
- Rock Hog bits are conditioned by a special manufacturing procedure which establishes a protective cushion on the bits, thus abating cracks which often occur in hi-impact drilling products.



- Rock Hog bits are manufactured utilizing premium aircraft alloy steels, which provide for the longest possible product life. In addition, premium quality carbide buttons are used in all of our drill bits.
- Rock Hog bits are processed through multiple precision heat treatments that extend the product life for maximum wear and performance in the toughest drilling conditions.
- The combination of premium steel, quality carbide, exact heat treatments, and state of the art design and manufacturing, yields a superior product capable of performing in the toughest drilling conditions.



# **Bit Shank Identification**

# These are the shank styles available and the hammer models the shanks are used with.

SHANK RH DESIGNATION NO.	Lenght & Splines SEE CHART AT BOTTOM	Hammer Manufacturer & Model	Number this Shank is used with.
Bulroc 2 BR2	Shank LTH: 6.493 No. of Splines: 6	Bulroc 2 Minroc 2	
Cop 32 C32	Shank LTH: 8.455 No. of Splines: 8	Atlas Copco Cop 32	
Bulroc 3 BR3	Shank LTH: 6.493 No. of Splines: 6	Bulroc 3 Boart BH 75 Minroc 3	Klemm KR-3 Bohler LH-78ZD Demag DH 90
Mach 303 M33	Shank LTH: 6.69 No. of Splines: 8	Halco Mach 303	
3.5 305	Shank LTH: 7.118 No. of Splines: 8	Atlas Copco 3.5 Sandvik	
3415/SD4 341	Shank LTH: 10.242 No. of Splines: 8		Boart BH 40 Drillquip T4 Mission 3415/SD4 Halco Mach 44M
340A 340	Shank LTH: 8.243 No. of Splines: 8	Rock Hog RH4i9 & RH45R9HP Atlas Copco DHD-340A and DH4 Bulroc Hyper 41 Compair-Holman Vol 400 and 401	Secoroc 44 Numa 4 Atlas Copco Cop 44
Cop42 C42	Shank LTH: 7.420 No. of Splines: 7	Atlas Copco Cop 42	

SHANK RH DESIGNATION NO.	Length & Splines SEE CHART AT BOTTOM	Hammer Manufacturer & Model	Number this Shank is used with.
QL40 QL4	Shank LTH: 11.00 No. of Splines: 10	Atlas Copco QL40	
Mach 40/44 M44	Shank LTH: 9.789 No. of Splines: 8	Halco Mach 40/44	
4315/SD5 431	Shank LTH: 11.619 No. of Splines: 8	Mission 4315/SD5 Drillquip T354315 & T50	Digger 5 Halco Mach 50M
350R 350	Shank LTH: 10.243 No. of Splines: 8	Rock Hog RH50R1HP Atlas Copco DHD-350R & DH5 Digger 5 Secoroc 54	Drillquip T 35350 Atlas Copco Cop 54 Compare-Holman VOL 500 Halco Mach 501R
QL50 QL5	Shank LTH: 9.427 No. of Splines: 12	Rock Hog RH50Q1HP & RH55Q1HP Atlas CopcoQL50	COP 54 GE
MACH 50 M50	Shank LTH: 10.450 No. of Splines: 8	Halco Mach 50	
360 360	Shank LTH: 12.143 No. of Splines: 8	Digger 6 Mincon 6DH-360 Compare-Holman VOL 600	Atlas Copco DHD-360, SF6, DH6, DHD-160 Secoroc 64 Drillquip T36 Numa 6 Atlas Copco COP64 Mission XL61
QL60 QL6	Shank LTH: 9.950 No. of Splines: 12	Rock Hog RH61Q1HP & RH65Q1HP	Mincon 6DH, 6DH-LV, 6BH, XP60 Atlas Copco QL60 & TD COP 64 GE

SHANK DESIGNATION	RH NO.	Length & Splines SEE CHART AT BOTTOM	Hammer Manufacturer & Model	Number this Shank is used with.
	531	Shank LTH: 12.723 No. of Splines: 8	Mission 5315/SD6 and PD6	Stenvick ADEC-6M Drillquip T3653-15 Digger 6 Halco Mach 60M Bohler LH136
MACH 60	M60	Shank LTH: 12.830 No. of Splines: 8	Halco Mach 60	
6315/SD8	631	Shank LTH: 12.673 No. of Splines: 8	Mission 6315/SD8 Drillquip T38	Atlas Copco 84LV Secoroc 84LV Halco Mach 80M and 88M Digger 7
380 3		Shank LTH: 13.773 No. of Splines: 10	Rock Hog RH8I3 & RH8ILV3 Atlas Copco DHD-380 Drillquip T38 Digger 8 Mincon 8DH	Numa 8 Atlas Copco Cop 84 Secoroc 84 Halco Mach 80IR and 88IR
QL80	QL8	Shank LTH: 13.053 No. of Splines: 16	Rock Hog RH8Q3 RH8QLV3 Atlas Copco QL80 Mincon MP80	COP 84 GE
	0	NO. OF PLINES		odel you are looking for, ask your about your specific needs.



# **DTH Bit Face Styles**

Shown here are Rock Hog's standard face designs. The number of blow holes, flushing grooves and buttons will vary depending on the size and face style of the bit.

Standard options such as larger, extra, or longer gauge buttons are available.

Special face designs are available on a made-to-order basis. Contact your Rock Hog representative for details.

### **CONCAVE**

This is the most common face style used in the market today. The dish type face gives excellent penetration in medium and hard rock formations, while maintaining a straight hole. This face has excellent air flushing characteristics. Concave is the predominate face style for the majority of drilling conditions.



### **FLAT**

The flat face bit, as the name implies, is flat across the bit front. This bit is very aggressive in drilling applications and is suited best for very hard rock and in hard rock with broken formation. Used primarily in blast hole work, the bit tends to lead off in deep holes. Rock Hog flat face bits come with standard face slots to aid in keeping the cutting face clean.



### **CONVEX**

This face has been utilized in very hard drilling formations where the face of the bit tends to be prematurely worn away. The convex style tends to keep the drilling face in tact longer by drilling with the two rows of buttons on the convex face. This face style gives good hole penetration.



### **KAVEX**

This face is a combination of convex / concave. It is recommended for abrasive formations in the hard and very hard range where other bit faces wear away quickly. The kavex is designed to provide improved cleaning of cuttings thus reducing body wear. The concave center helps drill a straight hole.



### **Button Shapes & Grades**

### **DOMED (SPHERICAL or HEMI-SPHERICAL)**

This button is the most common shape utilized in DTH Bits. This type of shape is the strongest and most resistant to breakage. The domed shape provides excellent penetration in medium rock, hard rock, broken hard rock formations, and in all types of drilling. This is the standard button that will be quoted unless specified otherwise.



### **BALLISTIC**

Normally this button is used in less hard consolidated drilling formations. This type of button is very aggressive and drills faster than dome. However, because the ballistic tip protrudes out farther than domed, the ballistic is prone to breakage if used in the wrong formations. Care should be used when drilling with this type of button. Ballistic buttons yield high penetration rates and efficient rock breakage.



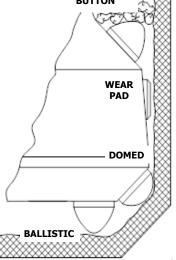
### **WEAR PAD (FLAT TOP BUTTONS)**

Wear Pads are used in conjunction with either of the two types of buttons previously mentioned. These flat top buttons are placed on the bit skirt, behind the gauge row buttons. They are utilized to enhance bit life in areas where extreme body wear has occurred on the bit skirt.



### REVERSING BUTTONS

Reversing buttons are often utilized on bits with oversized heads and on standard heads where clearance allows. The reversing buttons are used most often in broken rock formations to allow the bit to drill slowly up and out of the hole, when broken rock has fallen in behind the bit and hammer. Either ballistic or domed buttons can be used and the number of buttons is variable. This concept is also used on the backhead or topsub of the DTH hammer for the same purpose.



REVERSING

### **CARBIDE SIZE IN ROCK HOG DTH BITS**

Rock Hog's engineers have chosen the best all around button size and number of buttons for each size bit. Large carbides tend to last longer, are less likely to have shear failure, and require less frequent sharpening. Smaller carbides tend to drill faster, however the sharpening interval is more frequent and they wear out faster. DTH bits tend to have larger buttons on the gauge row and smaller buttons in the center.

### **GRADES**

Rock Hog uses only carbide grades with excellent resistance to wear and with high toughness properties. Along with our long proven standard grades are Rock Hog's premium grades.

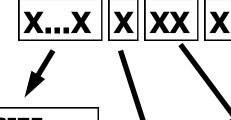


### **DTH Bit Part No. Breakdown**

# ENTIRE PART NUMBER XXXXXXXX XXX XXX

### **HEAD NUMBER**

# SHANK NUMBER OPTIONS



This Number Defines the

XXX

# **X...X**

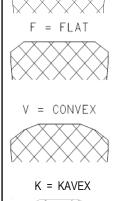
### SIZE# XX XX 2, 3, or 4 Digits

that define the
Bit's Size in
Inches of Gauge:

Inches	of Gauge:
XX	XX
Whole	Decimal
Size	Size
2 = 2"	0 = .000
3 = 3"	1 = .12 (1/8)
4 = 4"	2 = .25(1/4)
5 = 5"	3 = .38(3/8)
6 = 6"	5 = .50(1/2)
7 = 7"	6 = .62(5/8)
8 = 8"	7 = .75(3/4)
9 = 9"	8 = .88(7/8)
10=10"	for all other
11=11"	sizes use
12=12"	2 digits, for
	example
	16 = .16
	29 = .29
	42 = .42
	67 = .67
	CI7E

# FACE X

= CONCAVE



### GAUGE XX

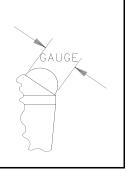
Diameter of the Gauge Buttons In *inches* (mm)

38 = 3/8 (9.5) 44 = 7/16 (11.1) 50 = 1/2 (12.7)

56 = 9/16 (14.5)

62 = 5/8 (15.9)

75 = 3/4 (19.0)



### **DESIGN**

**Bit Shank** 

There are various designs available for a given face style.

Each design is assigned a different number.

# Letters Define Optional Features On the Bit:

**B** = All Ballistic Buttons

**F** = Ballistic Face Buttons Domed Gauge Buttons

**G** = Ballistic Gauge Buttons Domed Face Buttons

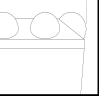
**H**\_\_\_= Alternate Compacts/Button Designation (contact your sales rep. for details)

**M** \*\_= \* Domed Rev Buttons

 $\mathbf{R}_{\underline{\phantom{a}}} = \underline{*}_{\underline{\phantom{a}}}$  Ballistic Rev Buttons

 $\mathbf{W}_{\underline{\phantom{M}}}^{\underline{\phantom{M}}} = \underline{*}_{\underline{\phantom{M}}} Wear Pads$ 

**Note:** \* = Quantity of Buttons



**#Note** on head size. If you use head sizes in millimeters (mm) and an equivalent size is not listed in the Product Spec. Tables, divide mm by 25.4 to obtain the head size in inches, then determine the part no. based on the inch size.

# Bit Specifications and Ordering Standard Designs

- Available designs are listed by nominal shank size on the following pages. Any head or shank not listed in the tables is a special order.
- Available in head sizes from 2 ¾" (70mm) to 12 ¼" (311mm) on the shank of your choice.
- Standard heads up to 9" have (2) blow holes and (2) face flushing grooves.
- Size and number of buttons on the head are given in the tables.
- The options shown on page 17 can be applied.
- Rock Hog reserves the right to make changes in specifications, add improvements, or discontinue items without notice or obligation.
  - Bits that require a blow tube/ footvalve are supplied with the blow tube installed.

### **How to Order**

Choose the head number & shank number from the tables and any options from page 19
BIT PART NUMBER = head number shank number options

Give this number to your Rock Hog representative when ordering.

### **Special Designs**

- Any head or shank not listed in the tables
- Any oversize head on a standard shank
- Any additional buttons, blow holes, or scallops
- Must be approved by customer prior to manufacturing
- Are made on an as-ordered basis only
- Have no warranty or a limited warranty
- A minimum order quantity is required
- Require additional manufacturing lead time

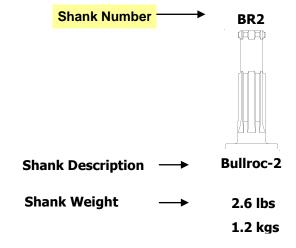
### **To Order Specialty Bits:**

Give your Rock Hog representative all the details available for your desired design, and the quantity needed. A part number will be assigned to the design for your future reference.

**BIT WEIGHT** = <u>head weight</u> + <u>shank weight</u>

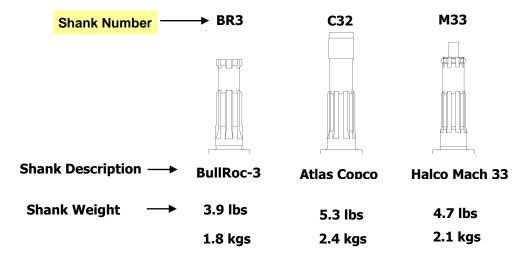


N	Hea um Γab	be	r			0000	0		0000	0000				
	Hea	nd		C	Concav	е		Flat		Convex				
Diame	eter	Weight		Head Button (d		ty) & size	Head	Button (q	ty) & size	Head	Button (q	ty) & size		
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face		
2 3/4	70	3	1.4	27C441	(6) 7/16	(4) 3/8	27F441	(6) 7/16	(4) 3/8	27V441	(6) 7/16	(4) 3/8		
2 7/8	73	3	1.4	28C441	(6) 7/16	(4) 3/8	28F441	(6) 7/16	(4) 3/8	28V441	(6) 7/16	(4) 3/8		
3	76	3	1.4	30C441	(8) 7/16	(6) 3/8	30F441	(8) 7/16	(6) 3/8	30V441	(8) 7/16	(6) 3/8		
3 1/4			(6) 3/8	32F441	(8) 7/16	(6) 3/8	32V441	(8) 7/16	(6) 3/8					
3 1/2	89	4	1.8	35C441	(8) 7/16	(6) 7/16	35F441	(8) 7/16	(6) 7/16	35V441	(8) 7/16	(6) 7/16		





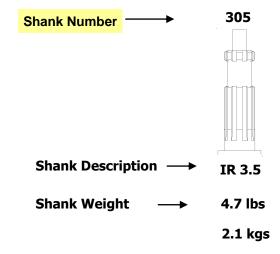
N	Hea um Γab	be	r	00	00000	00000	0.0	00000	6000					
	Hea	ıd		0	Concav	е		Flat		Convex				
Diame	eter	Weight		Head	Button (q	ty) & size	Head	Button (q	ty) & size	Head	Button (q	ty) & size		
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face		
3 1/2	89	3.9	1.8	35C441	(8) 7/16	(6) 7/16	35F441	(8) 7/16	(6) 7/16	35V441	(8) 7/16	(6) 7/16		
3 5/8	92	4	1.8	36C441	(8) 7/16	(6) 7/16	36F441	(8) 7/16	(6) 7/16	36V441	(8) 7/16	(6) 7/16		
3 3/4	95	4	1.8	37C441	(8) 7/16	(6) 7/16	37F441	(8) 7/16	(6) 7/16	37V441	(8) 7/16	(6) 7/16		
3 7/8	98	4	1.8	38C441	38C441 (8) 7/16 (6) 7/16		38F441	(8) 7/16	(6) 7/16	38V441	(8) 7/16	(6) 7/16		
4	102	5	2.3	40C441	(8) 7/16	(7) 7/16	40F441	(8) 7/16	(7) 7/16	40V441	(8) 7/16	(7) 7/16		



# 3 1/2 -inch Series Bits

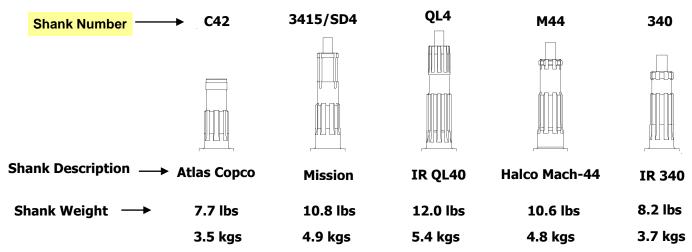


Nu	Hea um Tab	be	r	00	00000	00000	0.0	00000	00000	00	0000	00000	
	Hea	ıd		С	oncav	e		Flat		Convex			
Diame	ter	r Weig		Head	Button (q	ty)&size	Head	Button (q	ty)&size	Head	Button (q	ty) & size	
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face	
3 1/2	89	5.5	2.5	35C441	(8) 7/16	(6) 7/16	35F441	(8) 7/16	(6) 7/16	35V441	(8) 7/16	(6) 7/16	
3 3/4	95	5.9	2.7	37C441	(8) 7/16	(6) 7/16	37F441	(8) 7/16	(6) 7/16	37V441	(8) 7/16	(6) 7/16	
3 7/8	98	6	2.7	38C441	(8) 7/16	(6) 7/16	38F441	(8) 7/16	(6) 7/16	38V441	(8) 7/16	(6) 7/16	
4	102	6	2.7	40C563	(8) 9/16	(6) 1/2	40F563	(8) 9/16	(6) 1/2	40F563	(8) 9/16	(6) 1/2	
4 1/8	105	7	3.2	41C563	(8) 9/16	(6) 1/2	41F563	(8) 9/16	(6) 1/2	41V563	(8) 9/16	(6) 1/2	
4 1/4	108	9	4.1	42C563	(8) 9/16	(6) 1/2	42F563	(8) 9/16	(6) 1/2	42V563	(8) 9/16	(6) 1/2	



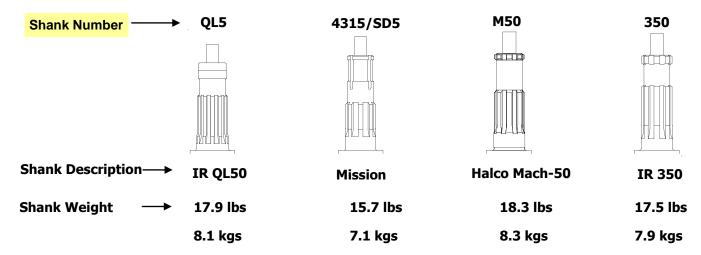


N	Hea um Tal	be	r	E		00000			00000			300	
	Head				Concav	e		Flat		Convex			
Diame	eter	We	eight	Head	Button (q	ty) & size	Head	Button (q	ty) & size	Head	Button (q	ty) & size	
inch	mm	Ibs	kgs	Number	gage	face	Number	gage	face	Number	gage	face	
4	102	9	4.1	40C563	(8) 9/16	(6) 1/2	40F563	(8) 9/16	(6) 1/2	40V563	(8) 9/16	(6) 1/2	
4 1/8	105	9.1	4.1	41C563	(8) 9/16	(6) 1/2	41F563	(8) 9/16	(6) 1/2	41V563	(8) 9/16	(6) 1/2	
4 1/4	108	9.6	4.3	42C563	(8) 9/16	(6) 1/2	42F563	(8) 9/16	(6) 1/2	42V563	(8) 9/16	(6) 1/2	
4 1/2	114	10.1	4.6	45C563	(8) 9/16	(6) 1/2	45F563	(8) 9/16	(6) 1/2	45V563	(8) 9/16	(6) 1/2	
4 3/4	121	10.4	4.7	47C563	(8) 9/16	(7) 1/2	47F563	(8) 9/16	(7) 1/2	47V563	(8) 9/16	(7) 1/2	
5	(-) ( )		(7) 9/16	50F621	(8) 5/8	(7) 9/16	50V621	(8) 5/8	(7) 9/16				
5 1/8	130	11.7	5.3	51C621	(8) 5/8	(7) 9/16	51F621	(8) 5/8	(7) 9/16	50V621	(8) 5/8	(7) 9/16	





N	Head Number Table				0000	00000	0 0	00000	00000	6 8	00000	00000				
	He	ad		C	oncav	е	Flat				Conve	K	Kavex			
Diame	eter	Wei		Head	Button (q	qty) & size Hea		Button (qty ) & size		Head	Button (qty ) & size		Head	Button (q	ty) & size	
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face	Number	gage	face	
5	127	17	7.7	50C621	(8) 5/8	(7) 9/16	50F621	(8) 5/8	(7) 9/16	50V621	(8) 5/8	(7) 9/16				
5 1/8	130	17	7.7	51C621	(8) 5/8	(7) 9/16	51F621	(8) 5/8	(7) 9/16	51V621	(8) 5/8	(7) 9/16				
5 1/4	133	17.2	7.8	52C621	(8) 5/8	(8) 9/16	52F621	(8) 5/8	(8) 9/16	52V621	(8) 5/8	(8) 9/16				
5 1/2	140	18.5	8.4	55C621	(8) 5/8	(8) 9/16	55F521	(8) 5/8	(8) 9/16	55V621	(8) 5/8	(8) 9/16				
5 3/4	146	19.2	8.7	57C621	(8) 5/8	(8) 9/16	57F621	(8) 5/8	(8) 9/16	57V621	(8) 5/8	(8) 9/16	57K622	(10) 5/8	(10) 9/16	
5 7/8	149	19.2	8.7	58C621	(8) 5/8	(8) 9/16	58F621	(8) 5/8	(8) 9/16	58V621	(8) 5/8	(8) 9/16	58K622	(10) 5/8	(10) 9/16	
6	152	19.7	8.9	60C621	(8) 5/8	(8) 5/8	60F621	(8) 5/8	(8) 5/8	60V621	(8) 5/8	(8) 5/8	60K622	(10) 5/8	(10) 9/16	





N	Hea um Fal	be	r			66666			000000	8		000				
	Head				oncav	е		Flat		(	Conve	K		Kavex		
Diame	ter	We	ight	Head	Button (q	ty)&size	Head	Button (q	ty) & size	Head	Button (q	ty) & size	Head	Button (q	ıty) & size	
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face	Number	gage	face	
6	153	24.9	11.3	60C621	(8) 5/8	(8) 5/8	60F621	(8) 5/8	(8) 5/8	60V621	(8) 5/8	(8) 5/8	60K622	(10) 5/8	(10) 5/8	
6 1/8	156	26.7	12.1	61C621	(8) 5/8	(8) 5/8	61F621	(8) 5/8	(8) 5/8	61V621	(8) 5/8	(8) 5/8	61K622	(10) 5/8	(10) 5/8	
6 1/4	159	27.9	12.6	62C621	(8) 5/8	(8) 5/8	62F621	(8) 5/8	(8) 5/8	62V621	(8) 5/8	(8) 5/8	62K622	(10) 5/8	(10) 5/8	
6 1/2	165	28.4	12.9	65C621	(8) 5/8	(8) 5/8	65F621	(8) 5/8	(9) 5/8	65V621	(8) 5/8	(9) 5/8	65K622	(10) 5/8	(10) 5/8	
6 3/4	171	29	13.1	67C621	(8) 5/8	(9) 5/8	67F621	(8) 5/8	(9) 5/8	67V621	(8) 5/8	(9) 5/8	67K622	(10) 5/8	(12) 5/8	
7	178	32.1	14.5	70C621	(8) 5/8	(9) 5/8	70F621	(8) 5/8	(9) 5/8	70V621	(8) 5/8	(9) 5/8	70K622	(10) 5/8	(12) 5/8	
7 1/2	191	40	18.1	75C621	(10) 5/8	(14) 5/8	75F621	(10) 5/8	(14) 5/8	75V621	(10) 5/8	(14) 5/8	75K622	(12) 5/8	(14) 5/8	
8	203	43.2	19.6	80C621	(10) 5/8	(16) 5/8	80F621	(10) 5/8	(16) 5/8	80V621	(10) 5/8	(16) 5/8	80K622	(12) 5/8	(16) 5/8	
8 1/2	216	45	20.4	85C621	(10) 5/8	(18) 5/8	85F621	(10) 5/8	(18) 5/8	85V621	(10) 5/8	(18) 5/8	85K622	(12) 5/8	(22) 5/8	
8 5/8	219	47	21.3	86C621	(10) 5/8	(18) 5/8	86F621	(10) 5/8	(18) 5/8	86V621	(10) 5/8	(18) 5/8	86K622	(12) 5/8	(22) 5/8	
8 3/4	222	48.8	22.1	87C621	(10) 5/8	(18) 5/8	87F621	(10) 5/8	(18) 5/8	87V621	(10) 5/8	(18) 5/8	87K622	(12) 5/8	(22) 5/8	
8 7/8	225	50	22.7	88C621	(10) 5/8	(18) 5/8	88F621	(10) 5/8	(18) 5/8	88v621	(10) 5/8	(18) 5/8	88K622	(12) 5/8	(22) 5/8	
9	229	51	23.1	90C621	(10) 5/8	(20) 5/8	90F621	(10) 5/8	(18) 5/8	90V621	(10) 5/8	(20) 5/8	90K622	(12) 5/8	(24) 5/8	
9 1/4	235	54	24.5	92C621	(10) 5/8	(22) 5/8	92F621	(10) 5/8	(18) 5/8	92V621	(10) 5/8	(20) 5/8	92K622	(12) 5/8	(24) 5/8	
9 1/2	241	56	25.4	95C621	(12) 5/8	(22) 5/8	95F621	(12) 5/8	(24) 5/8	95V621	(12) 5/8	(22) 5/8	95K622	(14) 5/8	(28) 5/8	
10	254	64	29.0	100C621	( ) ( )			(12) 5/8	(26) 5/8	100V621	(12) 5/8	(22) 5/8	100K622	(14) 5/8	(28) 5/8	

Note: There is no warranty for shank failures on heads over 7".

#### **Shank Number** 5315/SD6 M60 QL6 Shank Number -360 **Shank Description** -**IR 360** IR QL60 **Mission Halco Mach-60 Shank Weight** 27.6 lbs 25.4 lbs 33.4 lbs 27.8 lbs 11.5 kgs 12.5 kgs 15.1 kgs 12.6 kgs

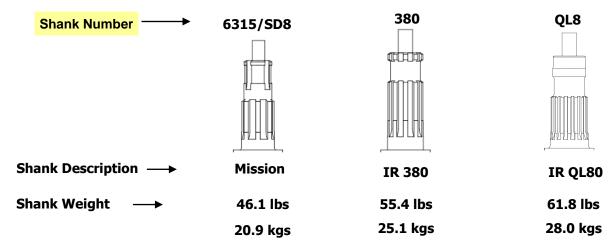
26

# 8-inch Series Bits, Heads up to 11"



N	Hea um Tal	be ole	r	0 0 0		e	0 0			0 0	Conve	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Kavex			
Diame	eter	We	ight	Head	Button (q	ty)&size	Head	Button (q	ty)&size	Head	Button (q	ty)&size	Head	Button (q	ty)&size	
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face Number		gage	face	
7 5/8	194	53	24.0	76C751	(8) 3/4	(12) 5/8	76F751	(8) 3/4	(12) 5/8	76V751	(8) 3/4	(12) 5/8	76K752	(10) 3/4	(12) 3/4	
7 7/8	200	54	24.5	78C751	(8) 3/4	(12) 5/8	78F751	(8) 3/4	(12) 5/8	78V751	(8) 3/4	(12) 5/8	78K752	(10) 3/4	(13) 3/4	
8	203	57.2	25.9	80C751	(8) 3/4	(12) 5/8	80F751	(8) 3/4	(12) 5/8	80V751	(8) 3/4	(12) 5/8	80K752	(10) 3/4	(13) 3/4	
8 1/4	210	58	26.3	82C751	(8) 3/4	(12) 5/8	82F751	(8) 3/4	(12) 5/8	82V751	(8) 3/4	(12) 5/8	82K752	(10) 3/4	(13) 3/4	
8 1/2	216	61.5	27.9	85C751	(8) 3/4	(14) 5/8	85F751	(8) 3/4	(14) 5/8	85V751	(8) 3/4	(14) 5/8	85K752	(10) 3/4	(13) 3/4	
8 5/8	219	62	28.1	86C751	(8) 3/4	(14) 5/8	86F751	(8) 3/4	(14) 5/8	86V751	(8) 3/4	(14) 5/8	86K752	(10) 3/4	(14) 3/4	
8 3/4	222	62.5	28.3	87C751	(8) 3/4	(14) 5/8	87F751	(8) 3/4	(14) 5/8	87V751	(8) 3/4	(14) 5/8	87K752	(10) 3/4	(14) 3/4	
8 7/8	225	63	28.5	88C751	(8) 3/4	(14) 5/8	88F751	(8) 3/4	(14) 5/8	88V751	(8) 3/4	(14) 5/8	88K752	(10) 3/4	(14) 3/4	
9	229	67.1	30.4	90C751	(10) 3/4	(16) 5/8	90F751	(10) 3/4	(16) 5/8	90V751	(10) 3/4	(16) 5/8	90K752	(12) 3/4	(16) 3/4	
9 1/2	241	74	33.5	95C751	(10) 3/4	(20) 5/8	95F751	(10) 3/4	(20) 5/8	95V751	(10) 3/4	(20) 5/8	95K752	(12) 3/4	(16) 3/4	
9 3/4	248	79	35.8	97C751	(10) 3/4	(20) 5/8	97F751	(10) 3/4	(20) 5/8	97V751	(10) 3/4	(20) 5/8	97K752	(12) 3/4	(16) 3/4	
9 7/8	251	82	37.1	98C751	(10) 3/4	(20) 5/8	98F751	(10) 3/4	(20) 5/8	98V751	(10) 3/4	(20) 5/8	98K752	(12) 3/4	(17) 3/4	
10	254	93.5	42.4	100C751	(10) 3/4	(20) 5/8	100F751	(10) 3/4	(20) 5/8	100V751	(10) 3/4	(20) 5/8	100K752	(12) 3/4	(17) 3/4	
10 1/2	267	81.1	36.7	105C751	(12) 3/4	(24) 5/8	105F751	(12) 3/4	(24) 5/8	105V751	(12) 3/4	(24) 5/8	105K752	(14) 3/4	(18) 3/4	
11	279	86.4	39.1	110C751	(12) 3/4	(24) 5/8	110F751	(12) 3/4	(24) 5/8	110V751	(12) 3/4	(24) 5/8	110K752	(14) 3/4	(18) 3/4	

Note: There is no warranty for shank failures on heads over 10".

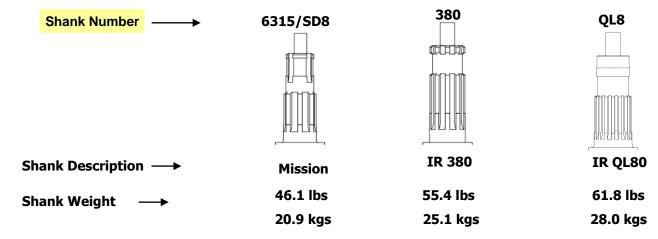


# 8-inch Series Bits, 11 1/4" to 12 1/4" Heads



N	Head Number Table						0 0 0 0			Convoy			Vavov			
	пеа	au			oncav	е	Flat			Convex			Kavex			
Diame	eter	Weight		Head	Button (q	ty)&size	Head	Button (q	ty)&size	Head	Button (c	ty) & size	Head	Button (c	ıty) & size	
inch	mm	lbs	kgs	Number	gage	face	Number	gage	face	Number	gage	face	Number	gage	face	
11 1/4	286	93	42.1	112C751	(12) 3/4	(34) 5/8	112F751	(12) 3/4	(34) 5/8							
11 1/2	292	96	43.5	115C751	(12) 3/4	(36) 5/8	115F751	(12) 3/4	(34) 5/8							
11 3/4	298	98	44.4	117C751	(12) 3/4	(36) 5/8	117F751	(12) 3/4	(36) 5/8							
11 7/8	302	100	45.3	118C751	(12) 3/4	(36) 5/8	118F751	(12) 3/4	(36) 5/8							
12	305	103	46.7	120C751	(12) 3/4	(36) 5/8	120F751	(12) 3/4	(36) 5/8							
12 1/4	311	106	48.0	122C751	(12) 3/4	(36) 5/8	122F751	(12) 3/4	(36) 5/8							

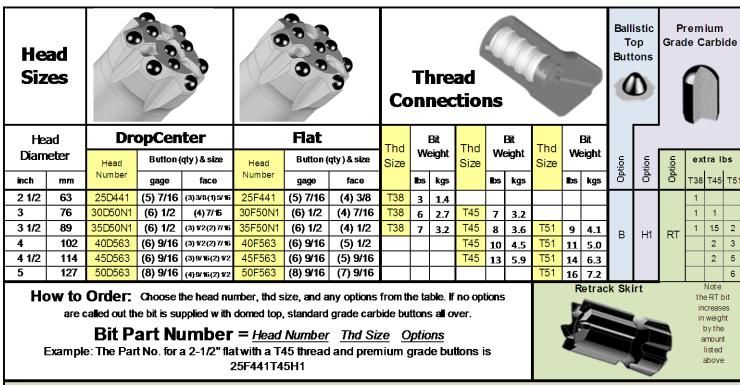
Note: There is no warranty for shank failures on heads over 10".



# **Threaded Button Bits**



Rock Hog Drilling Products is proud to introduce its new "HARDLINE" series of threaded button bits for 2010. The "HARDLINE" series is produced using proprietary manufacturing processes that are exclusive to Rock Hog. Actual field test results of Rock Hog's new "HARDLINE" series of threaded button bits have proven yet again that when the drilling gets tough, Rock Hog has the answer.



\*Note on Rock Hog's HARDLINE Series:

Currently only 3" and 3-1/2" bits with a standard skirt are supplied using our new **HARDLINE** manufacturing process. All other bits are supplied using our long proven standard manufacturing process.

### LIMITED WARRANTY POLICY

#### I. WARRANTY

Rock Hog Drilling Products, Inc. warrants each new product made by it to be free from defects in material and workmanship for 180 days from the date of initial sale, (initial sale date to be the invoice date of the product from the manufacturer) and agrees only to repairs, replace, or give credit toward, at its own expense, the product found to be defective in material or workmanship, provided manufacturer is notified in writing of such defect or defects within the 180 day warranty period. At no time will any cash refund be remitted to resolve a warranty claim. Defects caused by improper use or application shall not be considered defects within the scope of the foregoing warranty. If any repairs, alterations, or modifications are made to the product the manufacturer shall be relieved of responsibility for fulfillment of this warranty. If improper use, lack of lubrication, or lack of or improper maintenance are made on or used with the products, the manufacturer shall also be relieved of responsibility for fulfillment of this warranty.

#### II. DISCLAIMER

Under no circumstances shall manufacturer be liable for any consequential or special damage which any person, firm, corporation, or other entity may suffer or claim to suffer or incur or claim to incur as a result of any defect in the product or in any correction or alteration thereof made or furnished by the manufacturer or others. "Consequential" or "Special" damages as used herein includes but is not limited to costs of transportation, lost sales, lost profits, lost income, increased overhead labor and material costs, and costs of manufacturing variances and operational inefficiencies.

#### III. MAXIMUM LIABILITY

The maximum liability of the manufacturer under the exclusive warranty set forth herein shall be the amount paid to Rock Hog Drilling Products, Inc. by the customers, for the component specified.

### IV. ENTIRE LIABILITY

This warranty constitutes manufacturer's entire warranty. Manufacturer expressly disclaims any other warranties of any kind whatsoever as to the product furnished hereunder, including but not limited to express or implied warranties as to merchantability, fitness for particular purposes sold, description or quality of the product furnished here under.

#### V. WARRANTY PROCEDURE

#### WARRANTY CLAIMS WILL BE RESOLVED WHEN:

- 1. Detailed photographs, which must include the product serial number, are returned to Rock Hog with the product part number, date purchased, and the information required under item #2 as follows. (Note: All products where a warranty claim is pending are required to be kept by the distributor until Rock Hog makes a full disposition of the claim. Rock Hog reserves the option to have the product returned to the manufacturer in the event the photographs are inconclusive in resolving the claim.)
- 2. The distributor is to advise Rock Hog of the problem with the product including the footage the product drilled, air pressure, rock type, and drilling location. On bits the diameter over the gage row must be given along with the width across the flats on the gage row buttons. In addition the distributor is requested to supply other pertinent information useful in analyzing the claim.
- 3. Rock Hog will issue a credit of up to a maximum of the amount paid to Rock Hog for the product. Rock Hog reserves the right of final determination of any credit to be issued.
- 4. Where the customer's account is past due with the manufacturer, all warranty claim evaluations and or adjustments will be withheld until the customer's account is current. Once the customer's account is current, normal warranty procedures will resume.

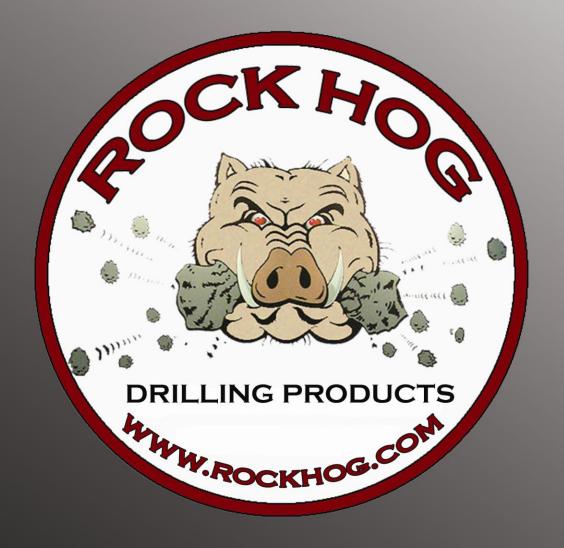
### **LIMITED WARRANTY POLICY (cont.)**

#### VI. PRODUCTS NOT WARRANTED

- 1. The limited warranty policy applies to our standard line of products as shown in our most current product catalog.
- 2. Hammer parts warranted are:
  - a. Back Heads
  - b. Air Distributors
  - c. Wear Sleeves
  - d. Cylinders
  - e. Chucks
  - f. Pistons
  - g. Bearings

All other hammer parts are consider disposable and are not warranted.

- 3. DTH Drill Bits with oversize heads, per the following are not covered by warranty.
  - a. DTH Bits over 4.00" Head Diameter on a 3" Series Shank
  - b. DTH Bits over 5.00" Head Diameter on a 4" Series Shank
  - c. DTH Bits over 6.00" Head Diameter on a 5" Series Shank
  - d. DTH Bits over 7.00" Head Diameter on a 6" Series Shank
  - e. DTH Bits over 10.00" Head Diameter on a 8" Series Shank
- 4. Manufacturer does not warranty carbide breakage of "Ballistic" style buttons. Additionally, manufacturer will not warranty any damage caused by this breakage. "Ballistic" style button bits have an aggressive drilling nature and are not suited for all drilling conditions.
- 5. Manufacturer does not warranty standard catalog items where defects are caused by improper use or where repairs, alterations, or modifications, are made to the product. In addition the manufacturer does not warranty defects caused by improper use, unsafe practices, lack of lubrication, or lack of or improper maintenance on any standard catalog item.



# DTH Bits DTH Hammers Threaded Button Bits

# **Rock Hog Drilling Products**

140 Landis Drive Mercersburg, PA 17236 USA

Phone: (970) 577-1875 Fax: (970) 577-1877

Toll Free: 1-888-7-ROCKHOG

www.rockhog.com