YOUR DRILLING EXPERT

HALCO Rock Tools

PRODUCT CATALOGUE

www.halco.uk

OUR COMMITMENT TO YOU

At Halco we pride ourselves on providing exemplary levels of customer service, support and training no matter what your drilling requirements are.

Having manufactured drilling consumables for over seventy years, our support team are well placed to provide accurate and timely solutions to optimise your drilling performance.

Halco is a world class manufacturer of Down The Hole (DTH) drilling equipment with manufacturing locations in The United Kindgom and the United States of America. Our headquarters are in the North of England, where Halco pioneered the development and distribution of DTH hammers and bits in the 1950's

Produced for more than seventy years, our products continue to be regarded as some of the most reliable and durable available today. This is due to our commitment to meet our customers needs, design expertise, and rigourouse product testing in extreme drilling conditions.

Further Learning Aids:
- **A-Z of DTH Drilling**
- **DTH Maintenance Manual**
- **DTH Users Guide**
- **www.halco.uk**

We offer a wide range of specialist products necessary for the rigours of every drilling application.

- **Mining**
- **Quarrying**
- **Oil and Gas**
- **Exploration**
- **Geothermal/Waterwell**
- **Geotechnical/Civil Engineering**

Our team of specialists, together our dedicated dealer network are available to help you select the optimal product for your drilling application and equipment.

To find you nearest Halco dealer contacts our sales teams at one of our sales locations shown on the back page of this docuement.

QUICK REFERENCE GUIDE

HOLE SIZE	HAMMER	PAGE
1"	DOMINATOR 10	PAGE 4-5
2"	DOMINATOR 20 MACH 20	PAGE 6-7
3"	DOMINATOR 30 GP 300	PAGE 8-11
4"	SUPER DOMINATOR 400 SUPER DOMINATOR 450 SUPER DOMINATOR 450HD GP400 MACH 44	PAGE 12-21
5"	DOMINATOR 500 SUPER DOMINATOR 550 SUPER DOMINATOR 550HD GP500 MACH 50	PAGE 22-33
6"	SUPER DOMINATOR 600 SUPER DOMINATOR 650HD SUPER DOMINATOR 650 SNUB GP600 MACH 60	PAGE 33-43
8"	DOMINATOR 800 DOMINATOR 850 SUPERIOR 880 THREADED CATCHER	PAGE 44-55
10"	DOMINATOR 1000	PAGE 56-57
12"	MACH 120 & 122 MACH 132 SUPERIOR 1200 SUPERIOR 1200 -THREADED CATCHER SUPERIOR 1200 -JETTED BACKHEAD	PAGE 58-66
18"	SUPERIOR 1800	PAGE 67-68
Bits		PAGE 69-100
Shock Absorbers		PAGE 101-102
SimCas-X		PAGE 103-104

Choosing the right hammer is essential to your productivity and operating cost.

All Halco hammers are built to last and manufactured to an exceptional standard. Our hammers provide the outstanding performance and productivity expected by drillers worldwide.

Versatility and variety are key to Halco products and you can be assured that all Halco hammers are suitable for a wide range of rock drilling applications.

All our high performance hammers are built at our state-of-the-art lean manufacturing plant using the highest quality heat treated nickel chrome alloy steels and processes that meet ISO 9001:2008 standards.

It is imperative to Halco that every hammer we produce surpasses your expectations and we constantly strive to improve our service and product quality.

Our hammer range includes:

DOMINATOR RANGE

The Dominator range of hammers offer higher performance and are ideally suited for medium to higher air pressures in blast-hole applications.

This design is simple with fewer components, which makes servicing and onsite maintenance easy. With a range of heavy duty models on offer this extends the life of the hammer considerably.

MACH RANGE

This is a proven hammer which has been around for over 35 years. Designed for all kinds of drilling conditions but excels in overburden drilling due to the high frequency with less blow energy, particularly in unstable ground conditions. This hammer can drill smaller diameters than the standard range and is ideal for civil engineering applications.

GP RANGE

The GP series offers breakthrough performance across some of the most challenging applications. The robust non ported piston design dramatically improves drilling performance when operating under a column of water.

A built-in choke facility allows the driller to adjust the volume of air through the hammer to optimise cutting evacuation.

SUPERIOR RANGE

Halco's Superior range are the obvious choice for the Oil & Gas industry where both maximum speed and reliability are expected.

Standard features of the Superior range include diamond enhanced drill bits and a bit catcher system. Variable bypass ports have been added to the top adaptor as well as live air bleed pistons. Together these features give the driller the ability to inject greater volumes of air and drilling additives to increase the uphole velocity required to drill deeper holes.

RC RANGE

The Halco reverse circulation (RC) product range has been designed to give maximum performance in Exploration and Grade Control applications.

Unlike standard DTH hammers, RC hammers return the rock cuttings back to the surface through the internals of the hammer and drill string.

Geologists worldwide trust Halco RC products to help them explore prospects and identify mineral lithologies.

1" Dominator 10

AT A GLANCE

SIZE
55mm - 64mm
2 1/8 - 2 1/2"

SHANK
Halco 1

AIR PRESSURE
100 - 250 psi
(7 - 17 bar)

One piece top adaptor reduces internal parts. No makeup required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

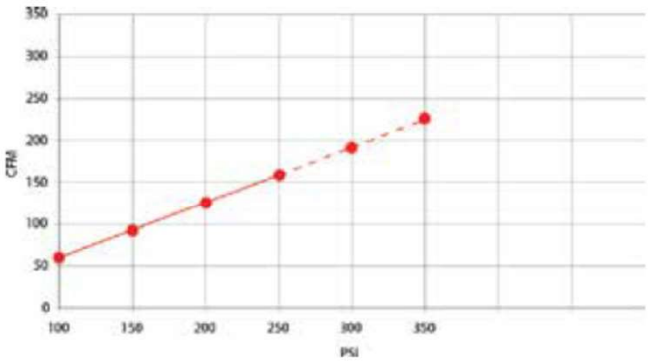
The Halco shank reduces contact stress and wear rates.

DOMINATOR 10

The Dominator 10 is designed for small diameter drilling operations.

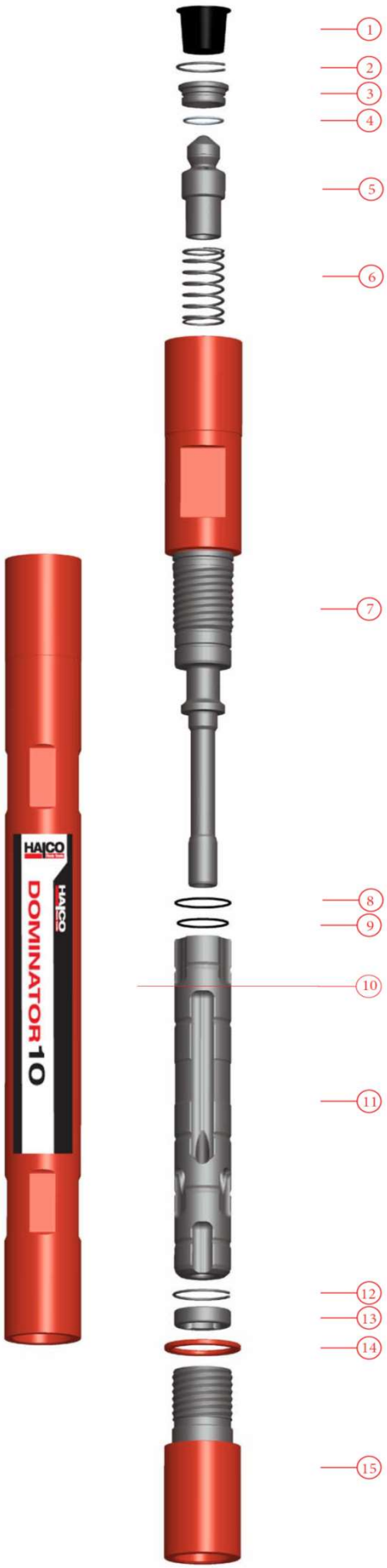
The Dominator 10 provides high performance at both low and high pressures. The strong robust design withstands heavy duty applications and includes an N.R.V (Non Return Valve) which is fitted into the hammer to prevent flooding where ground water is present.

Air Consumption



Figures are based on theoretical data

1" DOMINATOR 10



Hammer Overview

Hammer Model	**Dominator 10**
Part Number	**600422**
Shank	Halco 1
Thread connection	40mm DIN 405 6 TPI Box
Minimum bit diameter	55 MM
Air consumption (@25bar)	
Hammer flat size	38mm (1.5")
Weight	7.0 Kg (15.4 lbs)
Outside diameter	47mm (1 7/8")
Length (shoulder to shoulder)	772mm (30.9")
Maximum weight on bit	120 Kg (264 lbs)

Parts list

Hammer type	**Dominator 10**		**Maintenance Kits**	
Shank	**Halco 1**			
Part number	**600422**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK31**	**RK54**
1	Thread Protector	200005		
2	Snap Ring	783041	1	1
3	Non Return Valve Seat	603448		1
4	O-Ring	768174	1	1
5	Non Return Valve	603447		1
6	N.R.V. Spring	760100	1	1
7	Top Adaptor	603413		
8	O-Ring	768168	1	1
9	O-Ring	768175	1	1
10	Cylinder	603410		
11	Piston	603450		
12	Snap Ring	783037	1	1
13	Bit Retaining Ring	603449		1
14	Chuck Spacer	603412	1	1
15	Chuck	603411		1

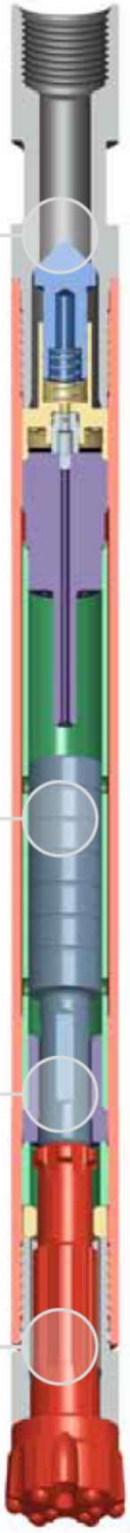
2" DOMINATOR 20

AT A GLANCE

SIZE
70mm - 76mm
2 3/4 - 3"

SHANK
Halco 2

AIR PRESSURE
100 - 250 psi
(7 - 17 bar)



Integral N.R.V. (Non-Return-Valve) to prevent flooding when drilling in water.

Solid piston with liner support.

Guide bush fitted for centralising piston.

Halco Mach 20 shank reduces contact stresses and wear rates.

The valved design of the Mach 20 provides high performance at low pressure. A non return valve is fitted to prevent flooding when drilling in water. The Mach 20 has a strong robust design to withstand heavy duty applications.

The Mach 20 is fitted with adjustable chokes to give three levels of air volumes for different drilling conditions.

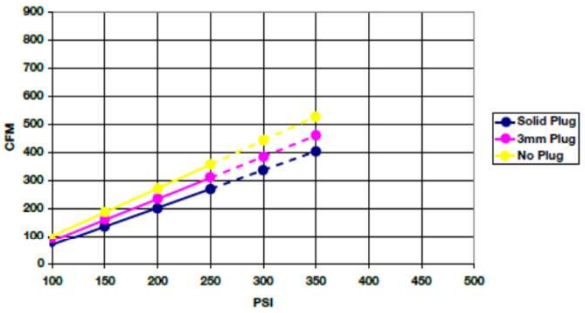
The unique drill bit design for Mach 20 does not use footvalves which reduces the possibility of hammer failure. Mach 20 shank has a long service life and reduces contact stresses and wear rates.

Suitable for operation at air pressures of 100 - 250 psi (7- 17 bar).

Drilling diameters of 70 - 76mm (2 3/4 - 3").

Air Consumption

Mach 20 Air Consumption



Available Shanks

Halco Mach 20

2" Mach 20

Hammer Overview

Hammer Model	**Mach 20**
Part Number	**600169**
Shank	Halco Mach 20
Thread connection	50mm DIN405 6 TPI Box
Minimum bit diameter	70 MM
Air consumption (@25bar)	
Hammer flat size	48mm (1.89")
Weight	13.0 Kg (28.6 lbs)
Outside diameter	62mm (2.44")
Length (shoulder to shoulder)	840mm (33.0")
Maximum weight on bit	150 Kg (330 lbs)

Parts list

Hammer type	**Mach 20**		**Maintenance Kits**	
Shank	**Halco 2**			
Part number	**600423**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK18**	**SK30**
1	Thread Protector	200002		
2	Top Adaptor	602715		
3	Wear-Space (Option)	602726	1	1
4	Non Return Valve	602727		1
5	N.R.V. Spring	760111	1	1
6	N.R.V. Housing	602720		
7	Valve Centraliser	602724	1	1
8	Valve	602725	1	1
9	Solid bleed plug -Std	732025	1	1
	3mm Bleed Plug	602736	1	1
10	Air Distributor	602719		1
11	Liner	602717		
12	Cylinder	602714		
13	Piston	602718		
14	Piston Guide Bush	602723		
15	Bottom Spacer	602722		1
16	Bit Retaining Ring	602721		1
17	Chuck Lock Ring	602729	1	1
18	Chuck	602716		1

3" DOMINATOR 30

AT A GLANCE

SIZE
90mm - 105mm
3 1/2 - 4 1/8"

SHANK
I. R. 3.5

AIR PRESSURE
100 - 362 psi
(7 - 25 bar)

Top Adaptor with internal N.R.V. (Non Return Valve) replaceable air distributor.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder.

Heavy duty cylinder for extended hammer life.

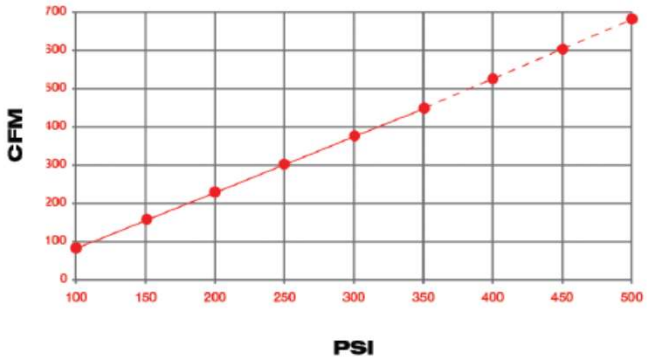
DOMINATOR 30

The Dominator 30 hammer is a high performance hammer for medium to hard rock conditions.

This hammer has no internal liner which allows a larger piston diameter for greater blow energy.

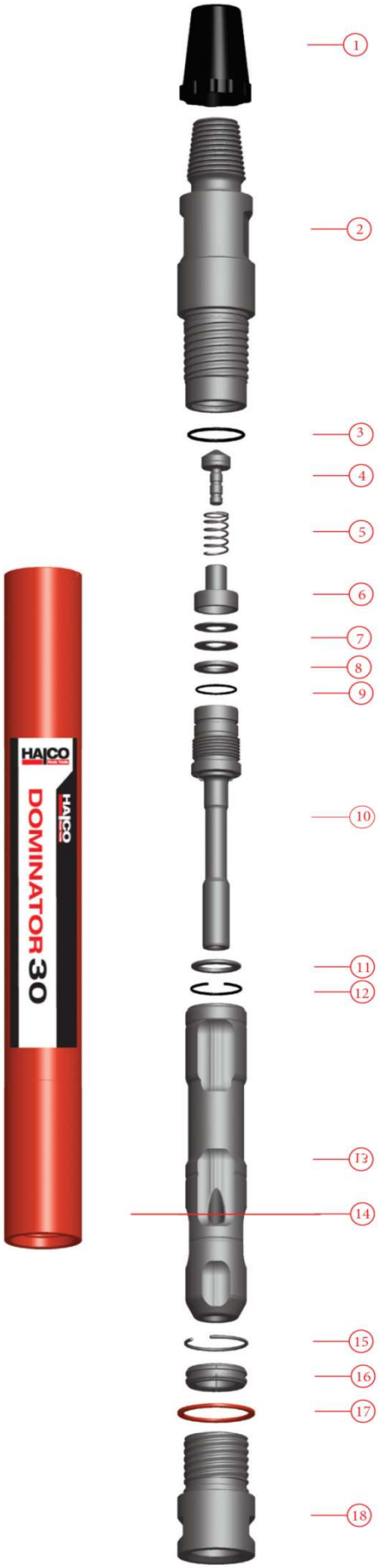
The Dominator 30 has fewer parts than any other 3 inch hammer in the market, which allows for easy maintenance and servicing.

Air Consumption



Figures are based on theoretical data

3" DOMINATOR 30



Hammer Overview

Hammer Model	**Dominator 30**
Part Number	**600424**
Shank	IR3.5
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	90 MM
Air consumption (@25bar)	
Hammer flat size	63mm (2.48")
Weight	23Kg (83.8 lbs)
Outside diameter	81mm (3.35")
Length (shoulder to shoulder)	832mm (32.25")
Minimum weight on bit	150 Kg (330lbs)
Maximum weight on bit	300 Kg (660lbs)

Parts list

Hammer type	**Dominator 30**		**Maintenance Kits**	
Shank	**IR3.5**			
Part number	**600424**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK27**	**RK47**
1	Thread Protector	200111		
2	Top Adaptor	602980		
3	O-Ring	768098	1	1
4	Non Return Valve	602328		1
5	N.R.V. Spring	760100	1	1
6	N.R.V. Housing	602971		
7	Disk Springs	760094	1	1
8	Thrust Washer	602972		
9	O-Ring	768033	1	1
10	Air Distributor	603108		1
11	Washer	602979		
12	Snap Ring	783035	1	1
13	Piston	603107		
14	Cylinder	602974		
15	Spacer	783036	1	1
16	Bit Retaining Ring	602976		1
17	Chuck Spacer	602977	1	1
18	Chuck	602978		1
	Foot Valve	602922		1

3" GP300

AT A GLANCE

SIZE
90mm - 105mm
3 1/2 - 4 1/8"

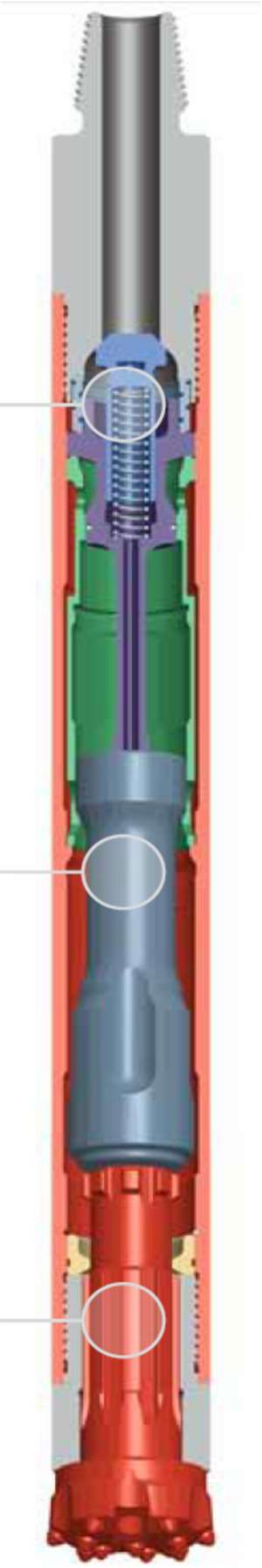
SHANK
MD 3.5

AIR PRESSURE
100 - 362 psi
(7 - 25 bar)

Internal N.R.V. (Non-Return-Valve) to prevent flooding when drilling in water.

Solid piston with liner support.

IR DHD 3.5 shank reduces contact stresses and wear rates.



Dominator 375 hammer gives up to 25% increase in performance compared to Dominator 350 and Dart 350. This exceptional hammer is simple, robust and has a high penetration rate. The Dominator 375 has an integral N.R.V. (Non-Return-Valve) with an adjustable air bleed system to adjust air volume, this hammer has a liner and solid piston design.

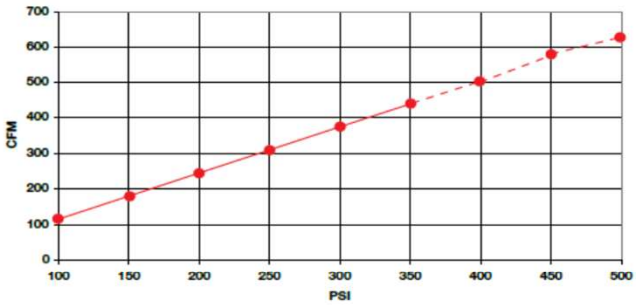
This hammer has few internal parts which makes on site servicing easy with minimum tools needed. The MD 3.5 shank drill bit can be fitted for improved service life and heavy duty applications.

Suitable for operation at air pressures of 100 - 350 psi (7 - 24 bar).

Drilling diameters of 95mm - 115mm (3 1/2 - 4 1/8").

Air Consumption

Dominator 375 Air Consumption



Available Shanks

MD 3.5

3" GP300

Hammer Overview

Hammer Model	**GP300**
Part Number	**600393**
Shank	MD3.5
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	95 MM
Air consumption (@25bar)	
Hammer flat size	64mm (2.520")
Weight	24 Kg (52.91 lbs)
Outside diameter	85mm (3.35")
Length (shoulder to shoulder)	885mm (34.84")
Minimum weight on bit	150 Kg (330lbs)
Maximum weight on bit	300 Kg (660lbs)

Parts list

Hammer type	**GP300**		**Maintenance Kits**	
Shank	**MD3.5**			
Part number	**600393**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK64**	**RK101**
1	Thread Protector	200111		
2	Top Adaptor	604371		
3	Choke - Blank	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
4	Non Return Valve	604378	1	1
5	N.R.V. Spring	760154		
6	Make up Shim - 4.9mm	602634		1
	Make up Shim - 5.3mm	602635		1
	Make up Shim - 5.7mm	602636		1
7	Compression Spring	760107		1
8	Air Distributor	604461		
9	O-Ring	768099	1	1
10	Liner	604459		
11	Cylinder	604458		
12	Piston	604460		
12	Snap Ring	783051	1	1
14	Retaining Ring band	792040	1	1
15	Bit Retaining Ring	604457		1
17	Chuck	604456		1
	Foot Valve	602922		1

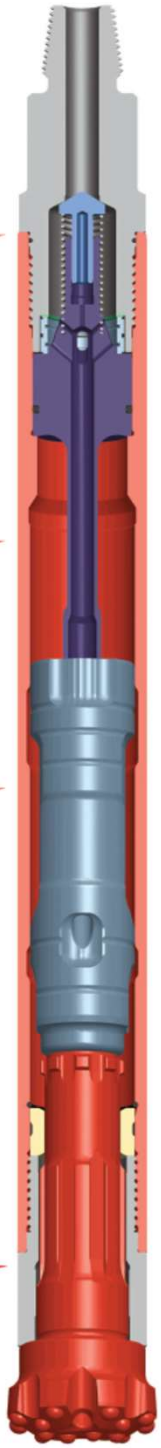
4" SUPER DOMINATOR 400

AT A GLANCE

SIZE
108mm - 150mm
(4 1/4- 5 7/8")

SHANK
HALCO 4

AIR PRESSURE
100-507psi
(7-35 bar)



Top adaptor with internal N.R.V. (Non Return Valve) and replaceable air distributor.

Revised chamber volumes and cycle timing to optimise performance.

Simplified piston geometry for improved balance and location within the cylinder.

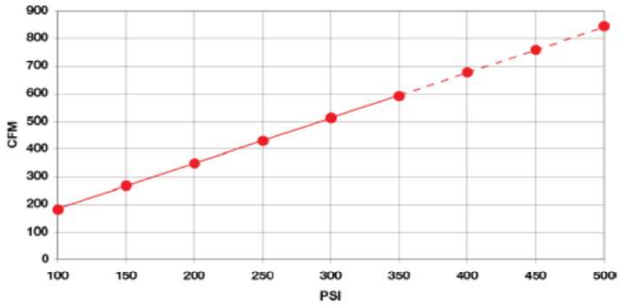
Halco 4 shanks reduce contact stresses and wear rates.

SUPER DOMINATOR 400

The Super Dominator 400 is a heavy duty hammer with thicker 98mm (3.8") diameter outer components to provide extra service life in abrasive conditions and is suitable for waterwell drilling.

The Super Dominator 400 is designed for maximum performance at high pressures.

Air Consumption



Figures are based on theoretical data

4" SUPER DOMINATOR 400

Hammer Overview

Hammer Model	**SDOM400**
Part Number	**600258**
Shank	DHD340A
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	105 MM
Air consumption (@25bar)	
Hammer flat size	65mm (2.56")
Weight	38 Kg (83.8 lbs)
Outside diameter	98mm (3.875")
Length (shoulder to shoulder)	1042mm (41")
Minimum weight on bit	250 Kg (550 lbs)
Maximum weight on bit	500 Kg (1100 lbs)

Parts list

Hammer type	**SDOM400**		**Maintenance Kits**	
Shank	**DHD340A**			
Part number	**600258**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK45**	**RK83**
1	Thread Protector	200111		
2	Top Adaptor	603215		
3	O-Ring	768040	1	1
4	Non Return Valve	602633		1
5	N.R.V. Spring	760108	1	1
6	Make up Shim - 4.9mm	602634		1
	Make up Shim - 5.3mm	602635		1
	Make up Shim - 5.7mm	602636		1
7	Compression Spring	760107		1
8	Cylinder	603384		
9	Air Distributor	603266		
10	O-Ring	768050	1	1
11	Piston	603383		
12	Snap Ring	783029	1	1
13	Bit Retaining Ring	603586		1
14	Chuck Spacer	602733	1	1
15	Chuck	603218		1
	Foot Valve	601773		

Alternative thread connections

Part Number	**600229**
Thread connection	2 3/8" API Reg Pin Plain Diameter

4" SUPER DOMINATOR 450

AT A GLANCE

SIZE
110mm - 140mm
4 5/16 - 5 1/2"

SHANK
Halco 4.5

AIR PRESSURE
100-507 psi
(7-35 bar)

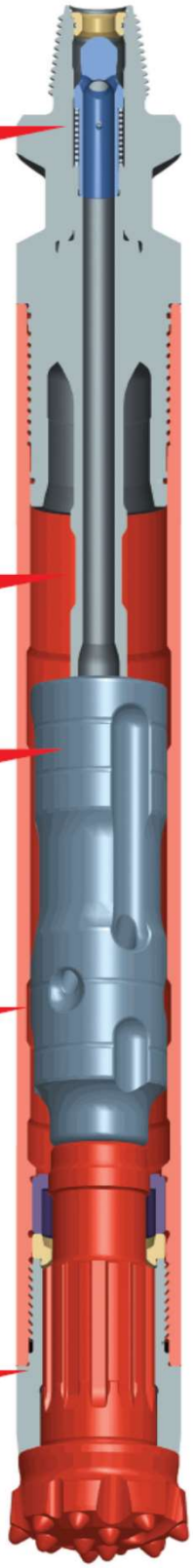
One piece top adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

Revised cylinder porting to maximise air flow efficiency.

The Halco 4.5 shank reduces contact stress and wear rates.



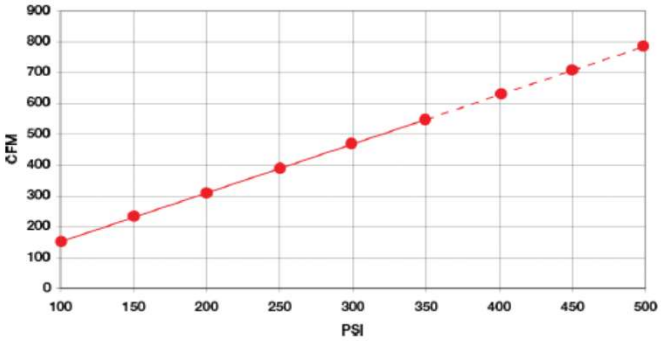
SUPER DOMINATOR 450

The Super Dominator 450 has been specifically designed for high production drilling in blast hole applications.

The hammer is robust and has few parts, making it user friendly and reliable. The Super Dominator 450 is fitted with a N.R.V (Non Return Valve) in the top adaptor for a quick, easy inspection and maintenance operation. A fixed air distributor in the top adaptor means the 450 requires no shimming which simplifies servicing. It also has no liner which increases the piston power output.

The Super Dominator 450 utilizes Halco's 12 spline shank which has a simplistic robust geometry combined with increased drive contact area.

Air Consumption



Figures are based on theoretical data

4" SUPER DOMINATOR 450

Hammer Overview

Hammer Model	**SDOM450**
Part Number	**600382**
Shank	Halco 4.5
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	108 MM
Air consumption (@25bar)	
Hammer flat size	65mm (2.56")
Weight	38.5 Kg (84.7 lbs)
Outside diameter	101.5mm (4.0")
Length (shoulder to shoulder)	914mm (36.0")
Minimum weight on bit	250 Kg (550 lbs)
Maximum weight on bit	500 Kg (1100 lbs)

Parts list

Hammer type	**SDOM400**		**Maintenance Kits**	
Shank	**Halco 4.5**			
Part number	**600258**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK59**	**RK93**
1	Thread Protector	200111		
2	Snap Ring	783049	1	1
3	N.R.V. Seat	603919		1
4	O-Ring	768187	1	1
5	Non Return Valve	603918		1
6	N.R.V. Spring	760142	1	1
7	Top Adaptor	603946		
8 & 9	O-Ring (2)	768190	2	2
10	Cylinder	604387		
11	Piston	604392		
12	Bit Guide Bush	604314		1
13	O-Ring	768189	1	1
14	Bit Retaining Ring	603948		1
15	Chuck Lock Ring	602733	1	1
16	Chuck	603939		1
	Foot Valve	603951		1

Alternative thread connections

Part Number	**TBA**
Thread connection	2 7/8" API Reg Pin

4" SUPER DOMINATOR 450HD

Hammer Overview

Hammer Model	**SDOM450HD**
Part Number	**600421**
Shank	Halco 4.5
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	65mm (2.56")
Weight	42.0 Kg (92.6 lbs)
Outside diameter	103.5mm (4.074")
Length (shoulder to shoulder)	914mm (36.0")
Minimum weight on bit	250 Kg (550 lbs)
Maximum weight on bit	500 Kg (1100 lbs)

Parts list

Hammer type	**SDOM400**		**Maintenance Kits**	
Shank	**Halco 4.5**			
Part number	**600421**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK59**	**RK141**
1	Thread Protector	200111		
2	Snap Ring	783049	1	1
3	N.R.V. Seat	603919		1
4	O-Ring	768187	1	1
5	Non Return Valve	603918		1
6	N.R.V. Spring	760142	1	1
7	Top Adaptor	600677		
8 & 9	O-Ring (2)	768190	2	2
10	Cylinder	602555		
11	Piston	604392		
12	Bit Guide Bush	604314		1
13	O-Ring	768189	1	1
14	Bit Retaining Ring	603948		1
15	Chuck Lock Ring	602733	1	1
16	Chuck	DP516		1
				1
	Foot Valve	603951		2

Alternative thread connections

Part Number	**TBA**
Thread connection	2 7/8" API Reg Pin

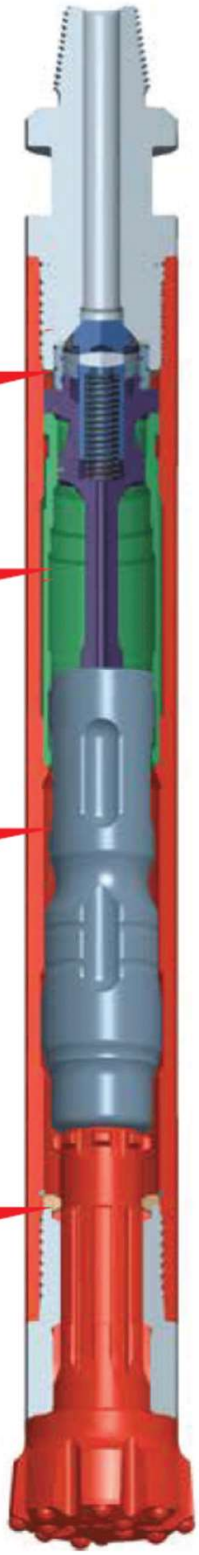
4" GP400

AT A GLANCE

SIZE
110mm - 140mm
4 5/16 - 5 1/2"

SHANK
DHD340
TD 40

AIR PRESSURE
100 - 435 psi
(7 - 30 bar)



A choke facility is housed within the N.R.V. to allow adjustment of air flow to improve flushing.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

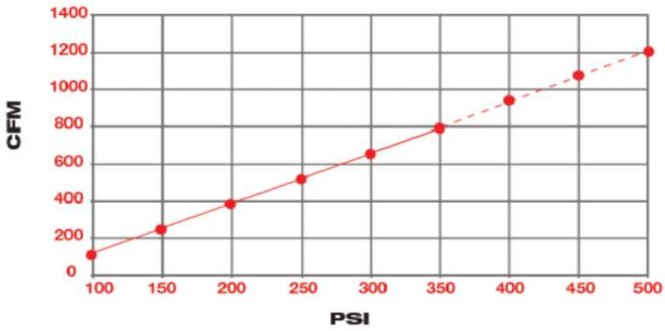
A captive bit retaining ring makes changing the drill bit easier.

GP 400

The GP400 high performance hammer drills under a head of water typically suited to Waterwell and Geothermal applications due to its non-ported piston design.

It features a choke facility which helps to adjust air flow through the hammer.

Air Consumption



Figures are based on theoretical data

4" GP400 - DHD340

Hammer Overview

Hammer Model	**GP400**
Part Number	**600466**
Shank	DHD340
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	108 MM
Air consumption (@25bar)	
Hammer flat size	66mm (2.560")
Weight	40 Kg (122.3 lbs)
Outside diameter	98mm (3.858")
Length (shoulder to shoulder)	954mm (37.5")
Minimum weight on bit	250 Kg (550lbs)
Maximum weight on bit	500 Kg (1100lbs)

Parts list

Hammer type	**GP300**		**Maintenance Kits**	
Shank	**DHD340**			
Part number	**600466**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK72**	**RK123**
1	Thread Protector	200111		
2	Top Adaptor	602646		
3	O-Ring	768190	1	1
4	Choke - Solid	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
5	Non Return Valve	604444		1
6	N.R.V. Spring	760079	1	1
7	Make up Shim - 4.9mm	602634		1
	Make up Shim - 5.3mm	602635		1
	Make up Shim - 5.7mm	602636		1
8	Compression Ring	604994		1
9	Air Distributor	604992		
10	O-Ring	768204	1	
11	Liner	604991		
12	Cylinder	604990		
13	Square Snap Ring	604995		
14	Piston	604993		
15	Snap Ring	783029	1	1
16	Bit Retaining Ring	603255		1
17	Chuck	603932		1
	Foot Valve	601773		1

4" GP400 - TD40/QLX40

Hammer Overview

Hammer Model	**GP400**
Part Number	**600444**
Shank	TD40/QLX40
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	115 MM
Air consumption (@25bar)	
Hammer flat size	66mm (2.560")
Weight	40 Kg (122.3 lbs)
Outside diameter	98mm (3.858")
Length (shoulder to shoulder)	954mm (37.5")
Minimum weight on bit	250 Kg (550lbs)
Maximum weight on bit	500 Kg (1100lbs)

Parts list

Hammer type	**GP400**		**Maintenance Kits**	
Shank	**TD40/QLX40**			
Part number	**600444**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK72**	**RK143**
1	Thread Protector	200111		
2	Top Adaptor	602646		
3	O-Ring	768190	1	1
4	Choke - Blank	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
5	Non Return Valve	604444		1
6	N.R.V. Spring	760079	1	1
7	Make up Shim - 4.9mm	602634		1
	Make up Shim - 5.3mm	602635		1
	Make up Shim - 5.7mm	602636		1
8	Compression Spring	760107		1
9	Air Distributor	604571		
10	O-Ring	768204	1	1
11	Liner	604696		
12	Cylinder	604694		
13	Piston	604572		
14	Snap Ring	783029	1	1
15	Guide bush	604856		
16	Bit Retaining Ring	604854		1
17	Chuck	604853		1
	Foot Valve	640014		1

4" MACH 44

AT A GLANCE

SIZE
110mm - 140mm
4 5/16 - 5 1/2"

SHANK
Halco 4

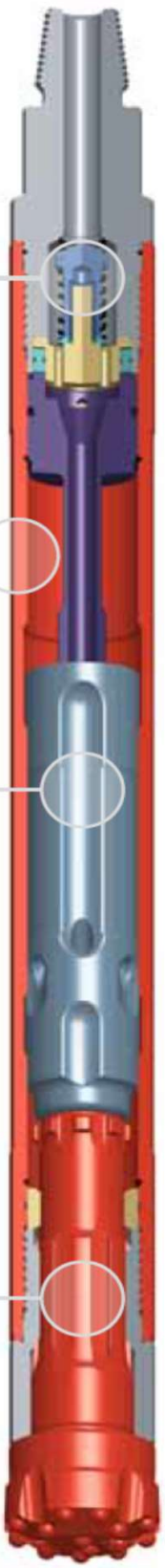
AIR PRESSURE
100 - 435 psi
(7 - 30 bar)

Top-adaptor with integral N.R.V. (Non-Return-Valve) replaceable air distributor.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder.

Halco shank reduces contact stresses and wear rates.



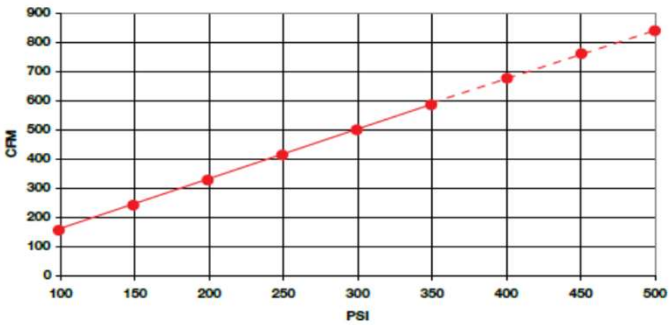
The Mach 44 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures. The Mach 44 has a proven track record of performanc and reliability. The high frequency of the Mach 44 makes it ideal when using overburden systems for broken or unstable ground conditions.

Suitable for operation at air pressures of 100 - 350 psi (7 - 24 bar).

Drilling diameters of 105mm - 150mm (4 1/4 - 5 7/8").

Air Consumption

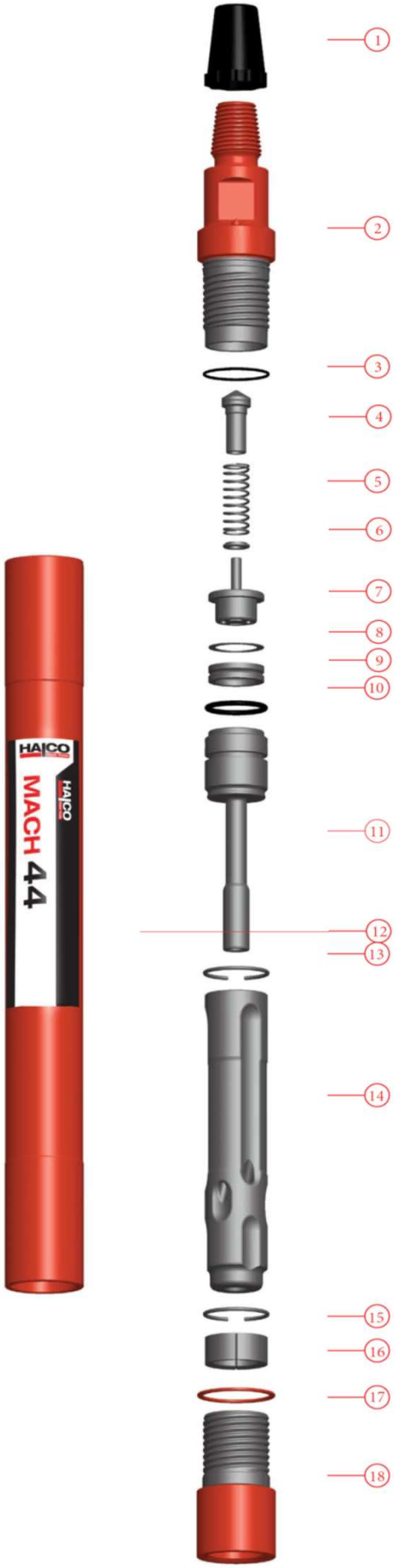
Mach 44 Air Consumption



Available Shanks

Halco Mach 44

4" MACH 44



Hammer Overview

Hammer Model	**MACH44**
Part Number	**600070**
Shank	Halco 4
Thread connection	2 3/8" API Reg Pin Up
Minimum bit diameter	108 MM
Air consumption (@25bar)	
Hammer flat size	65mm (2.560")
Weight	35.3 Kg (77.82 lbs)
Outside diameter	95mm (3.75")
Length (shoulder to shoulder)	1000mm (39.38")
Minimum weight on bit	250 Kg (550lbs)
Maximum weight on bit	500 Kg (1100lbs)

Parts list

Hammer type	**MACH44**		**Maintenance Kits**	
Shank	**Halco 4**			
Part number	**600070**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK02**	**RK02**
1	Thread Protector	200111		
2	Top Adaptor	601632		
3	O-Ring	768040	1	1
4	Non Return Valve	602330		1
5	N.R.V. Spring	760084	1	1
6	N.R.V. Seat	601778		1
7	N.R.V. Finger	601717		
8	Make up Shim 0.5mm	601640	1	1
	Make up Shim 1.0mm	601720	1	1
	Make up Shim 1.5mm	601721	1	1
8	Compression Ring	601635	1	1
10	O-Ring	768050	1	1
11	Air Distributor	601868		
12	Cylinder	601865		
13	Snap Ring	783014	1	1
14	Piston	602456		
15	Snap Ring	783014	1	1
16	Bit Retaining Ring	601945		1
17	Chuck Spacer	601431	1	1
18	Chuck	601439		1
	Foot Valve	601641		1

5" DOMINATOR 500

AT A GLANCE

SIZE
127mm - 165mm
5 - 6 1/2"

SHANK
Halco 5

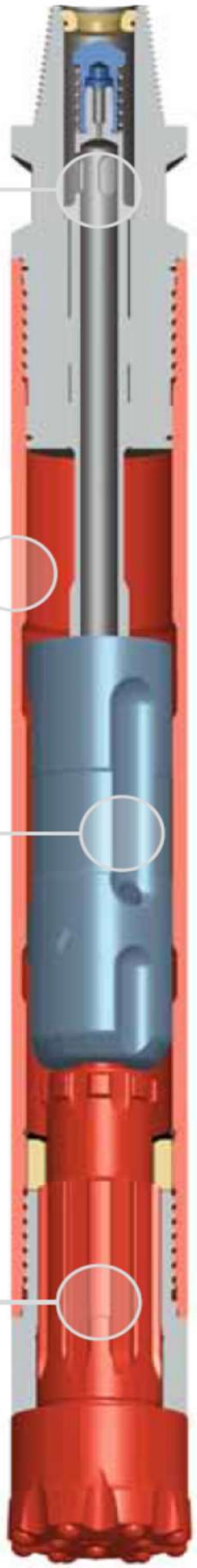
AIR PRESSURE
100-507 psi
(7-35 bar)

One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder.

Shank reduces contact stresses and wear rates.



Dominator 500 a class leader in performance, is suitable for drilling at a wide range of air pressures, excelling at high working pressures. Dominator 500 has a one piece top-adaptor with N.R.V. (Non-Return-Valve fitted for easy inspection and service, with integral finger to reduce maintenance and eliminate shimming. Dominator 500 has no liner which increases the piston blow energy and reduces part required.

The Dominator 500 can be used for waterwell, shallow gas and oil applications.

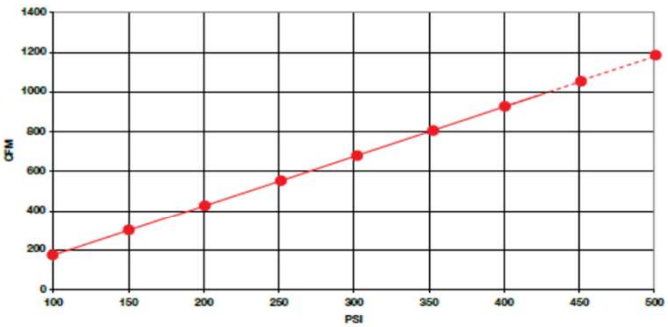
Dominator 500 is simple to maintain and to service with only few simple tools required with a recommended minimum bit size of 127mm (5").

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 127mm - 165mm (5 - 6 1/2").

Air Consumption

Dominator 500 Air Consumption



Available Shanks

Mach 50

5" DOMINATOR 500

Hammer Overview

Hammer Model	**DOM500**
Part Number	**600120**
Shank	Halco 5
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	127 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.54")
Weight	58.0 Kg (83.8 lbs)
Outside diameter	118mm (4.65")
Length (shoulder to shoulder)	980mm (38.6")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**DOM500**		**Maintenance Kits**	
Shank	**Halco 5**			
Part number	**600120**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK16**	**RK25**
1	Thread Protector	201701		
2	Snap Ring	783028	1	1
3	N.R.V. Seat	602703		1
4	O-Ring	768144	1	1
5	Non Return Valve	602330		1
6	N.R.V. Spring	760084	1	1
7	Top Adaptor	602704		
8	Cylinder	602457		
9	O-Ring	768091	1	1
10	O-Ring	768043	1	1
11	Piston	602459		
12	Snap Ring	783025	1	1
13	Bit Retaining Ring	602430		1
14	Chuck Spacer	602433	1	1
15	Chuck	602458		1
	Foot Valve	601843		1

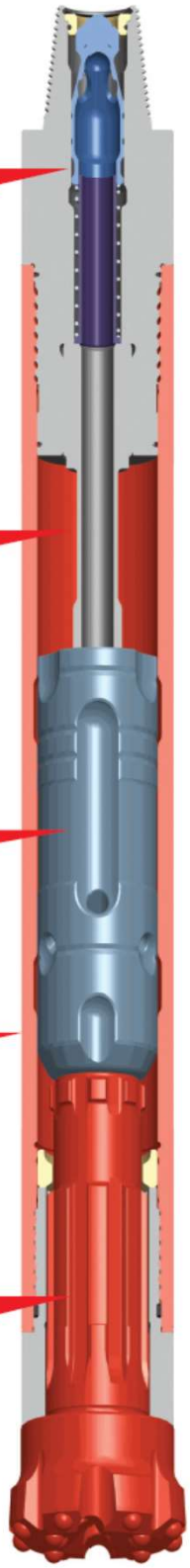
5" SUPER DOMINATOR 550

AT A GLANCE

SIZE
130mm - 165mm
5 1/8 - 6 1/2"

SHANK
QL 50

AIR PRESSURE
100-507 psi
(7-35 bar)



One-piece top adaptor reduces internal parts. No make-uo required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimise performance.

Simplified piston geometry for improved balance and location within the cylinder

Heavy duty cylinder to extend hammer life.

QL50 shanks reduce contact stresses and wear rates.

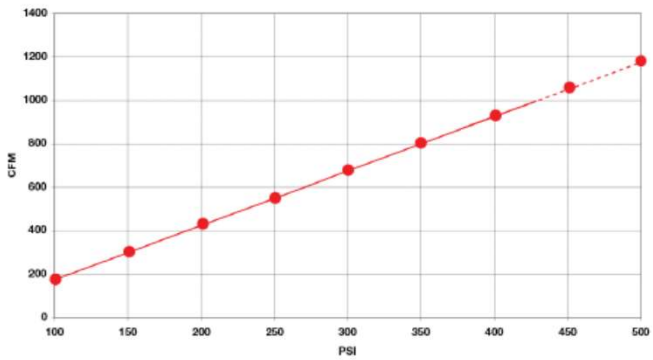
SUPER DOMINATOR 550 HD

Super Dominator 550HD is a class leader in performance and is suitable for drilling at a wide range of air pressures but excels at high working pressures.

Combining the raw power of the Super Dominator 500 with extended life for abrasive conditions, the Super Dominator 550HD has a larger outside diameter, a one piece top adaptor with N.R.V (Non Return Valve) fitted for easy inspection and an integral finger to reduce maintenance and eliminating shimming.

The Super Dominator 500HD has no liner which increases the piston blow energy and reduces parts required.

Air Consumption



Figures are based on theoretical data

5" SUPER DOMINATOR 500

Hammer Overview

Hammer Model	**SDOM500**
Part Number	**600267**
Shank	DHD350
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	140 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.54")
Weight	58.0 Kg (83.8 lbs)
Outside diameter	118mm (4.65")
Length (shoulder to shoulder)	975mm (38.40")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**DOM500**		**Maintenance Kits**	
Shank	**DHD350**			
Part number	**600267**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK48**	**RK72**
1	Thread Protector	201701		
2	Snap Ring	783028	1	1
3	N.R.V. Seat	603510		1
4	O-Ring	786144	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	1
7	N.R.V. Shield	603652		1
8	Top Adaptor	603513		
9	Cylinder	603368		
10	O-Ring	768091	1	1
11	O-Ring	768043	1	1
12	Piston	603369		
13	Snap Ring	783025	1	1
14	Bit Retaining Ring	602706		1
15	Chuck Lock Ring	603104	1	1
16	Chuck Spacer	602433	1	1
17	Chuck	602549		1
	Foot Valve	601902		1

5" SUPER DOMINATOR 550HD

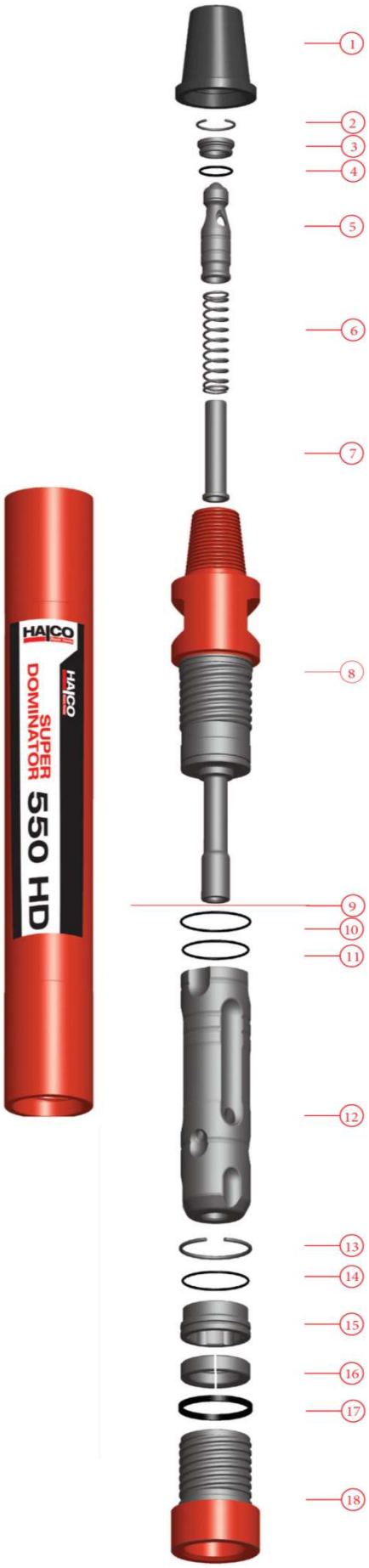
Hammer Overview

Hammer Model	**SDOM550HD**
Part Number	**600293**
Shank	DHD350
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	140 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.54")
Weight	67.0 Kg (147.4 lbs)
Outside diameter	124.5mm (4.85")
Length (shoulder to shoulder)	975mm (38.4")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**SDOM550HD**		**Maintenance Kits**	
Shank	**DHD350**			
Part number	**600293**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK49**	**RK73**
1	Thread Protector	201701		
2	Snap Ring	783028	1	1
3	N.R.V. Seat	603510		1
4	O-Ring	786144	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	1
7	N.R.V. Shield	603652	1	1
8	Top Adaptor	603661		
9	Cylinder	603370		
10	O-Ring	768091	1	1
11	O-Ring	768043	1	1
12	Piston	603369		
13	Snap Ring	783025	1	1
14	Bit Retaining Ring	602706		1
15	Chuck Lock Ring	603104	1	1
16	Chuck Spacer	602863	1	1
17	Chuck	602866		1
	Foot Valve	601902		

5" SUPER DOMINATOR 550HD



Hammer Overview

Hammer Model	**SDOM550HD**
Part Number	**600294**
Shank	QL50
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	130 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.54")
Weight	67.0 Kg (147.4 lbs)
Outside diameter	124.5mm (4.85")
Length (shoulder to shoulder)	955mm (37.6")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**SDOM550HD**		**Maintenance Kits**	
Shank	**QL50**			
Part number	**600294**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK40**	**RK77**
1	Thread Protector	201701		
2	Snap Ring	783028	1	1
3	N.R.V. Seat	603510		1
4	O-Ring	786144	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	
7	N.R.V. Shield	603652	1	1
8	Top Adaptor	603661		
9	Cylinder	603370		
10	O-Ring	768091	1	1
11	O-Ring	768043	1	1
12	Piston	603524		
13	Snap Ring	783025	1	1
14	Oring	768043	1	1
15	Guide Bush	603520		1
16	Bit Retaining Ring	604981		1
17	Chuck Lock Ring	603104	1	1
18	Chuck	604980		1
	Foot Valve	601902		

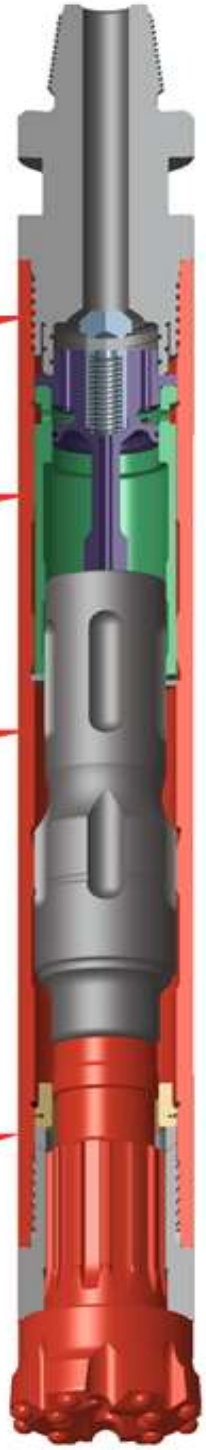
5" GP500

AT A GLANCE

SIZE
140 mm - 165mm
5 1/2 - 6 1/2"

SHANK
DHD 350

AIR PRESSURE
100-435 psi
(7-30 bar)



Choke system to allow adjustment of air flow to improve flushing.

Optimised drive chamber capacities to maximise hammer performance.

Robust piston design for optimum strength and performance.

A captive bit retaining ring makes changing the drill bit easier.

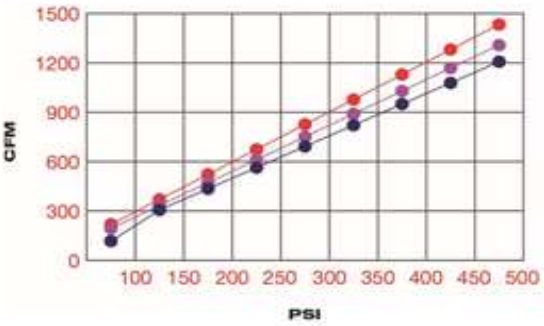
GP 500

The GP500 high performance hammer drills under a head of water typically suited to Waterwell and Geothermal applications due to its non-ported piston design.

It features a choke facility which helps to adjust air flow through the hammer.

Air Consumption

Figures are based on theoretical data



5" GP500 -DHD350

Hammer Overview

Hammer Model	**GP500**
Part Number	**600426**
Shank	DHD350
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	140 MM
Air consumption (@25bar)	
Hammer flat size	66mm (64.750")
Weight	60 Kg (132.3 lbs)
Outside diameter	126mm (4.96")
Length (shoulder to shoulder)	1074mm (42.3")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**GP500**		**Maintenance Kits**	
Shank	**DHD350**	**DHD350**		
Part number	**600426**	**600426**	**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK83**	**RK138**
1	Thread Protector	201701		
2	Top Adaptor	604558		
3	Choke - Blank	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
4	Non Return Valve	604444		
5	N.R.V. Spring	760079	1	1
6	Make up Shim - 4.9mm	604446		1
	Make up Shim - 5.0mm	604447		1
	Make up Shim - 5.5mm	604448		1
7	Compression Spring	760109		
8	Air Distributor	604442		
9	O-Ring	768202	1	1
10	Liner	604932		
11	Square Snap Ring	604937	1	1
12	Cylinder	604931		
13	Piston	604439		
14	Snap Ring	783054	1	1
15	Bit Retainer Ring	604689		1
16	Chuck	604688		1
	Foot Valve	601902		1

Alternative thread connections

Part Number	**600429**
Thread connection	2 3/8" API Reg Pin Up

5" GP500 -QL50

Hammer Overview

Hammer Model	**GP500**
Part Number	**600448**
Shank	QL50
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	130 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.543")
Weight	60 Kg (132.3 lbs)
Outside diameter	126mm (4.96")
Length (shoulder to shoulder)	1053mm (41.456")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**GP500**		**Maintenance Kits**	
Shank	**QL50**	**QL50**		
Part number	**600448**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**		
1	Thread Protector	201701		
2	Top Adaptor	604558		
3	Choke - Blank	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
4	Non Return Valve	604444		1
5	N.R.V Spring	760079	1	1
6	Make up Shim - 4.5mm	604446		1
	Make up Shim - 5.0mm	604447		1
	Make up Shim - 5.5mm	604448		1
7	Compression Spring	760109		1
8	Air Distributor	604442		
9	O-Ring	768202	1	1
10	Liner	604932		
11	Square Snap Ring	604937	1	1
12	Cylinder	604931		
13	Piston	604936		
14	Snap Ring	783054	1	1
15	Guide Bush	604935		1
16	O-Ring	768043	1	1
15	Bit Retaining Ring	604933		1
17	Chuck Lock ring	604949		
18	Chuck	604934		
	Foot Valve	603252		1

Alternative thread connections

Part Number	**600429**
Thread connection	2 3/8" API Reg Pin Up

5" MACH 50

AT A GLANCE

SIZE
140mm - 165mm
5 1/2 - 6 1/2"

SHANK
DHD 350R

AIR PRESSURE
100-435 psi
(7-30 bar)

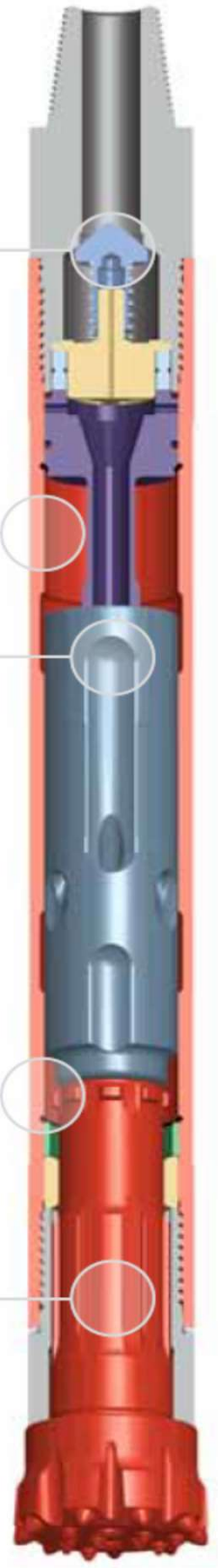
Top-adaptor with internal N.R.V. (Non-Return-Valve) replaceable air distributor.

Reversible cylinder.

Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimize performance.

Halco Mach 50 shank reduces contact stresses and wear rates.



The Mach 50 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures. The hammer is fitted with a reversible cylinder to prolong th service life. Mach 50 is versatile and reliable, requiring only a few simple tools for servicing and maintenance.

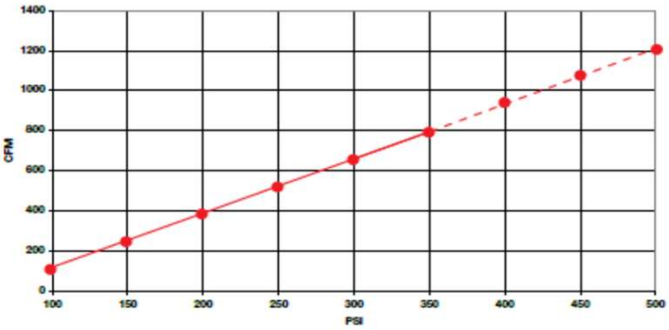
This hammer is most suited for use with the Sim-Cas Overburden system because of the high frequency of the piston/cycle.

Suitable for operation at air pressures of 100 - 350 psi (7 - 24 bar).

Drilling diameters of 127mm - 165mm (5 - 6 1/2").

Air Consumption

Mach 50 Air Consumption



Available Shanks

Halco Mach 50

5" MACH 50

Hammer Overview

Hammer Model	**MACH 50**
Part Number	**600046**
Shank	Halco 5
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	127MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.544")
Weight	54 Kg (119.0 lbs)
Outside diameter	114mm (4.5")
Length (shoulder to shoulder)	1012mm (40")
Minimum weight on bit	400 Kg (900 lbs)
Maximum weight on bit	900 Kg (1980 lbs)

Parts list

Hammer type	**GP500**		**Maintenance Kits**	
Shank	**Halco 5**	**Halco 5**		
Part number	**600046**	**600046**	**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK03**	**RK04**
1	Thread Protector	201701		
2	Top Adaptor	601698		
3	O-Ring	768043	1	1
4	Non Return Valve	602285		1
5	N.R.V. Spring	760084	1	1
6	N.R.V. Finger	601702		
7	Make up Shim 0.5mm	601706	1	1
	Make up Shim 1MM	601795	1	1
	Make sp Shim 1.5MM	601796	1	1
8	Make up Ring	601700	1	1
9	Air Distributor	601699		
10	Cylinder	601694		
11	O-Ring	768101	1	1
12	Snap Ring	783013		1
13	Piston	601695		
14	Snap Ring	783103	1	
15	Spacer	601705		1
16	Bit Retaining Ring	602117		1
17	Chuck Spacer	601603	1	1
18	Chuck	601602		1
	Foot Valve	601843		1

6"

SUPER DOMINATOR 600

One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder.

DHD 360 and Cop 64 shank reduces contact stresses and wear rates.

The Super Dominator 600 is one of the fastest 6" hammers specifically designed for high production drilling in blast-hole applications. The Super Dominator 600 is a reduced weight hammer with waterwell drilling capabilities. The unique one piece top-adaptor with N.R.V. (Non-Return-Valve) makes it easy to maintain and service the hammer.

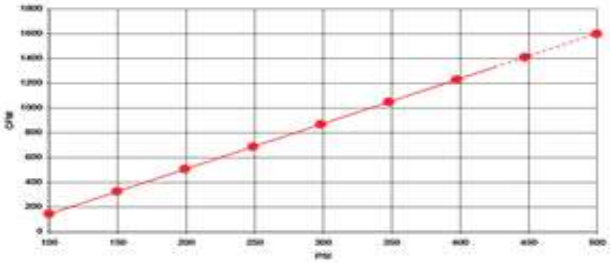
Super Dominator 600 requires only few tools to service and maintain the hammer.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 135mm - 165mm (6 1/8 - 9 1/2").

Air Consumption

Super Dominator 600 Air Consumption



Available Shanks

IR DHD 360

6" SUPER DOMINATOR 600

Hammer Overview

Hammer Model	**SDOM600**
Part Number	**600272**
Shank	DHD360
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	156 MM
Air consumption (@25bar)	
Hammer flat size	101mm (4.0")
Weight	100 Kg (220 lbs)
Outside diameter	140.0mm (5.511")
Length (shoulder to shoulder)	1139mm (44.8")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**SDOM600**		**Maintenance Kits**	
Shank	**DHD360**			
Part number	**600272**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK37**	**RK65**
1	Thread Protector	201701		
2	Snap Ring	783050	1	1
3	N.R.V. Seat	603872		1
4	O-Ring	768112	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	1
7	N.R.V. Shield	603652		1
8	Top Adaptor	603506		
9	O-Ring	768140	1	1
10	O-Ring	768055	1	1
11	Cylinder	603584		
12	Piston	602891		
13	Snap Ring	783017	1	1
14	O-Ring	747105	1	1
15	Bit Guide Bush	602239		1
16	Bit Retaining Ring	603749		1
17	O-Ring	747105	1	1
18	Chuck Spacer	601942	1	1
19	Chuck	602495		1
	Foot Valve	601595		1

6"

SUPER DOM 650 HD QL 60

One piece top-adaptor reduces internal parts. No make up required.

Revised reversible chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder.

Reversible cylinder.

IR QL 60 shank reduces contact stresses and wear rates.

The Super Dominator 650 HD QL 60 has been designed to give maximum performance in blast-hole applications. This hammer has been tuned to efficiently utilize the air supply to give optimum penetration rates. The Super Dominator 650 HD QL 60 is suitable for drilling over a wide range of air pressures, excelling at higher pressures.

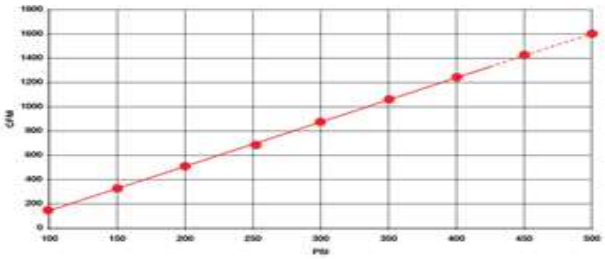
The unique top-adaptor with N.R.V. (Non-Return-Valve) makes this hammer easy to maintain and service.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 165mm - 241mm (6 1/2 - 9 1/2").

Air Consumption

Super Dominator 650 HD QL 60 Air Consumption



Available Shanks

IR QL 60

6" SUPER DOMINATOR 650HD

Hammer Overview

Hammer Model	**SDOM650HD**
Part Number	**600316**
Shank	QL60
Thread connection	3 1/2" API Reg Pin with carbides
Minimum bit diameter	156 MM
Air consumption (@25bar)	
Hammer flat size	101mm (4.0")
Weight	100 Kg (220 lbs)
Outside diameter	146mm (5.478")
Length (shoulder to shoulder)	1043mm (41.1")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**SDOM650HD**		**Maintenance Kits**	
Shank	**QL60**			
Part number	**600316**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK43**	**RK81**
1	Thread Protector	201701		
2	Snap Ring	783050	1	1
3	N.R.V. Seat	603872		1
4	O-Ring	768112	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	1
7	N.R.V. Shield	603652		1
8	Top Adaptor	603806		
9	O-Ring	747105	1	1
10	O-Ring	768140	1	1
11	Cylinder	603801		
12	Piston	603538		
13	Snap Ring	783017	1	1
14	O-Ring	747105	1	1
15	Bit Guide Bush	603537		1
16	Bit Retaining Ring	603866		
17	Chuck Spacer	601928		1
18	Chuck	604122		1
	Foot Valve	602852		1

Alternative thread connections

Part Number	**600465**
Thread connection	3 1/2" BECO Pin with carbides

6" SUPER DOMINATOR 650HD Snub

Hammer Overview

Hammer Model	**SDOM650HD Snub**
Part Number	**600467**
Shank	QL60
Thread connection	3 1/2" API Reg Pin with carbides
Minimum bit diameter	156 MM
Air consumption (@25bar)	
Hammer flat size	101mm (4.0")
Weight	100 Kg (220 lbs)
Outside diameter	146mm (5.478")
Length (shoulder to shoulder)	1043mm (41.1")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**SDOM650HD Snub**		**Maintenance Kits**	
Shank	**QL60**			
Part number	**600467**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK43**	**RK81**
1	Thread Protector	201701		
2	Snap Ring	783050	1	1
3	N.R.V. Seat	603872		1
4	O-Ring	768112	1	1
5	Non Return Valve	603554		1
6	N.R.V. Spring	760135	1	1
7	N.R.V. Shield	603652		1
8	Top Adaptor	603806		
9	O-Ring	747105	1	1
10	O-Ring	768140	1	1
11	Cylinder	605004		
12	Piston	605003		
13	Snap Ring	783017	1	1
14	O-Ring	747105	1	1
15	Bit Guide Bush	605005		1
16	Bit Retaining Ring	603866		
17	Chuck Spacer	601928		1
18	Chuck	604122		1
	Foot Valve	602852		1

Alternative thread connections

Part Number	
Thread connection	3 1/2" BECO Pin with carbides

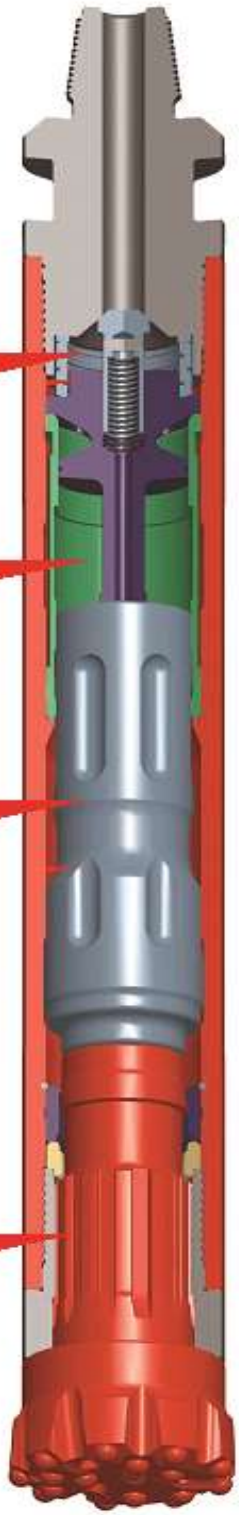
6" GP600

AT A GLANCE

SIZE
152 mm - 203mm
6 1/8 - 8"

SHANK
QL60
DHD 360

AIR PRESSURE
100-435 psi
(7-30 bar)



Choke system to allow adjustment of air flow to improve flushing.

Optimised drive chamber capacities to maximise hammer performance.

Robust piston design for optimum strength and performance.

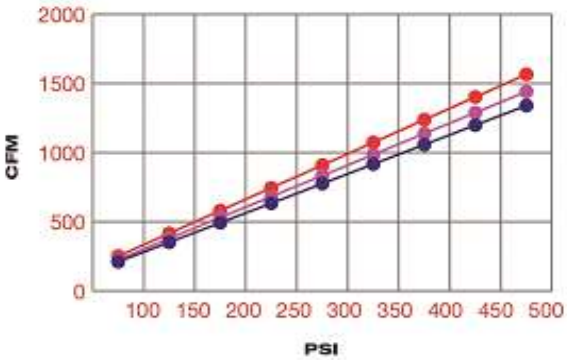
8 spline DHD360 shank reduces contact stress and wear rates.

GP 600

The GP600 is a high performance hammer which can drill under a head of water, so it is typically suitable for Waterwell and Geothermal applications due to its robust non-ported piston design.

A choke facility helps to adjust air flow through the hammer.

Air Consumption



Figures are based on theoretical data

6" GP600 - QL60

Hammer Overview

Hammer Model	**GP600**
Part Number	**600427**
Shank	QL60
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	152 MM
Air consumption (@25bar)	
Hammer flat size	101mm (3.976")
Weight	86 Kg (132.3 lbs)
Outside diameter	140mm (5.51")
Length (shoulder to shoulder)	1035mm (40.7")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**GP600**		**Maintenance Kits**	
Shank	**QL60**			
Part number	**600427**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK68**	**RK105**
1	Thread Protector	201701		
2	Top Adaptor	604521		
3	O-Ring	768140	1	1
4	Shim - 4MM	601946		1
	Shim - 5MM	601947		1
	Shim - 6MM	601948		1
	Shim - 7MM	601949		1
5	Compression Ring	760096		1
6	Choke Plug - Blank	604480	1	1
	Choke 1/8"	604481	1	1
	Choke 3/16"	604482	1	1
7	Non Return Valve	604444		1
8	N.R.V Spring	760079	1	1
9	Air Distributer	604514		
10	O-Ring	768043	1	1
11	Liner	604930		
12	Square Snap Ring	604929	1	1
13	Cylinder	604517		
14	Piston	604520		
15	Snap Ring	783056	1	1
16	Guid Bush	604518		1
17	O-Ring	747105	1	1
18	Bit Retaining Ring	604693		1
19	Chuck	604692		1
	Foot Valve	602852		1

6" GP600 - QL60HD

Hammer Overview

Hammer Model	**GP600HD**
Part Number	**600480**
Shank	QL60
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	156 MM
Air consumption (@25bar)	
Hammer flat size	101mm (3.976")
Weight	xx Kg (xxx lbs)
Outside diameter	146mm (5.75")
Length (shoulder to shoulder)	1035mm (40.7")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**GP600HD**		**Maintenance Kits**	
Shank	**QL60**			
Part number	**600480**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK84**	**RK156**
1	Thread Protector	201701		
2	Top Adaptor	604562		
3	O-Ring	768140	1	
4	SHIM 4MM	601946		1
	Make up Shim - 5mm	601947		1
	Make up Shim - 6mm	601948		1
	Make up Shim - 7mm	601949		1
5	Compression Ring	760096		
6	Choke - Solid	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
7	Non Return Valve	604444		1
8	N.R.V. Spring	760079	1	1
9	Air Distributor	604514		
10	O-Ring	768043	1	
11	Liner	604930		
12	Square Snap Ring	604929		1
13	Cylinder	605023		
14	Piston	604520		
15	Snap RIng	783056	1	
16	Guid Bush	604518		
17	O-Ring	747105		1
18	Bit Retaining Ring	604693		1
19	Chuck	605022		1
	Foot Valve			

6" GP600HD - DHD360

Hammer Overview

Hammer Model	**GP600HD**
Part Number	**600449**
Shank	DHD360
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	156 MM
Air consumption (@25bar)	
Hammer flat size	101mm (3.976")
Weight	86 Kg (132.27 lbs)
Outside diameter	144.75mm
Length (shoulder to shoulder)	1035mm (40.7")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**GP600HD**		**Maintenance Kits**	
Shank	**DHD360**			
Part number	**600449**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK68**	
1	Thread Protector	201701		
2	Top Adaptor	604562		
3	O-Ring	768140	1	
4	Shim 4MM	601946		
	Shim 5MM	601947		
	Shim 6MM	601948		
	Shim 7MM	601949		
5	Compression Ring	760096		
6	Choke Plug-Blank	604480	1	
	Choke - 1/8"	604481	1	
	Choke - 3/16"	604482	1	
7	N.R.V.	604444		
5	N.R.V Spring	760079	1	
8	Air Distributor	604514		
10	O-Ring	768043	1	
11	Liner	604930		
12	Square Snap Ring	604929	1	
13	Cylinder	604938		
14	Piston	604942		
15	Snap Ring	783056		
16	Guid Bush	604941	1	
17	O-Ring	747105	1	
15	Bit Retaining Ring	604940		
17	Chuck	604939		
	Foot Valve	601595		

6" MACH 60

AT A GLANCE

SIZE
152mm - 203mm
6 1/8 - 8"

SHANK
DHD360

AIR PRESSURE
100-435 psi
(7-30 bar)

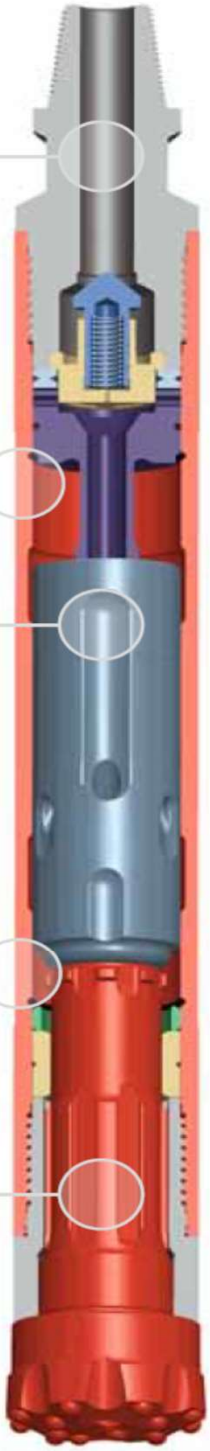
Top-adaptor with integral N.R.V. (Non-Return-Valve) replaceable air distributor.

Reversible cylinder for extended life.

Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimize performance.

Halco Mach 60 shank reduces contact stresses and wear rates.



The Mach 60 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures. The hammer is fitted with a reversible cylinder to prolong service life.

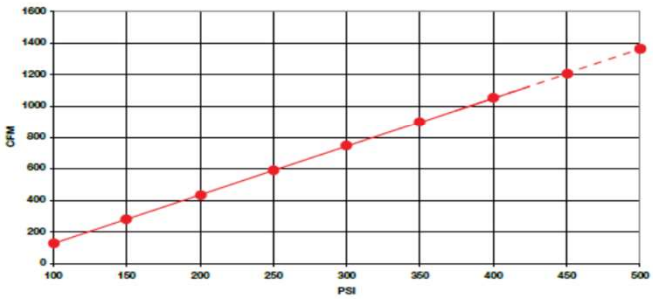
Mach 60 is versatile and reliable, requiring only a few simple tools for servicing and maintenance. Mach 60 is very economical to operate due to its relatively low air consumption and has a unique Mach 60 shank for full bit support. This hammer is most suited for use with the Sim-Cas Overburden system because of the high frequency of the piston/cycle.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 152mm - 216mm (6 - 9 5/8").

Air Consumption

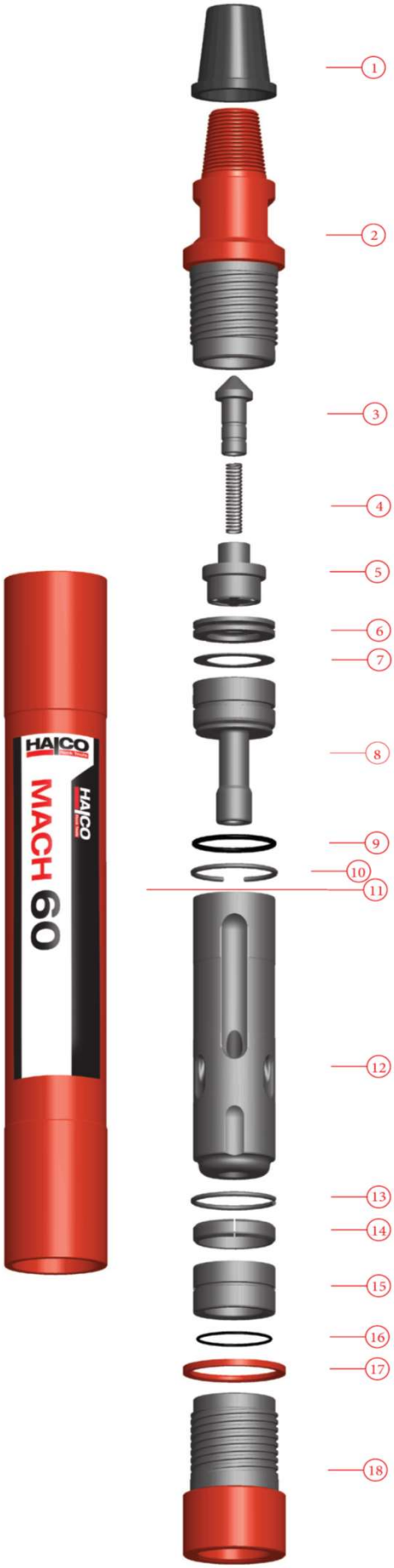
Mach 60 Air Consumption



Available Shanks

Halco Mach 60

6" MACH 60



Hammer Overview

Hammer Model	**MACH 60**
Part Number	**600035**
Shank	Halco 6
Thread connection	3 1/2" API Reg Pin Up
Minimum bit diameter	152 MM
Air consumption (@25bar)	
Hammer flat size	90mm (3.54")
Weight	89 Kg (196.2 lbs)
Outside diameter	138mm (5.43")
Length (shoulder to shoulder)	1095mm (3.54")
Minimum weight on bit	500 Kg (1100 lbs)
Maximum weight on bit	1500 Kg (3300 lbs)

Parts list

Hammer type	**GP600**		**Maintenance Kits**	
Shank	**Halco 6**			
Part number	**600035**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK07**	**RK10**
1	Thread Protector	201701		
2	Top Adaptor	601555		
4	Non Return Valve	601560		1
5	N.R.V. Spring	760079	1	1
6	N.R.V. Housing	601558		
7	Compression Ring	601562	1	1
8	Make up Shim 0.5mm	601590	1	1
	Make up Shim 1.0mm	601797	1	1
	Make up Shim 1.5mm	601798	1	1
8	Air Distributor	601557		
10	O-Ring	768130	1	1
11	Snap Ring	783012	1	
12	Cylinder	601553		
13	Piston	601554		
14	Snap Ring	783012	1	1
15	Bottom Spacer	601571		1
16	Bit Retaining Ring	601573		1
	O-Ring	747105	1	1
17	Chuck Spacer	601563	1	1
18	Chuck	601556		1
	Foot Valve	601570		1

DOMINATOR 800

8"

One piece top-adaptor reduces internal parts.
No make up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within the cylinder,

Halco Mach 80, IR DHD380 and A63-SD8 shank reduces contact stresses and wear rates.

The Dominator 800 is a general purpose hammer suitable for a wide range of air pressures. The Dominator 800 is a low to mid range air volume hammer. The one piece top-adaptor with N.R.V. (Non-Return-Valve) makes it easy to maintain and service the hammer. The Dominator 800 unique's air distributor finger is integral with the top-adaptor and reduces requirements for shimming. The Dominator 800 has no liner which increases the piston blow energy and reduces parts required. This hammer is suitable for use with overburden systems.

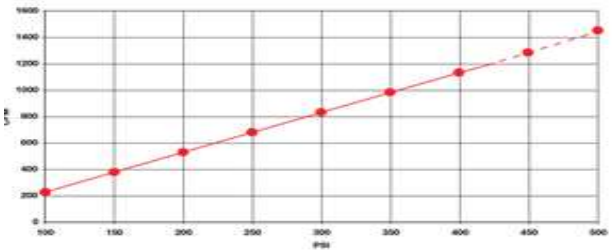
Dominator 800 is available in three different shank types (see below).

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 200 - 311mm (7 7/8 - 14 1/4").

Air Consumption

Dominator 800 Air Consumption



Available Shanks

Halco Mach 80

IR DHD 380

Sandvik Mission A63-15/SD8

8" DOMINATOR 800

Hammer Overview

Hammer Model	**DOM800**
Part Number	**600309**
Shank	DHD380
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	200 MM
Air consumption (@25bar)	
Hammer flat size	156mm (6.142")
Weight	181 Kg (399.03 lbs)
Outside diameter	182mm (7.165")
Length (shoulder to shoulder)	1254mm (49.37")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type	**DOM800**		**Maintenance Kits**	
Shank	**DHD380**			
Part number	**600309**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK25**	**RK64**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		1
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	Spring Cover	603696		1
7	N.R.V. Spring	760108	1	1
8	Top Adaptor	603607		
9	Spacer	603576		
10	O-Ring	768103	1	1
11	O-Ring	768145	1	1
12	Cylinder	603687		
13	Piston	603755		
14	Snap Ring	783015	1	1
15	Spacer	602840		1
16	Contianment Band	603549	1	1
17	Bit Retaining Ring	603043		1
18	Chuck Spacer	603576	1	1
19	Chuck	603495		1
	Foot Valve	601819		1

8" DOMINATOR 800

Hammer Overview

Hammer Model	**DOM800**
Part Number	**600374**
Shank	QL80
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	203 MM
Air consumption (@25bar)	
Hammer flat size	156mm (6.14")
Weight	180 Kg (396.8 lbs)
Outside diameter	182mm (7.165")
Length (shoulder to shoulder)	1180mm (46.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type	**DOM800**		**Maintenance Kits**	
Shank	**QL80**			
Part number	**600374**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK78**	**RK131**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		1
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	N.R.V. Shield	603696		
7	N.R.V. Spring	760108	1	1
8	Top Adaptor	603607		
9	Spacer	603576		
10	O-Ring	768103	1	1
11	O-Ring	768145	1	1
12	Cylinder	604344		
13	Piston	604343		
14	Snap Ring	783015	1	1
15	O-Ring	768151	1	1
16	Guid Bush	604346		1
15	Bit Retaining Ring	604347		1
17	Chuck Spacer	603576	1	1
18	Chuck	604345		1
	Foot Valve	603334		1

Alternative thread connections

Part Number
Thread connection

8" DOMINATOR 800

Hammer Overview

Hammer Model	**DOM800**
Part Number	**600310**
Shank	Halco 8
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	203 MM
Air consumption (@25bar)	
Hammer flat size	156mm (6.14")
Weight	175 Kg (385.8 lbs)
Outside diameter	182mm (7.165")
Length (shoulder to shoulder)	1254mm (49.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type	**DOM800**		**Maintenance Kits**	
Shank	**Halco 8**			
Part number	**600310**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK25**	**RK78**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		1
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	N.R.V. Shield	603696		1
7	N.R.V. Spring	760108	1	1
8	Top Adaptor	603607		
9	Spacer	603576		
10	O-Ring	768103	1	1
11	O-Ring	768145	1	1
12	Cylinder	603687		
13	Piston	603754		
14	Snap Ring	783015	1	
15	Retaining Ring Band	603549		1
16	Bit Retaining Ring	601677		1
17	Chuck Spacer	603576	1	1
18	Chuck	603685		1
	Foot Valve	601675		1

Alternative thread connections

Part Number
Thread connection

8"

DOMINATOR 850

One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Simplified piston geometry for improved balance and location within the cylinder.

Reversible cylinder.

Revised chamber volumes and cycle timing to optimize performance.

IR QL80 shank reduces contact stresses and wear rates.

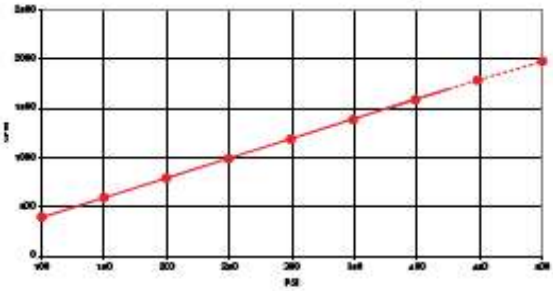
The Dominator 850 has been designed for high performance drilling in hard to medium rock formations, particularly mining applications. Its class leading performance has been achieved with a larger/heavier piston and a valveless air cycle providing a 50% increase in stroke. As well as a reversible cylinder for prolonged hammer life, the Dominator 850 benefits from a QL80 shank design. The one piece top-adaptor with N.R.V. (Non-Return-Valve) makes it easy to maintain and service the hammer. This hammer has few internal parts which makes on site servicing easy with minimum tools needed.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 222 - 270mm (8 3/4 - 10 5/8").

Air Consumption

Dominator 850 Air Consumption



Figures are based on theoretical data

Available Shanks

IR QL 80

8" DOMINATOR 850

Hammer Overview

Hammer Model	**DOM850**
Part Number	**600245**
Shank	QL80
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	203 MM
Air consumption (@25bar)	
Hammer flat size	125mm (6.14")
Weight	180 Kg (396.8 lbs)
Outside diameter	192mm (7.6")
Length (shoulder to shoulder)	1281mm (50.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type	**DOM850**		**Maintenance Kits**	
Shank	**QL80**			
Part number	**600245**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK32**	**RK55**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		
4	O-Ring	768150	1	1
5	Non Return Valve	602285	1	1
6	N.R.V. Cover	603696		1
7	N.R.V. Spring	760108		1
8	Top Adaptor	603353		
9	Spacer	603358		1
10	O-Ring	768169	1	1
11	Cylinder	603347		
12	Piston	603349		
13	Snap Ring	783039	1	1
14	O-Ring	768169	1	1
15	Bit Guide Bush	603360		1
16	Bit Retaining Ring	603359		1
17	Chuck Spacer	603358	1	1
18	Chuck	603357		
	Foot Valve	603334		1

Alternative thread connections

Part Number	
Thread connection	Beco option!!

8" SUPERIOR 880

AT A GLANCE

SIZE
200 mm - 311mm
7 7/8 - 12 1/4"

SHANK
DHD380
QL80

AIR PRESSURE
100-507 psi
(7-35 bar)

One piece top adaptor reduces internal parts as no make up is required. External N.R.V. (Non Return Valve) for easy maintenance.

Reversible cylinder.

Simplified piston geometry for improved balance and location within cylinder.

Revised chamber volumes and cycle timing to optimize performance.

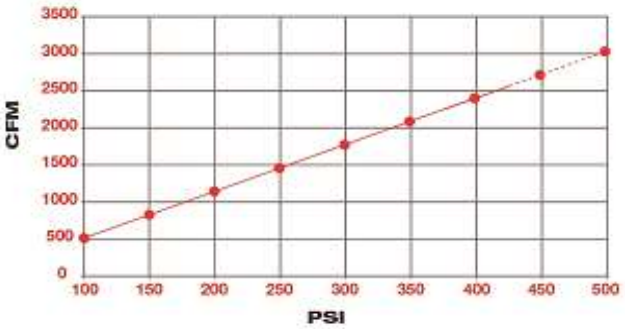
Optional bit catcher design to eliminate fishing operations in the event of a shank failure

DOMINATOR 880 DW

The Dominator 880 Deep Well hammer has been specifically designed for drilling deep holes under a head of water.

The wide body diameter of the Dominator 800 DW allows for an increased piston weight and improved performance.

Air Consumption



Figures are based on theoretical data

8" SUPERIOR 880 (standard chuck)

Hammer Overview

Hammer Model	**SUPERIOR 880**
Part Number	**600261**
Shank	DHD 380
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	203 MM
Hammer flat size	156 mm (6.142")
Weight	177 KG (390.21 lbs)
Outside diameter	182 mm (7.165")
Length (shoulder to shoulder)	1263 mm (49.724")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type	**SUPERIOR 880**		**Maintenance Kits**	
Shank	**DHD 380**			
Part number	**600261**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK25**	**RK64**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	N.R.V. Cover	603696		1
7	N.R.V. Spring	760108		1
8	Top Adaptor	603498		
9	Spacer	603576		1
10	O-Ring	768103	1	1
11	O-Ring	768145	1	1
12	Cylinder	603496		
13	Piston	602743		
14	Snap Ring	783015	1	1
15	Spacer	602840	1	1
16	Containment Band	603549		1
17	Bit Retaining Ring	603043		1
18	Chuck Spacer	603576		1
19	Chuck	603495		1
	Foot Valve	603334		1

Alternative thread connections

Part Number
Thread connection

8" DOMINATOR 880

Hammer Overview

Hammer Model	**Dominator 880**
Part Number	**600312**
Shank	DHD 380
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	203 MM
Hammer flat size	156 mm (6.142")
Weight	177 KG (390.21 lbs)
Outside diameter	182 mm (7.165")
Length (shoulder to shoulder)	1263 mm (49.724")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

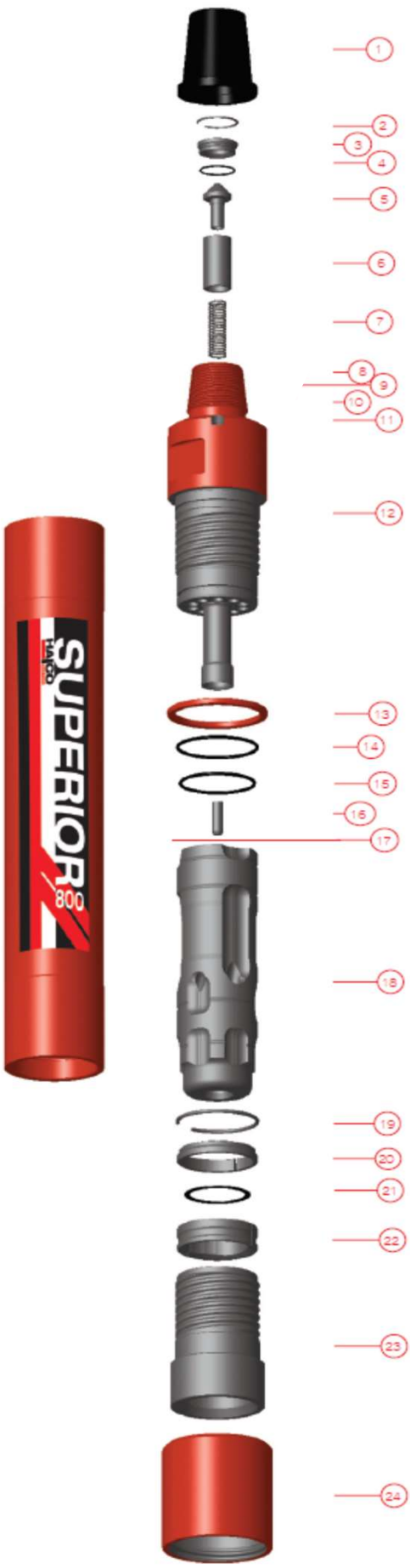
Parts list

Hammer type	**Dominator 880**		**Maintenance Kits**	
Shank	**DHD 380**			
Part number	**600312**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK25**	**RK64**
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	N.R.V. Cover	603696		1
7	N.R.V. Spring	760108		1
8	Top Adaptor	603609		
9	Spacer	603576		1
10	O-Ring	768103	1	1
11	O-Ring	768145	1	1
12	Cylinder	603691		
13	Piston	602654		
14	Snap Ring	783015	1	1
15	Spacer	602840	1	1
16	Containment Band	603549		1
17	Bit Retaining Ring	603043		1
18	Chuck Spacer	603576		1
19	Chuck	603495		1
	Foot Valve	603334		1

Alternative thread connections

Part Number
Thread connection

8" SUPERIOR 880 - Threaded Catcher



Hammer Overview

Hammer Model	
Part Number	
Shank	QL80
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	125mm (6.14")??????
Weight	180 Kg (396.8 lbs)
Outside diameter	192mm (7.6")
Length (shoulder to shoulder)	1281mm (50.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

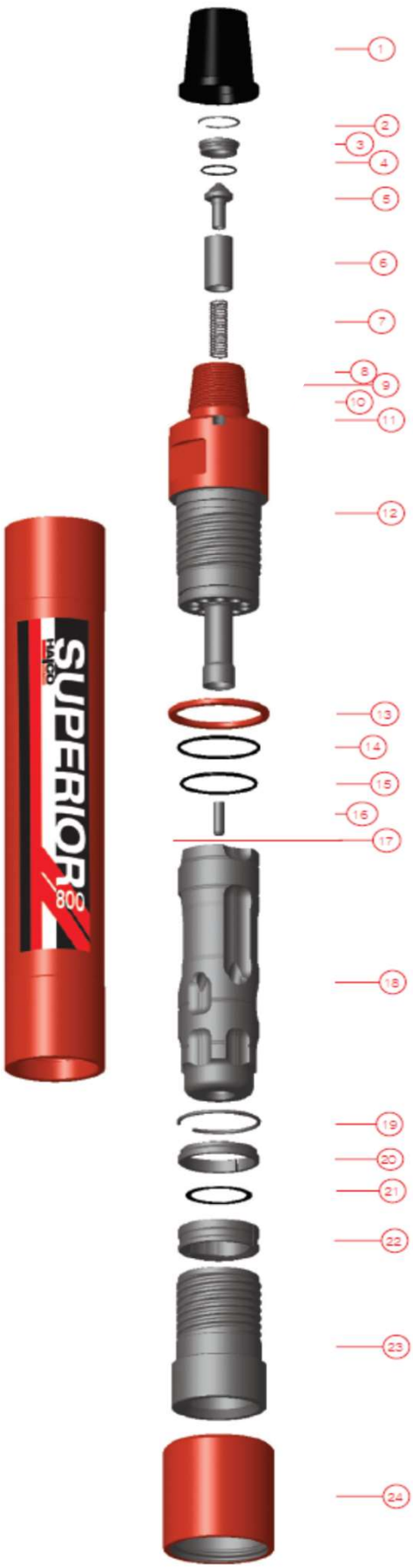
Parts list

Hammer type		**0**	Maintenance Kits	
Shank	**QL80**			
Part number	**0**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**		
1	Thread Protector			
2	Snap Ring			
3	N.R.V. Seat			
4	O-Ring			
5	Non Return Valve			
6	N.R.V. Spring			
	N.R.V. Cover			
8	Top Adaptor			
	Spacer			
9	O-Ring			
10	Cylinder			
11	Piston			
12	Snap Ring			
13	O-Ring			
	Bit Guide Bush			
15	Bit Retaining Ring			
17	Chuck Spacer			
18	Chuck			
	Foot Valve			

Alternative thread connections

Part Number	
Thread connection	

8" SUPERIOR 880 - Split Catcher



Hammer Overview

Hammer Model	
Part Number	
Shank	QL80
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	125mm (6.14")??????
Weight	180 Kg (396.8 lbs)
Outside diameter	192mm (7.6")
Length (shoulder to shoulder)	1281mm (50.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

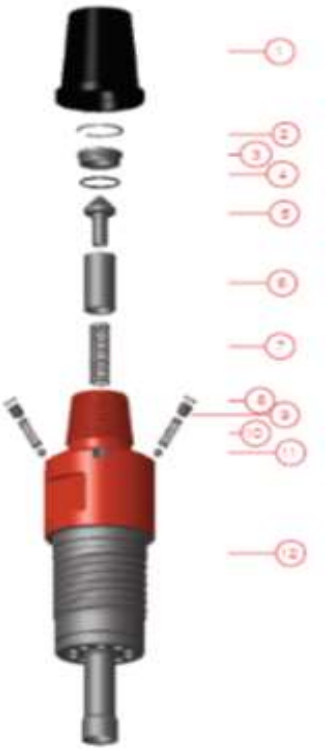
Parts list

Hammer type		**0**	Maintenance Kits	
Shank	**QL80**			
Part number	**0**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**		
1	Thread Protector			
2	Snap Ring			
3	N.R.V. Seat			
4	O-Ring			
5	Non Return Valve			
6	N.R.V. Spring			
	N.R.V. Cover			
8	Top Adaptor			
	Spacer			
9	O-Ring			
10	Cylinder			
11	Piston			
12	Snap Ring			
13	O-Ring			
	Bit Guide Bush			
15	Bit Retaining Ring			
17	Chuck Spacer			
18	Chuck			
	Foot Valve			

Alternative thread connections

Part Number	
Thread connection	

8" SUPERIOR 880 - Jetted Back Head



Hammer Overview

Hammer Model	
Part Number	
Shank	QL80
Thread connection	4 1/2" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	125mm (6.14")
Weight	180 Kg (396.8 lbs)
Outside diameter	192mm (7.6")
Length (shoulder to shoulder)	1281mm (50.4")
Minimum weight on bit	800 Kg (1760 lbs)
Maximum weight on bit	2000 Kg (4400 lbs)

Parts list

Hammer type		**0**	**Maintenance Kits**	
Shank	**QL80**			
Part number	**0**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**		
1	Thread Protector			
2	Snap Ring			
3	O-Ring			
4	N.R.V. Seat			
5	Non Return Valve			
6	N.R.V. Spring			
7	Top Adaptor			
2	Snap Ring			
	M24 Threaded Plug - Blank (4)			
	M24 Threaded Plug - 5mm (4)			
	M24 Threaded Plug - 8mm (4)			
	M24 Threaded Plug - 11mm (4)			
	Spring (4)			
	Ball Bearing (4)			

Alternative thread connections

Part Number	
Thread connection	

10" DOMINATOR 1000

AT A GLANCE

SIZE
254mm - 381mm
10 - 15"

SHANK
SD 10

AIR PRESSURE
100-435 psi
(7-30 bar)

One piece top adaptor reduces internal parts as no make up is required. External N.R.V. (Non Return Valve) for easy maintenance.

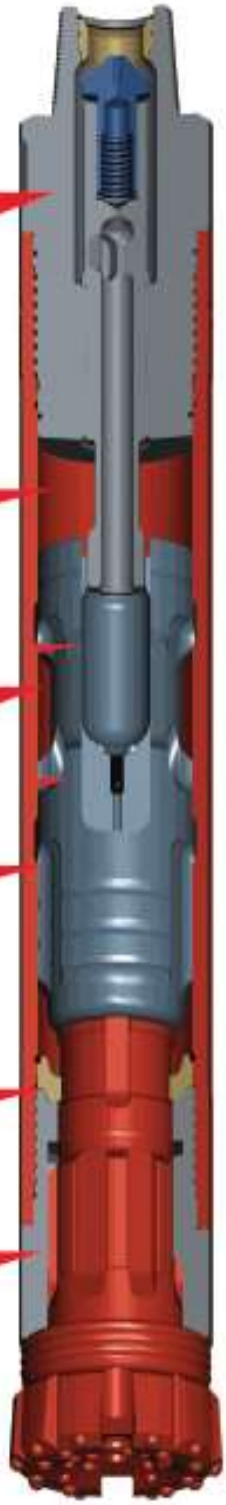
Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

Live air bleed piston to adjust volume.

Reversible cylinder.

The SD10 shank reduces contact stress and wear rates.



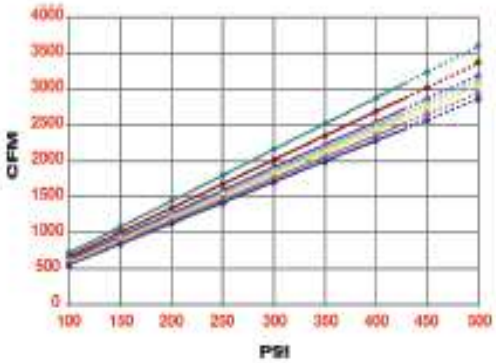
DOMINATOR 1000

The Dominator 1000 incorporates a unique piston design for high performance and reliability especially in Waterwell applications.

This hammer is suitable for a wide range of air pressures. Though its optimum performance is reached at air pressures of 200psi (14 bar) and above. It has been designed with the heaviest piston in its class, (weighing in at 87.6 kg) to provide excellence performance. To assist with maintenance, it has a captive bit ring and a reversible cylinder thus prolonging its life and ultimately reducing costs.

It is compatible with the Halco Bit Catcher System.

Air Consumption



Figures are based on theoretical data

10" DOMINATOR 1000

Hammer Overview

Hammer Model	**DOM1000**
Part Number	**600248**
Shank	SD10
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	254 MM
Air consumption (@25bar)	
Hammer flat size	200mm (7.875")
Weight	367 Kg (809 lbs)
Outside diameter	230mm (9.06")
Length (shoulder to shoulder)	1390mm (54.7")
Minimum weight on bit	1500 Kg (3400 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**DOM1000**		**Maintenance Kits**	
Shank	**SD10**			
Part number	**600248**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK29**	**RK50**
1	Thread Protector	200112		
2	Cirlcip	777001	1	1
3	N.R.V. Seat	602286		1
4	O-Ring	768133	1	1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor	603429		
8	Spacer	603432		
9	Cylinder	603434		
10 & 11	O-Ring	768172	2	1
	Bleed Plug - Blank	602499		
	Bleed Plug - 3mm	602500		
	Bleed Plug - 4mm	602501		
	Bleed Plug - 5mm	602502		
	Bleed Plug - 6mm	602503		
	Bleed Plug - 8mm	602874		
11	Piston	603433		
12	Snap Ring	783040	1	1
15	Bit Retaining Ring	603435		1
17	Chuck Spacer	603432	1	1
18	Chuck	603436		1
	Foot Valve	603186		1

Alternative thread connections

Part Number
Thread connection

AT A GLANCE

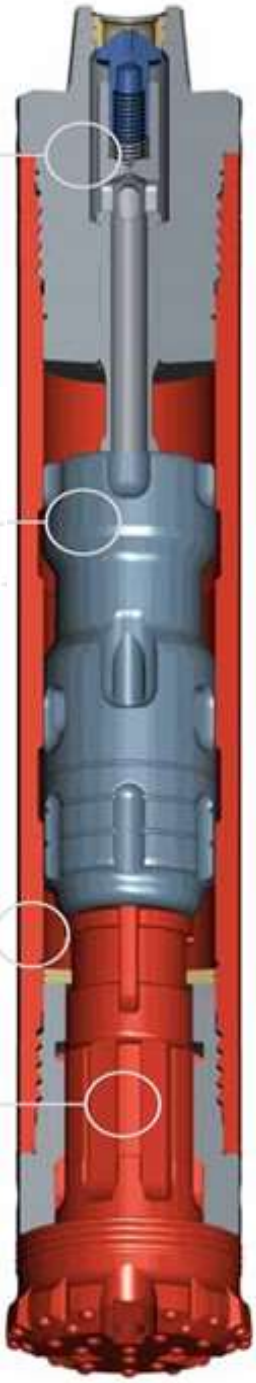
SIZE
311mm - 445mm
12 1/4 - 17 1/2"

SHANK
SD 12

AIR PRESSURE
100-435 PSI
(7-30 bar)

12"

MACH 122



One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimize performance.

A100-15/SD12 shank reduces contact stresses and wear rates.

The Mach 122 accepts A100-15 (SD12) shank bits and works over a wide pressure range with an optimum performance reached at air pressures of 200 psi (14 bar) and above as its higher air consumption provides increased uphole velocity, particularly when using oversized diameter drill bits.

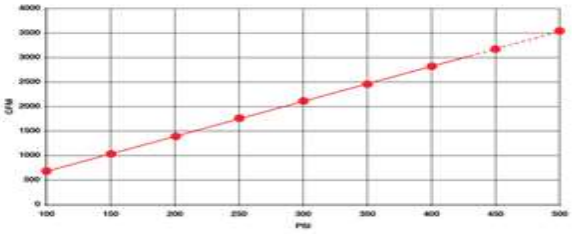
Mach 122 has a one piece top-adaptor with N.R.V. (Non-Return-Valve) fitted for easy inspection and service, with integral finger to reduce maintenance and eliminate shimming which increases service intervals. Mach 122 has no liner which increases the 140 kg piston blow energy and reduces parts required. This hammer is suitable for use with overburden systems.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 300 - 445mm (11 7/8 - 17 1/2").

Air Consumption

Mach 122 Air Consumption



Available Shanks

Sandvik Mission A100-15/SD12

12" Mach 120

Hammer Overview

Hammer Model	**Mach 120**
Part Number	**600108**
Shank	SD12
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	300 MM
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	614 Kg (1,353 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1667mm (65.6")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Mach 120**		**Maintenance Kits**	
Shank	**SD12**			
Part number	**600108**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK12**	**RK19**
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor	602639		
8 & 9	O-Ring	768137	2	2
10	Spacer	602366		
11	Cylinder	602013		
12	Piston	602047		
13	Snap Ring	783021	1	1
14	O-Ring	768105	1	1
15	Bit Retaining Ring	602102		1
16	Chuck Spacer	602366	1	1
17	Chuck	602052		1
	Foot Valve	601811		1

Alternative thread connections

Part Number
Thread connection

12" Mach 122

Hammer Overview

Hammer Model	**Mach 122**
Part Number	**600108**
Shank	SD12
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	300 MM
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	614 Kg (1,353 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1667mm (65.6")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Mach 122**		**Maintenance Kits**	
Shank	**SD12**			
Part number	**600108**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK12**	**RK19**
1	Thread Protector	200112		
2	Cirlcip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor	602639		
8 & 9	O-Ring	768137	2	1
9	Spacer	602366		
10	Cylinder	602013		
11	Piston	602047		
12	Snap Ring	783021	1	1
13	O-Ring	768105	1	1
14	Bit Retaining Ring	602102		1
15	Chuck Spacer	602366	1	1
16	Chuck	602052		1
	Foot Valve	601811		1

AT A GLANCE

SIZE
381mm - 489mm
15 - 19 1/4"

SHANK
DHD 112

AIR PRESSURE
100-435 PSI
(7-30 bar)

12"

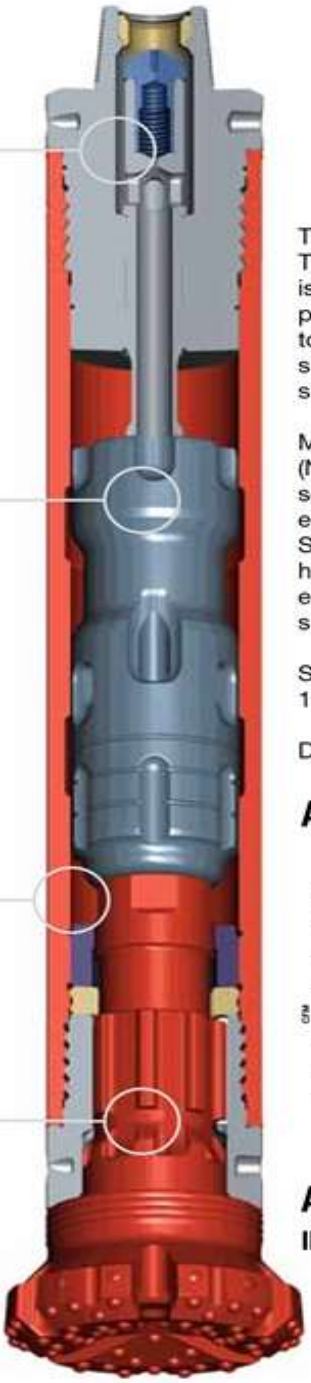
MACH 132

One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimize performance.

IR DHD 112 shank with drive pins reduces contact stresses and wear rates.



The Mach 132 hammer accepts IR DHD112 shank bits. This hammer, although capable of high pressure drilling is particularly suitable at pressures between 100-200 psi (7 - 14 bar). The Mach 132 has a pin drive system to prevent metal to metal contact thereby minimizing spline wear and damage which can result in drill bit shank failure.

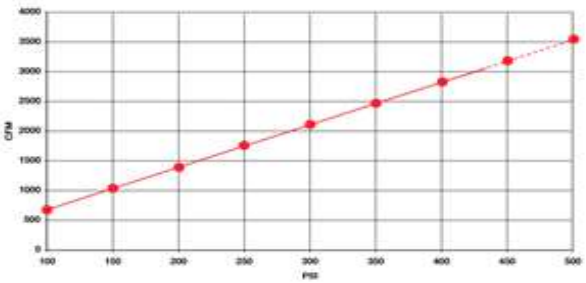
Mach 132 has a one piece top-adaptor with N.R.V. (Non-Return-Valve) fitted for easy inspection and service, with integral finger to reduce maintenance and eliminate shimming which increases service intervals. Servicing requires only a few simple tools. Mach 132 has no liner which increases the 140 kg piston blow energy and reduces parts required. This hammer is suitable for use with overburden systems.

Suitable for operation at air pressures of 100 - 435 psi (7 - 30 bar).

Drilling diameters of 381 - 489 mm (15 - 19 1/4").

Air Consumption

Mach 132 Air Consumption



Available Shanks

IR DHD 112

12" Mach 132

Hammer Overview

Hammer Model	**Mach 132**
Part Number	**600142**
Shank	DHD112 Pin Drive
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	615 Kg (1,356 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1684mm (66.3")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Mach 132**		**Maintenance Kits**	
Shank	**DHD112 Pin Drive**			
Part number	**600142**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK14**	**RK23**
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor	602639		
8 & 9	O-Ring	768137	2	2
	Bleed Plug - Blank	602499		
	Bleed Plug - 3mm	602500		
	Bleed Plug - 4mm	602501		
	Bleed Plug - 5mm	602502		
	Bleed Plug - 6mm	602503		
	Bleed Plug - 8mm	602874		
10	Spacer	602366		1
11	Cylinder	602563		
12	Piston	604503		
13	Snap Ring	783021	1	1
14	Bit Guide Bush	602531		1
15	O-Ring	768184	1	1
16	Viton Band Containmen	603819	1	1
17	Bit Retaining Ring	602530		1
18	Chuck Spacer	602366	1	
19	Drive Pin Set (8)	600564	1	1
20	Chuck	602528		1
	Foot Valve	602522		1

12" SUPERIOR 1200

AT A GLANCE

SIZE
381 - 660mm
(15" - 19 1/4")

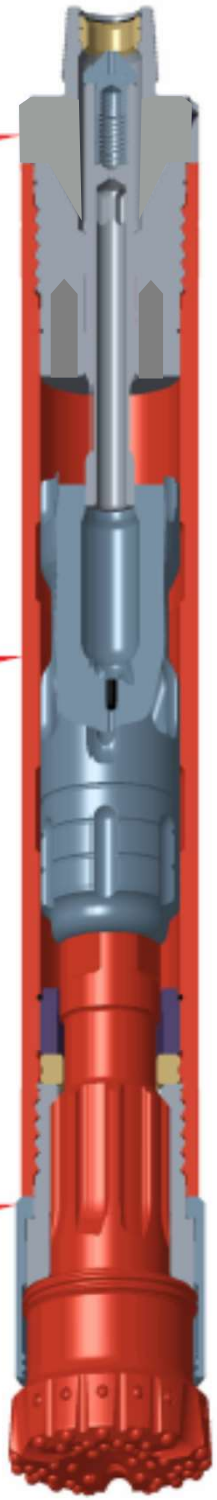
SHANK
DHD 112

AIR PRESSURE
100 - 435psi
(7 - 30 bar)

Variable bypass porting has been added to the top adaptor

A variable live air bleed to allow greater additives to increase up-hole velocity.

The Bit Catcher System has a specially designed chuck and drill bit arrangement.



SUPERIOR 1200

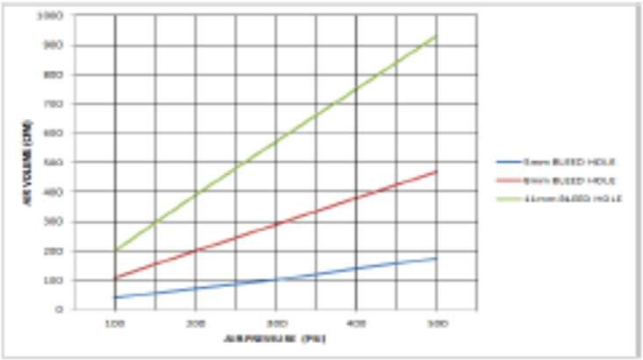
The Superior 1200 incorporates a unique piston design for high performance and reliability especially in Oil & Gas applications.

This hammer is suitable for a wide range of air pressures. Its optimum performance is reached at air pressures of 200psi (14 bar) and above.

Standard design features include a jetted back head, a variable air bleed piston and a bit catcher system to ensure your bits are not lost down the hole and diamond enhanced inserts.

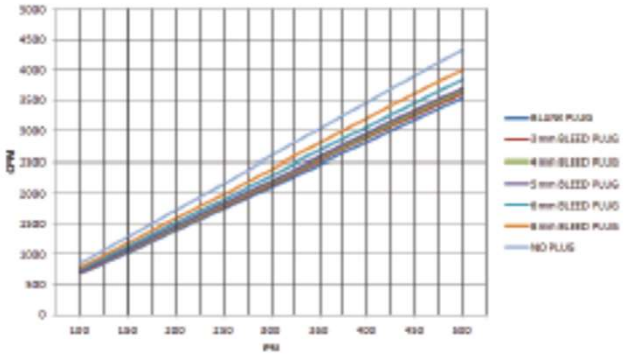
Air Consumption

Bypass Top Adaptor



Note: The air volumes quoted above are based upon one bleed plug.

Hammer



Figures are based on theoretical data.

12" SUPERIOR 1200 - Threaded Catcher

Hammer Overview

Hammer Model	**Superior 1200 - Thrd ctch**
Part Number	**600435**
Shank	DHD112 Pin Drive
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	615 Kg (1,356 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1684mm (66.3")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Superior 1200 - Thrd ctch**		**Maintenance Kits**	
Shank	**DHD112 Pin Drive**			
Part number	**600435**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK93**	**RK150**
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
11	Top Adaptor	605000		
12&13	O-Ring	768137	2	2
16	Bleed Plug - Blank	602499		
	Bleed Plug - 3mm	602500		
	Bleed Plug - 4mm	602501		
	Bleed Plug - 5mm	602502		
	Bleed Plug - 6mm	602503		
	Bleed Plug - 8mm	602874		
14	Spacer	602366		1
15	Cylinder	604875		
17	Piston	604503		
18	Snap Ring	783021	1	1
19	Bit Guide Bush	602531		1
20	O-Ring	768184	1	1
	Viton Band Containmen	603819	1	1
21	Bit Retaining Ring	602530		1
22	Drive Pin Set (8)	600564	1	1
23	Bit Catcher Chuck	604727		1
24	Threaded Catcher			
	Foot Valve	602522		

12" SUPERIOR 1200 - Split Catcher

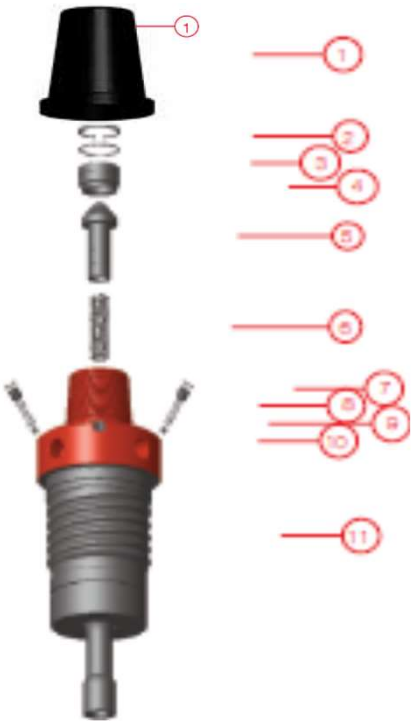
Hammer Overview

Hammer Model	**Mach 132**
Part Number	**TBA**
Shank	DHD112 Pin Drive
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	615 Kg (1,356 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1684mm (66.3")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Mach 132**		**Maintenance Kits**	
Shank	**DHD112 Pin Drive**			
Part number	**TBA**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**	**SK93**	**RK150**
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
11	Top Adaptor	605000		
12&13	O-Ring	768137	2	2
16	Bleed Plug - Blank	602499		
	Bleed Plug - 3mm	602500		
	Bleed Plug - 4mm	602501		
	Bleed Plug - 5mm	602502		
	Bleed Plug - 6mm	602503		
	Bleed Plug - 8mm	602874		
14	Spacer	602366		1
15	Cylinder	604875		
17	Piston	604503		
18	Snap Ring	783021	1	1
19	Bit Guide Bush	602531		1
20	O-Ring	768184	1	1
	Viton Band Containmen	603819	1	1
21	Bit Retaining Ring	602530		1
22	Drive Pin Set (8)	600564	1	1
23	Bit Catcher Chuck	604727		1
24	Split Catcher			
	Foot Valve	602522		

12" SUPERIOR 1200 - Jetted Backhead



Hammer Overview

Hammer Model	**Mach 132**
Part Number	**TBA**
Shank	DHD112 Pin Drive
Thread connection	6 5/8" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	615 Kg (1,356 lbs)
Outside diameter	273mm (10.75")
Length (shoulder to shoulder)	1684mm (66.3")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Mach 132**	
Shank	**DHD112 Pin Drive**	
Part number	**TBA**	
Item	**Description**	**Part No.**
1	Thread Protector	200112
2	Snap Ring	777001
3	O-Ring	768133
4	N.R.V. Seat	602286
5	Non Return Valve	602288
6	N.R.V. Spring	760055
7	Top Adaptor	604821
2	Snap Ring	777012
	M24 Threaded Plug - Blank (4)	602499
	M24 Threaded Plug - 5mm (4)	602500
	M24 Threaded Plug - 8mm (4)	602501
	M24 Threaded Plug - 11mm (4)	602502
	Spring (4)	602503
	Ball Bearing (4)	602874

18" SUPERIOR 1800

AT A GLANCE

SIZE
457 - 660mm
18" - 26"

SHANK
NUMA180
SD-18
QL200

AIR PRESSURE
100 - 435 psi
(7 - 30 bar)

Variable bypass porting has been added to the top adaptor

A variable live air bleed to allow greater additives to increase up-hole velocity.

A Halco Bit Catcher System is available upon request which has a specially designed chuck and drill bit arrangement.

SUPERIOR 1800

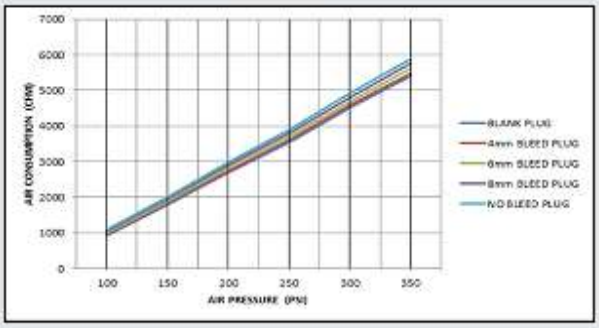
The Superior 1800 has been designed for high performance drilling in medium to hard rock conditions.

Design features include a jetted back head and a variable air bleed piston to enable greater up hole velocity.

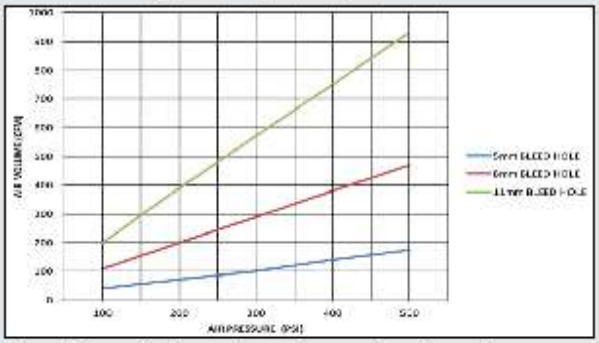
The Superior 1800 has a drive pin arrangement to prevent metal to metal contact, thereby minimising spline wear and damage, which can result in drill bit shank failure.

Air Consumption

Hammer



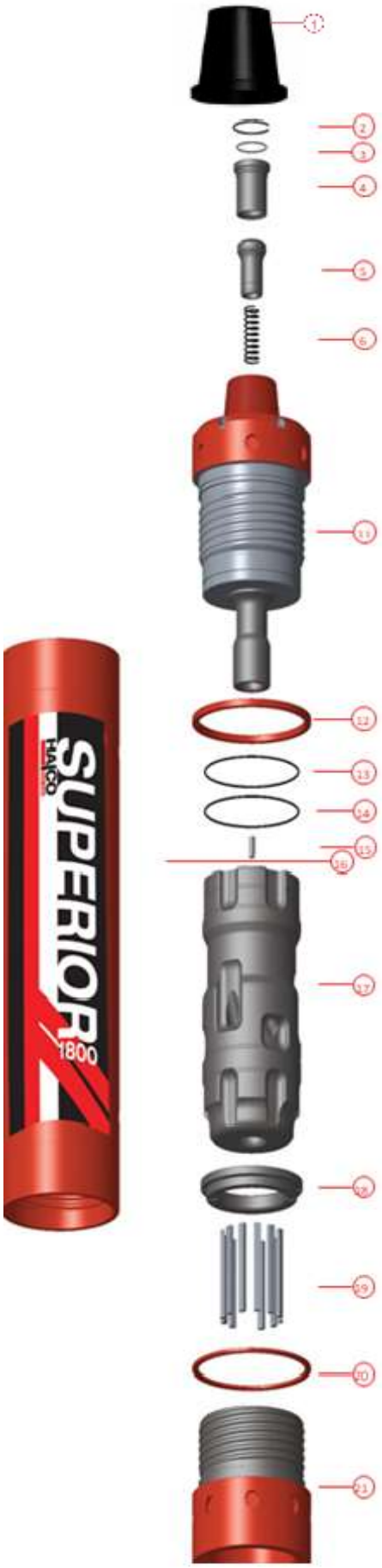
Bypass Top Adaptor



Note: The graph above shows the extra air volume that can be passed through the bypass top adaptor. The figures quoted are for one bleed plug only.

Figures are based on theoretical data.

18" SUPERIOR 1800 - Hammer



Hammer Overview

Hammer Model	**Superior 1800 - Thrd ctch**
Part Number	**600263**
Shank	NUMA 180
Thread connection	8 5/8" API Reg Pin
Minimum bit diameter	
Air consumption (@25bar)	
Hammer flat size	C Ring type
Weight	1600 Kg
Outside diameter	410mm (16.14")
Length (shoulder to shoulder)	1930mm (75.98")
Minimum weight on bit	1600 Kg (3520 lbs)
Maximum weight on bit	3500 Kg (7700 lbs)

Parts list

Hammer type	**Superior 1800 - Thrd ctch**		**Maintenance Kits**	
Shank	**NUMA 180**			
Part number	**600263**		**Service Kit**	**Repair Kit**
Item	**Description**	**Part No.**		
1	Thread Protector			
2	Snap Ring			1
3	O-Ring		1	1
4	N.R.V. Seat			1
5	Non Return Valve			1
6	N.R.V. Spring			1
7	Circlip			2
8	Bleed Plug - Blank			1
	Bleed Plug - 3mm			1
	Bleed Plug - 4mm			1
	Bleed Plug - 5mm			1
	Bleed Plug - 6mm			1
9	Compression Spring			1
10	Ball Bearing 9/16"			2
11	Top Adaptor			
12 &13	O-Ring		2	2
14	Spacer			
15	Cylinder			
16	Bleed Plug			
17	Piston			1
18	Snap Ring		1	1
19	Bit Guide Bush			
20	O-Ring		1	1
21	Bit Retaining Ring			1
22	Drive Pin			1
23	Catcher Chuck			1
24	Threaded catcher			
	Foot Valve			
	Drive Pin Set (8)			

What are 'Down-the-Hole' (DTH) Drill Bits and how are they used?

Down-the hole drill bits are used with down-the-hole hammers for drilling holes through a wide range of rock types.

In conjunction with our DTH hammers, our drill bits are designed with a splined drive for rotating the bit in the ground. Drill bits are available in a range of different sizes and configurations so they can drill a wide range of holes sizes, in different ground conditions.

How have DTH Drill Bits developed?

Rapid advances in drill bit technology have occurred throughout the last 40 years. The first type of drill bits used with down-the-hole hammers were 'cross bit' design. Four chisel shaped lengths of tungsten carbide were brazed creating stresses within the drill bit thereby limiting its life. A further disadvantage of the cross bit design was that the majority of the carbide was situated around the centre of the bit face and not towards the outer edge of the drill bit where there is the most rock to cut.

In the late 1960s however, the button bit was introduced; this was a landmark in the progress of DTH equipment, which led to bit lives previously unheard of.

Cylindrical button inserts were precision ground to extremely close tolerances and pressed into the bit as an interference fit. This resulted in improved carbide insert retention by eliminating brazing stresses and other defects associated with brazing and braze materials.

Buttons inserts are distributed more efficiently than cross bit inserts by providing more cutting power where it is needed at the outer edge of the drill bit face.

In many cases, the need to sharpen the drill bit was eliminated with the arrival of the button bit and the improved cutting action provided While the cross bit design is still used in some rotary and drifted applications where the rock is very soft, the button bit is now used in virtually every DTH application.

Applications for Overburden Systems

Soft soil is normally drilled with augers or by the rotary method but DTH hammers have been adapted to handle soft conditions by being able to drill and case a hole simultaneously by using a concentric bit, which can be withdrawn on completion of the bore hole; leaving the casing in situ, thus preventing hole collapse.

"We guarantee to have a drill bit that can tackle any challenge."

Drill Bit Selection Guide

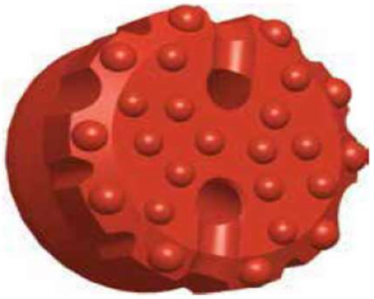
As with all Halco hammers it is crucial that you choose the right drill bit otherwise it will cost you both in time and money.We pride ourselves on having a comprehensive range of drill bits on offer so you can be sure that you will definitely find a suitable bit for any project you are undertaking.

Our carburised drill bit are among the best in the world providing outstanding performance and durability.

We produce all our drill bits at our specialised plant where they are made out of high quality nickel chrome alloy steel, carburised and heat-treated to offer extra protection against wear and fatigue. Every hole in the bit head is machined to within microns and fitted with carbide inserts which provide the cutting action of the rock.

We have three different bit heads on offer, Flat Face, Concave and Convex, which are availlable with three different inserts. We guarantee that we have a drill bit that can tackle any challenge and rock face formation. The two most important factors in choosing the right drill bit are productivity and reliability.

For soft to medium rock formations where penetration rates are high, the ballistic and semi-ballistic inserts coupled with flat face or concave bit heads are more suitable.

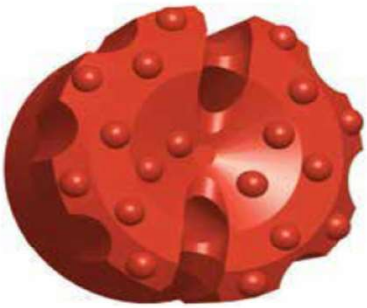


Flat Face

Alternative design for all rock conditions especially fractured and fissured rock and changing formations.

Ballistic Inserts

Suitable for soft and medium compact low abrasive rocks producing large cuttings.

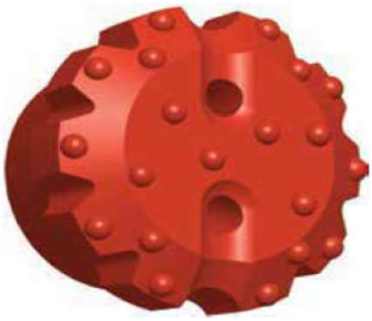


Concave

Alternative design for all rock conditions particularly deep hole drilling can improve hole alignment as a result of inverted pilot.

Domed Inserts

Strong rugged shape for high performance and good service life in all conditions particularly suitable for very hard abrasive rocks and deep hole drilling.



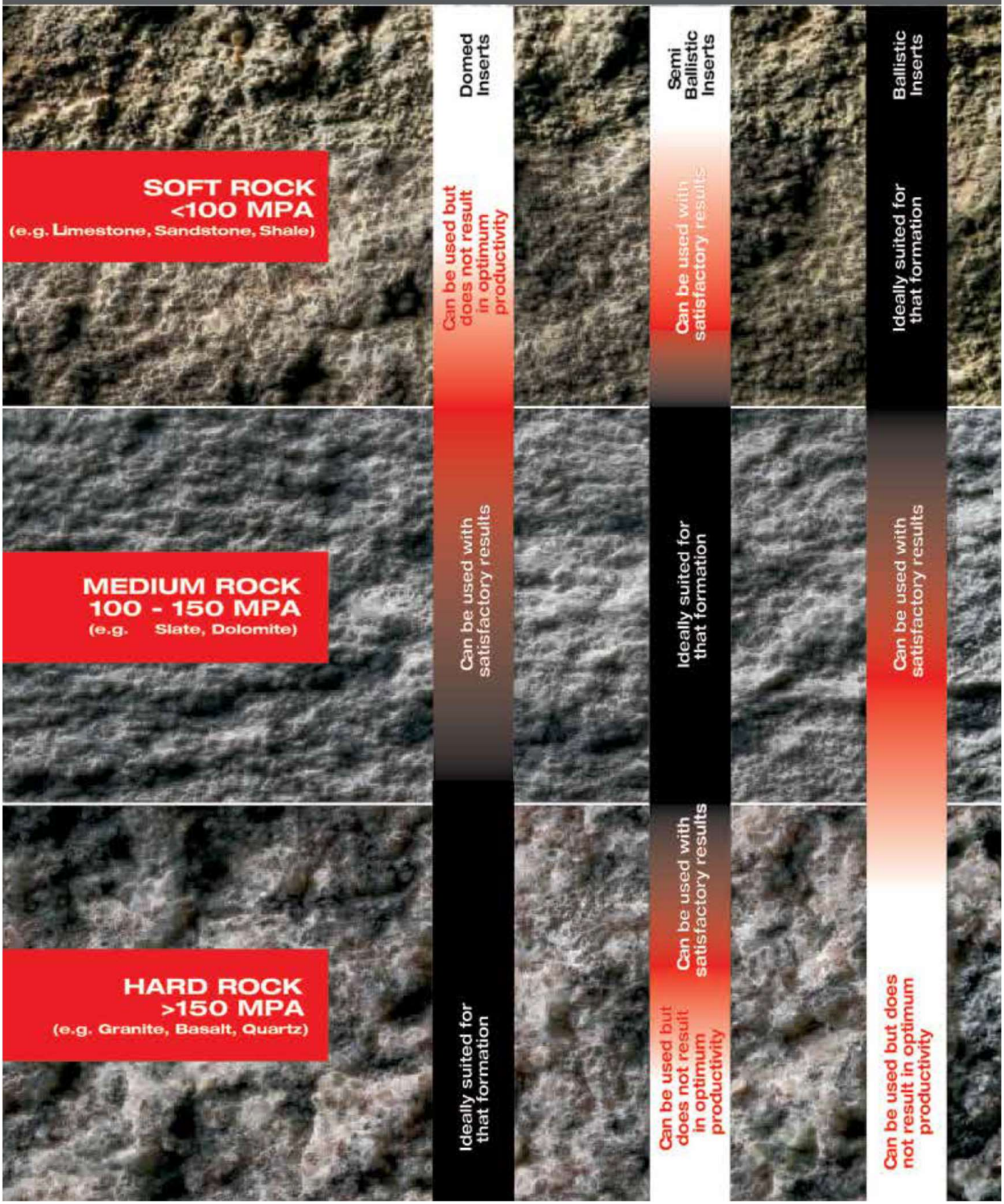
Convex

Strong design for all conditions especially hard abrasive rock. Good balance of fast drilling and long service life.

Semi-Ballistic In-

Suitable for all soft and medium rock conditions including fractured and fissured rock.

DRILL BIT INSERT GUIDE



SHANK GUIDE

DOMINATOR 100
DOM 10

MACH 20
DOM 20

MACH 303

MD 3.5

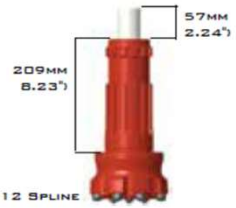
DHD 3.5
I.R. 3.5
DOM 30

SD 450

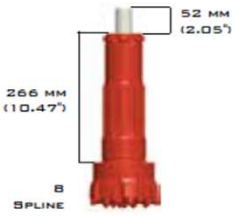
MACH 44
HALCO 4

DHD 340A
Cop 44
DHD 4

TD40
COP 44 G
QLX 40



MACH 50
HALCO 5



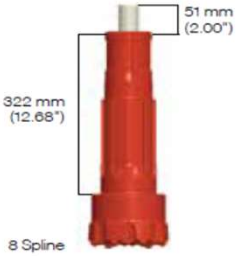
SD 5

DHD 350R
Cop 54
DHD 5

QL 50
TD 50
Cop 54GE

MACH 60
HALCO 6

SD 6

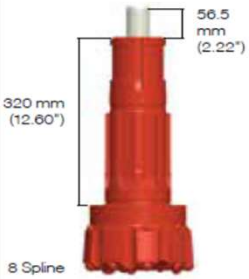


DHD 360
DHD 6
Cop 64

QL 60
TD60/65/70
Cop 64G

Mach 80
HALCO 8

SD 8



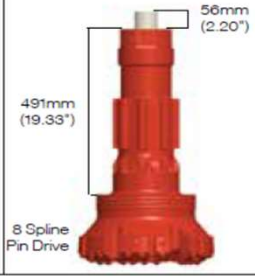
DHD 380
Cop 84
DHD 8

QL 80
TD 80

TD 90

SD 10

DHD 112



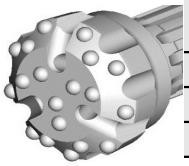
DHD 112S

SD 12

QL 120

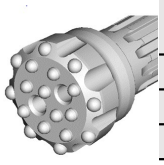
4" TD40/QLX40 Bits

Convex



Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653687	111	4 1/4	Convex	Parabolic	2	14mm (8)	13mm (6)	EY	Carburised	UK
	115	4 1/2	Convex	Ballistic	x	xxmm (x)	xxmm (x)	EY	Carburised	UK
	121	4 3/4	Convex	Ballistic	x	xxmm (x)	xxmm (x)	EY	Carburised	UK

Flat Face



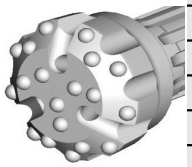
Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653624	115	4 1/2	Flat Face	Domed	2	16mm (8)	13mm (6)	EY	Carburised	UK
653647	116	4 1/2	Flat Face	Parabolic	2	16mm (8)	13mm (6)	EY	Carburised	UK
653664	127	5	Flat Face	Domed	2	16mm (8)	13mm (8)	EY	Carburised	UK

Concave

Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location

4" DHD340 Bits

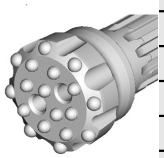
Convex



Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650950	108	4 1/4	Convex	Domed	2	13mm (12)	13mm (3)	EY	Carburised	UK
650949	115	4 1/2	Convex	Domed	2	13mm (12)	13mm (3)	EY	Carburised	UK
650013	127	5.00	Convex	Domed	2	13mm (12)	13mm (4)	EY	Carburised	UK
653682*	150	5 7/8	Convex	Domed	2	13mm (12)	13mm (5)	EY	Carburised	UK
650968	108	4 1/4	Convex	Parabolic	2	13mm (12)	13mm (3)	EY	Carburised	UK
653091	110	4 5/16	Convex	Parabolic	2	14mm (8)	14mm (6)	EY	Carburised	UK
650526	115	4 1/2	Convex	Parabolic	2	13mm (12)	13mm (4)	EY	Carburised	UK
650967	115	4 1/2	Convex	Parabolic	2	13mm (12)	13mm (4)	EY	Carburised	UK
653482	127	5	Convex	Ballistic	3	13mm (15)	13mm (5)	EY	Carburised	UK
653683*	150	5 7/8	Convex	Ballistic	3	13mm (12)	13mm (5)	EY	Carburised	UK

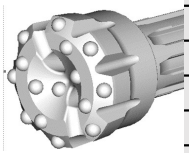
Note * Oversize sold without warranty

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653278	110	4 1/3	Flat Face	Domed	2	13mm (8)	14mm (8)	EY	Carburised	UK
650955	115	4 1/2	Flat Face	Domed	2	14mm (8)	13mm (10)	EY	Carburised	UK
653623	115	4 1/2	Flat Face	Domed	2	16mm (8)	13mm (6)	EY	Carburised	UK
653649	127	5	Flat Face	Domed	2	16mm (8)	13mm (8)	EY	Carburised	UK
650965	130	5 1/8	Flat Face	Domed	2	14mm (8)	14mm (10)	EY	Carburised	UK
653583	116	4 1/2	Flat Face	Parabolic	2	16mm (8)	13mm (6)	EY	Carburised	UK

Concave

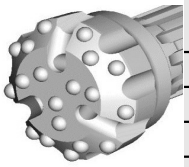


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650011	105	4 1/4	Concave	Domed	3	13mm (8)	11mm (3)	EY	Carburised	UK
650625	115	4 1/2	Concave	Domed	2	14mm (8)	3mm (6) DW	EY	Carburised	UK
650680	120	4 3/4	Concave	Domed	2	13mm (8)	3mm (6) DW	EY	Carburised	UK
	127	5	Concave					EY	Carburised	UK
650614	130	5 1/8	Concave	Domed	2	14mm (8)	3mm(8) DWI	EY	Carburised	UK
653094*	140	5 1/2	Concave	Domed	3	16MM (9)	14MM (9)	EY	Carburised	UK
670128	115	4 1/2	Concave	Domed	2	14MM (8)	13mm (7)	DF	Q&T	USA
670144	121	4 3/4	Concave	Domed	2	14mm (8)	13mm (7)	DF	Q&T	USA
670197	127	5	Concave	Domed	2	13mm (8)	14mm (8)	DF	Q&T	USA

Note * Oversize sold without warranty

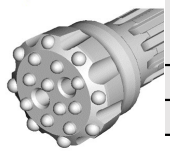
4" Halco 4.5 Bits

Convex



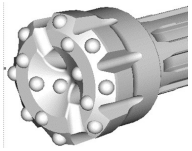
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	105	4 1/8	Convex	Domed				EY	Carburised	UK
	108	4 1/4	Convex	Domed				EY	Carburised	UK
653223	110	4 5/16	Convex	Domed	2	14mm (8)	14mm (6)	EY	Carburised	UK
650932	115	4 1/2	Convex	Domed	2	14mm (8)	13mm (8)	EY	Carburised	UK
650933	120	4 3/4	Convex	Domed	2	14mm (8)	13mm (8)	EY	Carburised	UK
650987	108	4 1/4	Convex	Parabolic	2	13mm (12)	13mm (3)	EY	Carburised	UK
653209	115	4 1/2	Convex	Ballistic	2	14mm (8)	14mm (7)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653230	115	4 1/2	Flat Face	Domed	2	14mm (8)	13mm (10)	EY	Carburised	UK
653650	127	5	Flat Face	Domed	2	16mm (8)	13mm (8)	EY	Carburised	UK

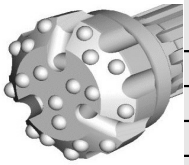
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653229	115	4 1/2	Concave	Domed	2	14mm (8)	13mm (7)	EY	Carburised	UK
653228	121	4 3/4	Concave	Domed	2	14mm (8)	13mm (7)	EY	Carburised	UK
653268	127	5	Concave	Domed	2	14mm (8)	13mm (8)	EY	Carburised	UK

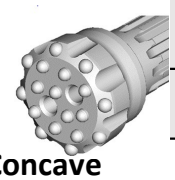
4" Halco 4 Bits

Convex



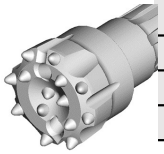
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650930	105	4 1/8	Convex	Domed	2	13mm (12)	13mm (3)	EY	Carburised	UK
650788	108	4 1/4	Convex	Domed	2	13mm (10)	13mm (3)	EY	Carburised	UK
650931	110	4 5/16	Convex	Domed	2	13mm (12)	13mm (3)	EY	Carburised	UK
650932	115	4 1/2	Convex	Domed	2	14mm (8)	13mm (8)	EY	Carburised	UK
650933	120	4 3/4	Convex	Domed	2	14mm (8)	13mm (8)	EY	Carburised	UK
650466	127	5	Convex	Domed	2	13mm (12)	13mm (4)	EY	Carburised	UK
650444	140	5 1/2	Convex	Domed	2	13mm (12)	13mm (5)	EY	Carburised	UK
650445	150	5 7/8	Convex	Domed	2	13mm (12)	18mm (5)	EY	Carburised	UK
650987	108	4 1/4	Convex	Parabolic	2	13mm (12)	13mm (3)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter &	Face carbide diameter &	Carbide grade	Type	Main Stocking location
650384	130	5 1/8	Flat Face	Domed	2	16mm (8)	13mm (8)	EY	Carburised	UK

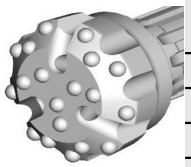
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter &	Face carbide diameter &	Carbide grade	Type	Main Stocking location
650580	108	4 1/4	Concave	Ballistic	2	13mm (8)	13mm (6)	EY	Carburised	UK
650925	127	5	Concave	Parabolic	2	13mm (8)	13mm (8)	EY	Carburised	UK

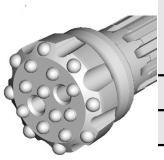
4" Mission 40 Bits

Convex



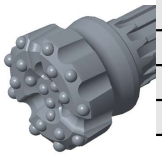
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	110	4 5/16	Convex	Domed				EY	Carburised	UK
	115	4 1/2	Convex	Domed	3	18mm (9)	18mm (9)	EY	Carburised	UK
	115	4 1/2	Convex	Parabolic	2	13mm (12)	13mm (4)	EY	Carburised	UK
	121	4 3/4	Convex	Parabolic				EY	Carburised	UK
	110	4 5/16	Convex	Ballistic				EY	Carburised	UK
	115	4 1/2	Convex	Ballistic				EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location

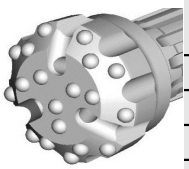
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	121	4 3/4	Concave					DF	Q&T	USA
	127	5.00	Concave					DF	Q&T	USA
671112	133	5 1/4	Concave	Domed	2	16mm (8)	13mm (8)	DF	Q&T	USA

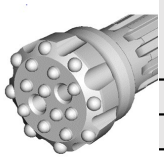
5" QL50 Bits

Convex



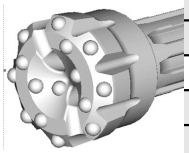
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653238	130	5 1/8	Convex	Balistic	3	14mm (9)	14mm (9)	EY	Carburised	UK
653593	140	5 1/2	Convex	D/B	3	14mm (9)	14mm (9)	EY	Carburised	UK
653669	140	5 1/2	Convex	Parabolic	2	16mm (12)	16mm (4)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653235	140	5 1/2	Flat Face	Domed	2	16mm (8)	16mm (8)LGD	EY	Carburised	UK

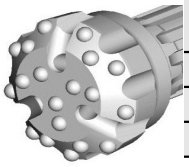
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653234	140	5.5	Concave	Parabolic	2	16mm (18)	16mm (7)	EY	Carburised	UK
653639	152	6	Concave	Domed	3	16mm (15)	14mm (5)	EY	Carburised	UK
653715	165	6 1/2	Concave	Domed	3	16mm (15)	14mm (6)	EY	Carburised	UK
670249	140	5 1/2	Concave	Domed	2	16mm (8)	16mm (7)	DF	Q&T	USA
670250	146	5 3/4	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670700	152	6	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670265	158	6 3/16	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA

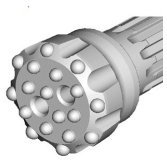
5" DHD350 Bits

Convex



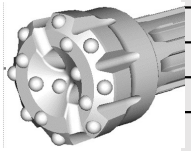
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653395	133	5 1/8	Convex	Domed	2	16mm (11)	16mm (4)	EY	Carburised	UK
650711	152	6	Convex	Domed	2	16mm (15)	16mm (5)	EY	Carburised	UK
653070	140	5 1/2	Convex	Semi Balistic	2	16mm (8)	16mm (8)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653205	140	5 1/2	Flat Face	Domed	2	16mm (8)	16mm (8)	EY	Carburised	UK

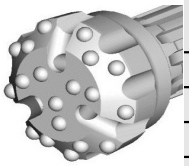
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650772	140	5 1/2	Concave	Domed	2	16mm (8)	16mm (7)	EY	Carburised	UK
653092	165	6 1/2	Concave	Domed	2	20mm (8)	16mm(10)	EY	Carburised	UK
670037	140	5 1/2	Concave	Domed	2	16mm (8)	16 mm (7)	DF	Q&T	USA
670040	146	5 3/4	Concave	Domed	2	16 mm (8)	16 mm (7)	DF	Q&T	USA
670165	152	6"	Concave	Domed	2	16 mm (8)	16 MM (8)	DF	Q&T	USA

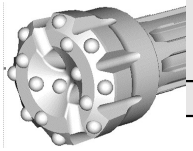
5" Mach 5 Bits

Convex



Part Number	Diameter		Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	mm	Inches								
650838	127	5	Convex	Domed	2	11mm (12)	11mm (6)	EY	Carburised	UK
650758	135	5 1/3	Convex	Domed				EY	Carburised	UK
650578	140	5 1/2	Convex	Domed	2	16mm (11)	16mm (3)	EY	Carburised	UK
650463	150	5 7/8	Convex	Domed	2	16mm (11)	16mm (3)	EY	Carburised	UK
650464	165	6 1/2	Convex	Domed	2	16mm (12)	16mm (4)	EY	Carburised	UK

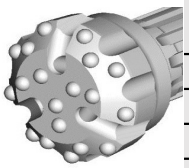
Concave



Part Number	Diameter		Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	mm	Inches								
650990	146	5.3/4	Concave	Domed	2	18mm (8)	16mm (7)	EY	Carburised	UK

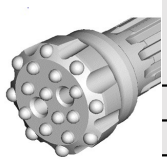
5" Mission 50 Bits

Convex



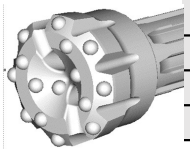
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
671117	140	5 1/2	Convex	Domed	3	16mm (9)	16mm (9)	DF	Q&T	USA
	146	5 3/4	Convex	Domed						
671105	140	5 1/2	Convex	Balistic	3	16mm (9)	16mm (9)	DF	Q&T	USA
	146	5 3/4	Convex	Balistic						

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location

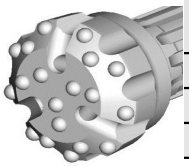
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	140	5 1/2	Concave	Domed				DF	Q&T	USA
671110	146	5 3/4	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA

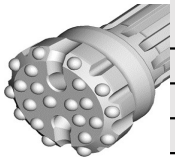
6" 6" QL60 Bits

Convex



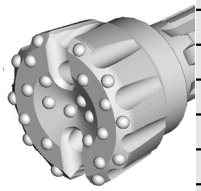
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	165	6 1/2	Convex	Domed	3	18mm (9)	18mm (9)	EY	Carburised	UK
653160	171	6 3/4	Convex	Domed	3	18mm (13)	18mm (6)	EY	Carburised	UK
	165	6 1/2	Convex	Ballistic	3	18mm (9)	18mm (9)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653352	165	6 1/2	Flat Face	Domed	2	18mm (10)	18mm (12)	EY	Carburised	UK
670215*	159	6 1/4	Flat Face	Domed	2	16mm (8)	18mm (13)	DF	Q&T	USA
653553	171	6 3/4	Flat Face	Domed	2	18mm (10)	18mm (12)	EY	Carburised	UK

Concave

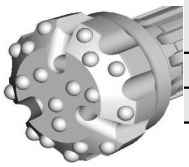


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650094	156	6.1/8	Concave	Domed	2	16mm (8)	16mm (8)	EY	Carburised	UK
653724	159	6 1/4	Concave	Domed	2	16mm (9)	16mm (10)	EY	Carburised	UK
653139	165	6 1/2	Concave	Domed	3	18mm (9)	18mm (9)	EY	Carburised	UK
653118	171	6 3/4	Concave	Domed	2	16mm (8)	16mm (10)	EY	Carburised	UK
653128	178	7	Concave	Domed	2	20mm (8)	16mm (11)	EY	Carburised	UK
653227	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)	EY	Carburised	UK
653142	203	8"	Concave	Domed	2	16mm (12)	16mm (19)	EY	Carburised	UK
653211	241	9 1/2	Concave	Domed				EY	Carburised	UK
670210	150	6	Concave	Domed	2	16mm (12)	16mm (4)	DF	Q&T	USA
670212	152	6 1/8	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670265	152	6 1/5	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670334	159	6 1/4	Concave	Domed				DF	Q&T	USA
670208	165	6 1/2	Concave	Domed	2	19mm (8)	16mm (8)	DF	Q&T	USA
670216	165	6 1/2	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670582	165	6 1/2	Concave	Domed	2	16mm (10)	16mm (9)	DF	Q&T	USA
670218	171	6 3/4	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670592	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (11)	DF	Q&T	USA
670718	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (11)	DF	Q&T	USA
671101	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (11)	DF	Q&T	USA
670665	178	7	Concave	Domed	3	16mm (9)	16mm (11)	DF	Q&T	USA
670722	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)	DF	Q&T	USA
671064	200	7 7/8	Concave	Domed	3	19mm (9)	16mm (18)	DF	Q&T	USA
670220	203	8	Concave	Domed	2	16mm (10)	16mm (13)	DF	Q&T	USA
671097	222	8 3/4	Concave	Domed	2	18mm (10)	18mm (18)	DF	Q&T	USA
	254	10	Concave	Domed				DF	Q&T	USA

Note * with fishing thread

6" DHD360 Bits

Convex

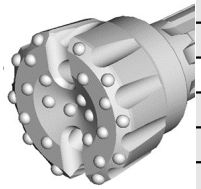


Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650783	152	6	Convex	Domed	2	16mm (15)	16mm (5)	EY	Carburised	UK
650795	165	6 1/2"	Convex	Domed	2	16mm (15)	16mm (5)	EY	Carburised	UK

Flat Face

Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650897	165	6 1/2"	Flat Face	Domed	2	20mm (8)	16mm (9)	EY	Carburised	UK

Concave

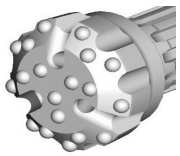


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	156	6 1/8	Concave	Dome				EY	Carburised	UK
	159	6 1/4	Concave	Domed				EY	Carburised	UK
650789	165	6 1/2	Concave	Domed	2	16mm (8)	16mm (10)	EY	Carburised	UK
653038	170	6 2/3	Concave	Domed	2	16mm (8)	16mm (10)	EY	Carburised	UK
653097	180	7	Concave	Domed	2	16mm (8)	16mm (10)	EY	Carburised	UK
653098	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)	EY	Carburised	UK
650673	203	8"	Concave	Domed	2	16mm (12)	16mm (19)	EY	Carburised	UK
650684	220	8 2/3	Concave	Domed	2	20mm (10)	20mm (12)	EY	Carburised	UK
	241	9 1/2	Concave	Domed				EY	Carburised	UK
670076	150	6	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
670076	150	6	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
	152	6 3/16	Concave	Domed				DF	Q&T	USA
670622	159	6 1/4	Concave	Domed	2	16mm (8)	16mm (8)	DF	Q&T	USA
	159	6 1/4	Concave	Domed				DF	Q&T	USA
670088	156	6 1/8	Concave	Domed	3	16mm (8)	16mm (8)	DF	Q&T	USA
	165	6 1/2	Concave	Domed				DF	Q&T	USA
	165	6 1/2	Concave	Domed				DF	Q&T	USA
	171	6 3/4	Concave	Domed				DF	Q&T	USA
	171	6 3/4	Concave	Domed				DF	Q&T	USA
	171	6 3/4	Concave	Domed				DF	Q&T	USA
		7	Concave	Domed				DF	Q&T	USA
670098	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)	DF	Q&T	USA
670100	200	7 7/8	Concave	Domed	2	16mm (14)	16mm (12)	DF	Q&T	USA
	203	8	Concave	Domed				DF	Q&T	USA
	222	8 3/4	Concave	Domed				DF	Q&T	USA
	254	10	Concave	Domed	3	18mm (9)	18mm (9)	DF	Q&T	USA

Note * with fishing thread

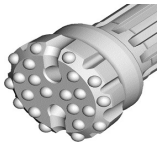
6" Mach 6

Convex



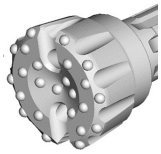
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650585	152	6	Convex	Domed	3	16mm (12)	16mm (4)	EY	Carburised	UK
650939	165	6 1/2	Convex	Domed	3	16mm (13)	16mm (6)	EY	Carburised	UK
650474	178	7	Convex	Domed	2	16mm (12)	16mm (6)	EY	Carburised	UK
650440	200	7 7/8	Convex	Domed	3	16mm (13)	16mm (7)	EY	Carburised	UK
650363	216	8 1/2	Convex	Domed				EY	Carburised	UK
650441	225	8 6/7	Convex	Domed	3	16mm (15)	16mm (11)	EY	Carburised	UK
650457	245	9 5/8	Convex	Domed	3	16mm (15)	16mm (12)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650354	191	7 1/2	Flat Face	Domed	3	16mm (13)	16mm (8)	EY	Carburised	UK

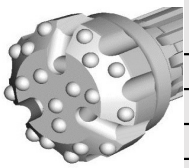
Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650681	203	8"	Concave	Domed	2	16mm (12)	16mm (19)	EY	Carburised	UK

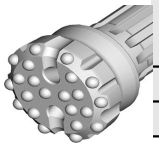
6" Mission 60 Bits

Convex



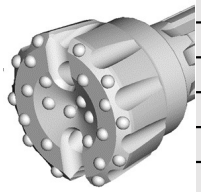
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
671120	172	6 3/4	Convex	Domed	3	16mm (9)	16mm (12)	DF	Q&T	USA
671119	159	6 1/4	Convex	Parabolic	3	19mm (9)	19mm (7)	DF	Q&T	USA
671106	165	6 1/2	Convex	Ballistic	3	19mm (9)	19mm (9)	DF	Q&T	USA
671107	172	6 3/4	Convex	Balistic	3	19mm (9)	19mm (9)	DF	Q&T	USA

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location

Concave

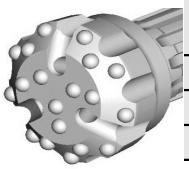


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	150	6	Concave	Domed				DF	Q&T	USA
	152	6 1/8	Concave	Domed				DF	Q&T	USA
	159	6 1/4	Concave	Domed				DF	Q&T	USA
671104	165	6 1/2	Concave	Domed	3	19mm (9)	16mm (12)	DF	Q&T	USA
671126	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (10)	DF	Q&T	USA
	178	7	Concave	Domed				DF	Q&T	USA
	190	7 1/2	Concave	Domed				DF	Q&T	USA
	200	7 7/8	Concave	Domed				DF	Q&T	USA
	222	8 3/4	Concave	Domed				DF	Q&T	USA
	254	10	Concave	Domed				DF	Q&T	USA

Note * with fishing thread

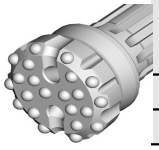
8" QL80 Bits

Convex



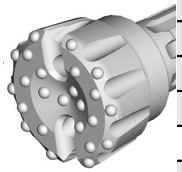
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653663	222	8 3/4	Convex	Domed	3	18mm (21)	18mm (20)	EY	Carburised	UK

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653490	203	8	Flat Face	Domed	2	18mm (10)	18mm (16)	EY	Carburised	UK

Concave

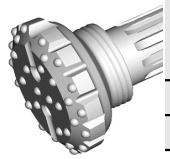


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653379	203	8	Concave	Domed	2	18mm (10)	18mm (14)	EY	Carburised	UK
653413	218	8 5/8	Concave	Domed	3	18mm (12)	18mm (14)	EY	Carburised	UK
653062	222	8 3/4	Concave	Domed	2	18mm (14)	18mm (10)	EY	Carburised	UK
653399	229	9	Concave	Domed	2	18mm (10)	18mm (18)	EY	Carburised	UK
653711	229	9	Concave	Domed	3	18mm (27)	18mm (9)	EY	Carburised	UK
653239	254	10	Concave	Domed	2	18mm (34)	13mm (12)	EY	Carburised	UK
671097	222	8 3/4	Concave	Domed	2	18mm (10)	18mm (18)	DF	Q&T	USA
670646	225	8 7/8	Concave	Domed	3	18mm (9)	18mm (9)	DF	Q&T	USA
671100	229	9	Concave	Domed	3	19mm (21)	16mm (9)	DF	Q&T	USA
670763	251	9 7/8	Concave	Domed	2	19mm (18)	16mm (8)	DF	Q&T	USA
671033	254	10	Concave	Domed	3	19mm (21)	19mm (14)	DF	Q&T	UK

Note * with fishing thread

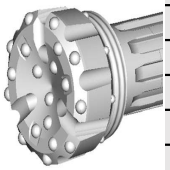
8" DHD380 Bits

Flat Face



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
650898	300	11.8	Flat Face	Domed	2	20mm (22)	20mm (12)	EY	Carburised	UK

Concave



Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter &	Face carbide diameter &	Carbide grade	Type	Main Stocking location
653714	200	7 7/8	Concave	Domed	3	18mm (25)	16mm (6)	EY	Carburised	UK
650373	203	8	Concave	Domed	2	20mm (10)	16mm (14)	EY	Carburised	UK
650074	216	8 1/2	Concave	Domed	3	13mm (9)	20mm (20)	EY	Carburised	UK
653611	222	8 3/4	Concave	Domed	3	22.2mm (12)	18mm (6)	EY	Carburised	UK
653584	222	8 3/4	Concave	Domed	3	22.2mm (12)	18mm (6)	EY	Carburised	UK
650022	241	9 1/2	Concave	Domed	2	20mm (18)	16mm (10)	EY	Carburised	UK
653849	251	9 7/8	Concave	Domed				EY	Carburised	UK
650389	254	10.0	Concave	Domed	2	20mm (18)	16mm (11)	EY	Carburised	UK
653041	311	12 1/4	Concave	Domed	2	20mm (22)	20mm (20)	EY	Carburised	UK
670437	222	8.3/4	Concave	Domed	2	19mm (14)	19mm (5)	DF	Q&T	USA

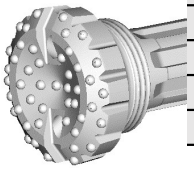
Note * with fishing thread

Concave - Bit catcher design

653717	216	8 1/2	Concave	Domed	3	18mm (27)	16mm (6)	EY	Carburised	UK

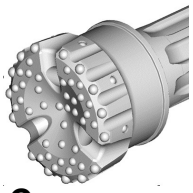
10" SD-10 Bits

Concave



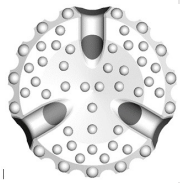
Part Number	Diameter		Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
	mm	Inches								
650071	311	12.25	Convex	Domed	2	20mm (22)	20mm (24)	EY	Q&T	UK
650072	381	15	Concave	Domed	3	20mm (27)	20mm (38)	EY	Q&T	UK
670539	305	12	Concave	Domed	2	19mm(22)	19mm(12)	DF	Q&T	USA

Extended Head bit catcher Concave



Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653631	381	15	Concave	Domed	3	20mm (36)	18mm (24)	EY	Q&T	UK
653720	422	16 5/8	Concave	Domed	3	20mm (48)	18mm (18)	EY	Q&T	UK
653552	444	17 1/2	Concave	Domed	3	22.2mm (48)	18mm (18)	EY	Q&T	UK

Concave

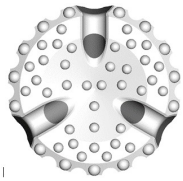


Part Number	Diameter mm	Diameter Inches	Face design		Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653587	311	12 1/4	Concave	Domed	3	22.2mm (15)	18mm (36)	EY	Q&T	UK
653729	330	13	Concave	Domed	3	18mm (9)	18mm (9)	EY	Q&T	UK
653928	357	14	Concave	Domed	2	18mm (9)	18mm (9)	EY	Q&T	UK
653729	381	15	Concave	Domed	3	16mm (12)	20mm (56)	EY	Q&T	UK
653730	444	17 1/2	Concave	Dome	3	16mm (36)	18mm (24) 20mm (48)	EY	Q&T	UK
653731	508	20	Concave	Dome	3	??	??	EY	Q&T	UK

Note standard concave bits have no fishing thread

12" SD-12 Bits

Concave



Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Guage carbide diameter & Qty	Face carbide diameter & Qty	Carbide grade	Type	Main Stocking location
653732	311	12 1/4	Concave	Domed	2		18mm (36) 20mm (14)	EY	Q&T	UK
653933	330	13	Concave	Domed	2		16mm (24) 18mm (32)	EY	Q&T	UK
653734	357	14	Concave	Domed	3	16mm (12)	20mm (48)	EY	Q&T	UK
653735	381	15	Concave	Domed	3	16mm (12)	20mm (56)	EY	Q&T	UK
653236	444	17 1/2	Concave	Domed	3	16mm (36)	18mm(24) 20mm(48)	EY	Q&T	UK
653737	508	20	Concave	Domed	3	16mm (18)	18mm (59) 20mm (30)	EY	Q&T	UK

Note standard concave bits have no fishing thread

Shock Absorbers 2 - 6"

Size	2"	3"	4"	5"	6"
Effective Length (Shoulder to Shoulder)	346mm (13.62")	457mm (17.93")	483mm (19.02")	514mm (20.27")	578mm (22.76")
Outside Diameter	62mm (2.44")	79.4mm (3.13")	95.4mm (3.76")	115mm (4.54")	140mm (5.51")
Thread Connection	50mm DIN405	2 3/8" API Reg	2 3/8" API Reg	3 1/2" API Reg	3 1/2" API Reg
Net Weight	7.5kg (16.5lb)	14.3kg (31.5lb)	22.1kg (48.7lb)	33.2kg (73.2lb)	53.0kg (116.8lb)

Size	2"	3"	4"	5"	6"
Complete Shock Absorber	**600688**	**600689**	**600690**	**600691**	**600692**
1 -Top Connector					
2 -Seal O-Ring					
3 -Splined Nut					
4 -Breakout washer					
5 -Splined Nut Seal					
6 -Retaining Ring					
7 -Thrust Guide					
8 - Thrust Guide O-Ring					
9 -Buffer *2					
10 -Bottom Conector					

Shock Absorbers 8 - 12"

Size	8"	10"	12"
Effective Length (Shoulder to Shoulder)	*346mm (13.62")*	*457mm (17.93")*	*483mm (19.02")*
Outside Diameter	*62mm (2.44")*	*79.4mm (3.13")*	*95.4mm (3.76")*
Thread Connection	*50mm DIN405*	*2 3/8" API Reg*	*2 3/8" API Reg*
Net Weight	*7.5kg (16.5lb)*	*14.3kg (31.5lb)*	*22.1kg (48.7lb)*

Size	8"	10"	12"
Complete Shock Absorber	600693	600694	600695
1 -Top Connector			
2 -Seal O-Ring			
3 -Splined Nut			
4 -Breakout washer			
5 -Splined Nut Seal			
6 -Retaining Ring			
7 -Thrust Guide			
8 - Thrust Guide O-Ring			
9 -Buffer *2			
10 -Bottom Conector			

SIM-CASX

Casing advancing system for overburden and loose rock formations.

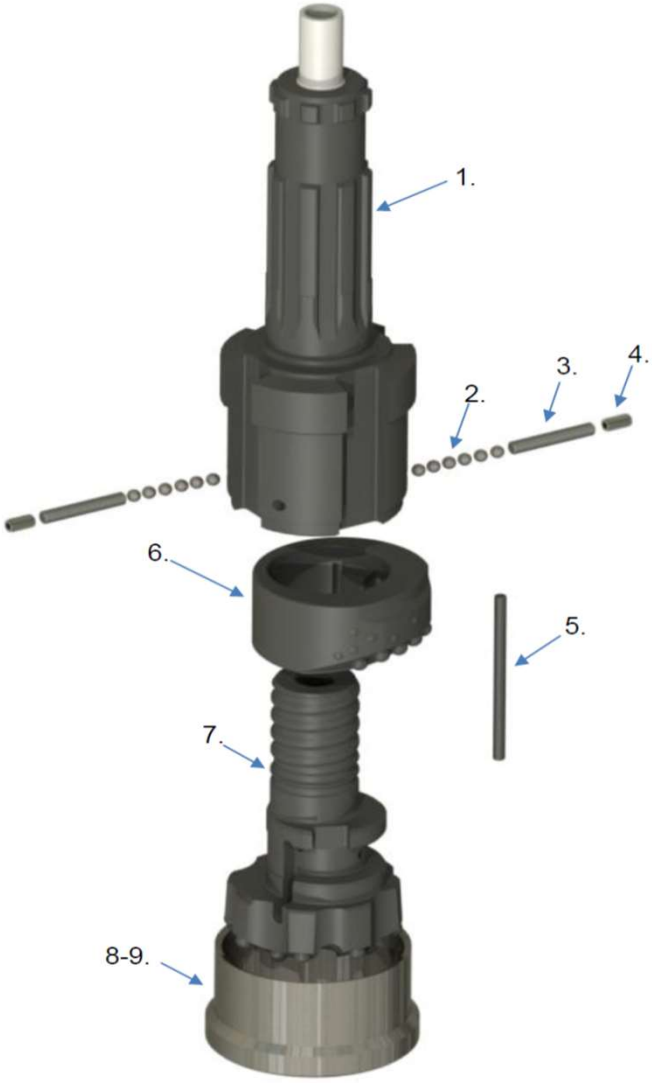
Halco's eccentric Sim-Cas system is still one of the most cost effective solutions for casing installation when drilling in difficult ground conditions. The eccentric system negates the need to leave expensive ring bits in the hole when installing permanent casing.

The updated Sim-CasX solution has several benefits over its predecessor while retaining Halco's renowned product quality:

- Two piece pilot and reamer, allowing high wear reamers to be replaced more often
- Larger Pilot bit so the Reamer does less work resulting in longer reamer life
- Stronger Pilot bit shaft for better impact energy transfer
- Internal drive lug with pressurised cleaning channels, ensures the reamer is always in the correct drilling position
- Ball bearing retaining system to ensure nothing comes adrift down the hole

Size	Shank	Pilot Bit diameter	Reaming diameter	Maximum Casing OD	Minimum Casing ID
Sim-CasX 90	DHD 3.5	90	123	115	102
Sim-CasX 115	DHD 340	115.8	151.2	142	128
Sim-CasX 140	DHD 350	141.2	185.8	171	155.6
Sim-CasX 165	DHD 360	165.8	211.2	195.6	182.5
Sim-CasX 190	DHD 360	190.8	236.2	222	205
Sim-CasX 240	DHD 380	240.8	308	273	260.4

SIM-CasX



System Size	90	115	140	165	190	240
Shank	DHD 3.5	DHD340	DHD350	DHD360	DHD360	DHD380
Pilot Bit diameter mm	90.0	115.8	141.2	165.8	190.8	240.8
Reaming diameter mm	123.0	151.2	185.8	211.2	236.2	308.0
Maximum Casing OD mm	115.0	142.0	171.0	195.6	222.0	273.0
Minimum casing ID mm	102.0	128.0	155.6	182.5	205.0	260.4
Casing thickness for thick wall shoe mm	6.0	5.6	5.6	5.6	6.3	6.3
Casing thickness for thin wall Shoe mm	4.5	4.5	4.5	4.5	5.0	

System Size	90	115	140	165	190	240
Sim-CasX System	**651041**	**651040**	**651042**	**651043**	**651044**	**651045**
1 - Guide Device	651046	651052	651058	651059	651069	651075
6 - Reamer	651048	651054	651060	651066	651071	651077
7 - Pilot Bit	651049	651055	651061	651067	651072	651078
8 - Casing Shoe - thick wall	651050	651056	651062	651073	651073	651079
9 - Casing Shoe - thin wall	651051	651057	651063	651074	651074	
Locking Kit	651047	651053	651059	651070	651070	651076
2 - Retaining balls						
3 -Solid locking pins						
4 - Spring Pins						
5 - Pusher Pin						

CONVERSION TABLE

Air Volume	Example
1 cc = .001 litre	1000cc = 1 litre
1 litre = .001 m^3	1000 litres = 1 m^3

Air Flow	Example
1 cfm = 0.0283 m^3/min	100 cfm = 2.83 m^3/min
1 cfm = 0.4719 litre/sec	100 cfm = 47.19 litre/sec
1 m^3/min = 35.315 cfm	10 m^3/min = 353.15 cfm
1 m^3/min = 16.667 litre/sec	10 m^3/min = 166.67 litre/sec
1 litre/sec = 2.1189 cfm	100 litre/sec = 211.89 cfm
1 litre/sec = 0.0600 m^3/min	100 litre/sec = 600 m^3/min

Air Pressure	Example
1 psi = 0.0689 bar	100 psi = 6.89 bar
1 psi = 0.0703 kg/cm^2	100 psi = 7.03 kg/cm^2
1 psi = 0.0680 atm (Atmosphere)	100 psi = 6.80 atm
1 bar = 14.504 psi	10 bar = 145.04 psi
1 bar = 1.0197 kg/cm^2	10 bar = 10.197 kg/cm^2
1 bar = 0.9869 atm	10 bar = 9.869 atm
1 atm = 14.696 psi	10 atm = 146.96 psi
1 atm = 1.0132 bar	10 atm = 10.132 bar
1 atm = 1.0332 kg/cm^2	10 atm = 10.332 kg/cm^2

Velocity	Example
1 m/min = 3.2808 ft/min	1000 m/min = 3280.80 ft/min
1 m/min = 0.0167 m/sec	1000 m/min = 16.70 m/sec
1 ft/min = 03048 m/min	1000 ft/min = 304.80 m/min
1 ft/min = 0.0051 m/sec	1000 ft/min = 5.10 m/sec
1 m/sec = 60.00 m/min	10 m/sec = 600 m/min
1 m/sec = 196.85 ft/min	10m/sec = 1968.50 ft/min

Torque	Example
1 lb/ft = 0.1383 kgm	1000 lb/ft = 138.30 kgm
1 lb/ft = 1.3558 Nm	1000 lb/ft = 1355.80 Nm
1 lb/ft = 12.00 lb/in	1000 lb/ft = 12,000 lb/in
1 kgm = 7.233 lb/ft	100 kgm = 723.30 lb/ft
1 kgm = 9.8067 Nm	100 kgm = 980.67 Nm
1 kgm = 86.796 lb/in	100 kgm = 8679.60 lb/in
1 lb/in = 0.0833 lb/ft	1000 lb/min = 83.30 lb/ft
1 lb/in = 0.0115 kgm	1000 lb/in = 11.50 kgm
1 lb/in = 0.1130 Nm	1000 lb/in = 113 Nm

www.halco.uk

United Kingdom

Armytage Road
Brighouse
West Yorkshire
HD6 1QF

Tel: +44 (0)1422 399900
email: salesuk@halco.uk

United States of America

2720 Fallon Drive
Sherman
TX 75090

Tel +1 903 893 2300
email: salesusa@halco.us

Your drilling expert

HALCO Rock Tools