HAICO Rock Tools

YOUR DRILLING EXPERT

PRODUCT CATALOGUE

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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 Kingdom and Australia . 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 rigorous product testing in extreme drilling conditions.

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

- Mining
- Quarrying
- Oil and Gas
- Exploration
- 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 contact our sales teams at one of our sales locations shown on the back page of this document.

Further Learning Aids:

- A-Z of DTH Drilling
- DTH Maintenance Manual
- DTH Users Guide
- www.halco.uk

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SIM-CasX 59

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Hammer Selection Guide

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:

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.

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.

Hammers

YOUR DRILLING EXPERT

1" Dominator 10

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.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
55mm - 64mm 2 1/8 - 2 1/2"	Halco 1	100 - 250 psi (7 - 17 bar)

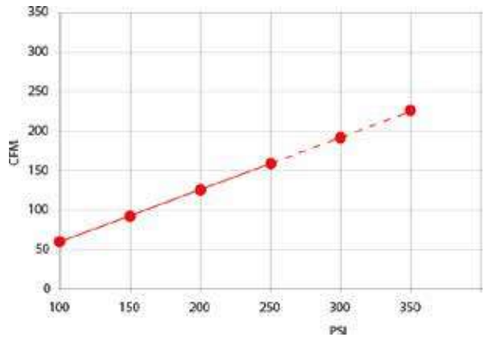
Hammer Overview

Hammer Model	**Dominator 10**
Part Number	**600422**
Shank	**Halco 1**
Thread connection	**40mm DIN 405 6 TPI Box**
Minimum bit diameter	**55 MM**
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

Air Consumption

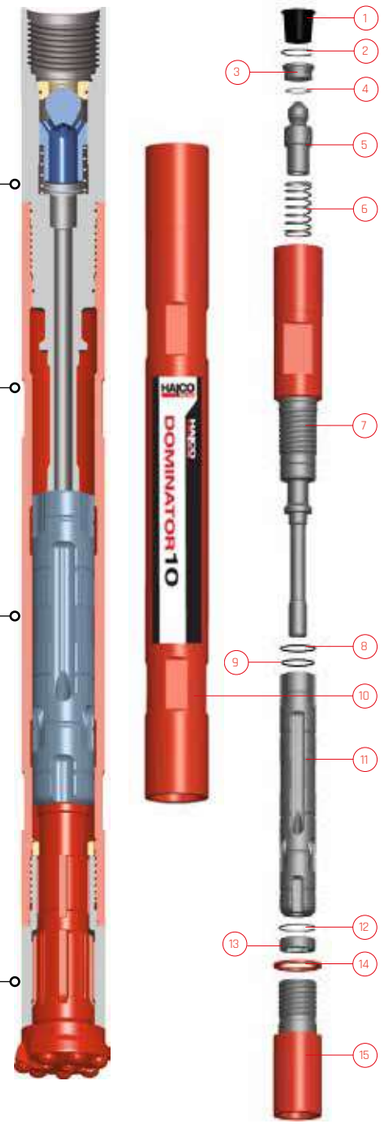


One piece top adaptor reduces internal parts. No makeup required. External N.R.V. for easy maintenance.

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.



2" Mach 20

MACH 20

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 foot valve 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").

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
70mm - 76mm 2 3/4 - 3"	Halco 2	100 - 250 psi (7 - 17 bar)

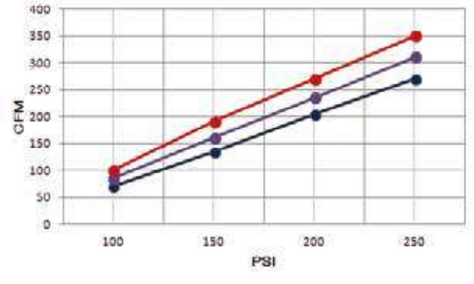
Hammer Overview

Hammer Model	**Mach 20**
Part Number	**600169**
Shank	**Halco 2**
Thread connection	**50mm DIN405 6 TPI Box**
Minimum bit diameter	**70 MM**
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

Air Consumption

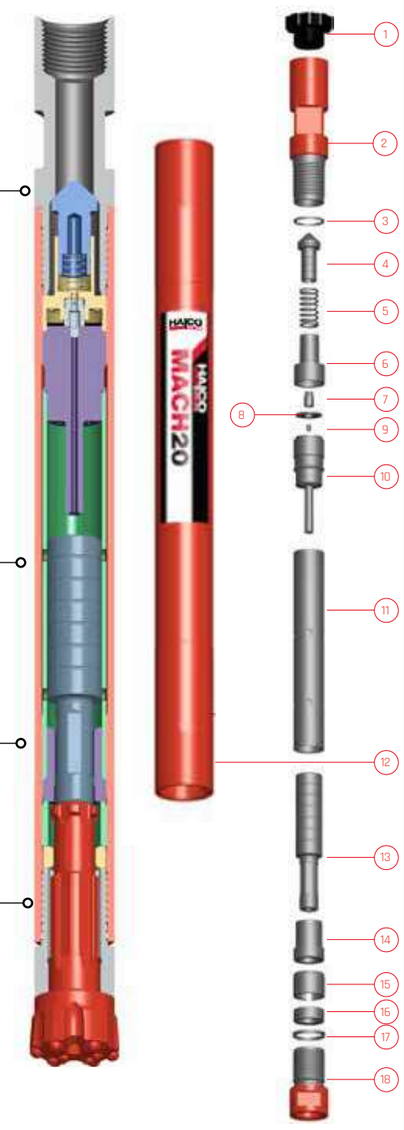


Integral N.R.V. (Non-Return-Valve) to prevent flooding when drilling in water.

Solid piston with liner support.

Guide bush fitted for centralising piston.

Halco Mach 20 shank reduces contact stresses and wear rates.



3" Dominator 30

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.

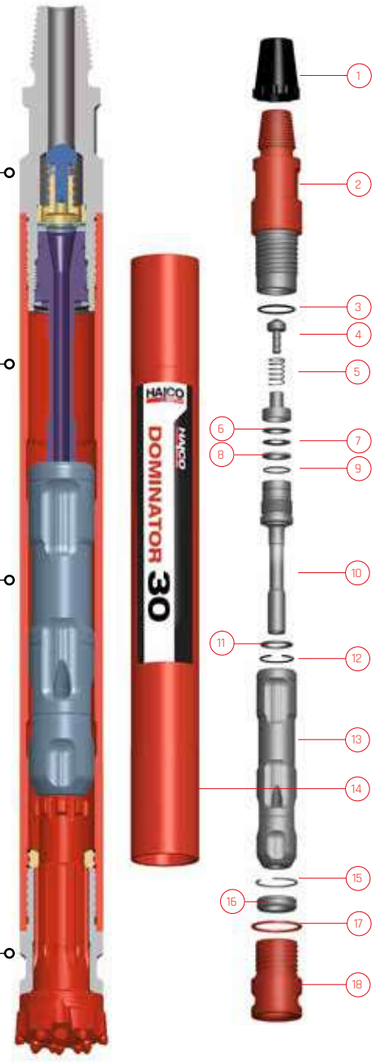
The Dominator 30 has fewer parts than other 3 inch hammers in the market, which allows for easy maintenance and servicing.

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
90mm - 105mm 3 1/2 - 4 1/8"	I.R.3.5	100 - 362 psi (7 - 25 bar)

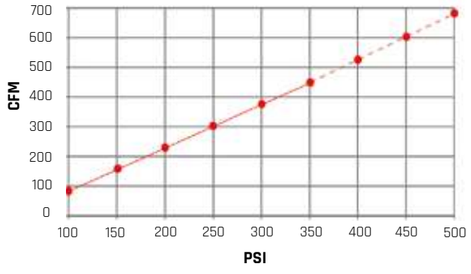
Hammer Overview

Hammer Model	**Dominator 30**
Part Number	**600424**
Shank	**IR3.5**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**90 MM**
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		Service Kit	Repair Kit
Part number	600424			
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

Air Consumption



Figures are based on theoretical data

3" GP300

GP300

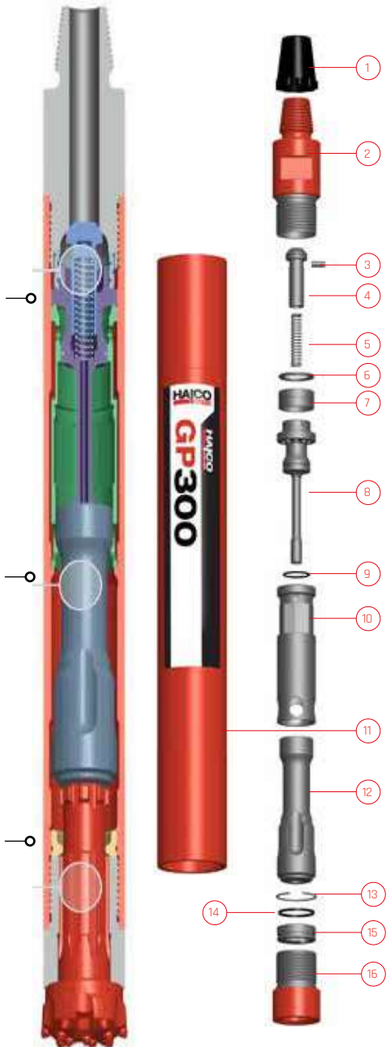
Dominator 375 hammer gives up to 25% increase in performance compared to Dominator 350 and Dart 350.

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"),

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
95mm - 105mm 3 1/2 - 4 1/8"	MD3.5	100 - 362 psi (7 - 25 bar)

Hammer Overview

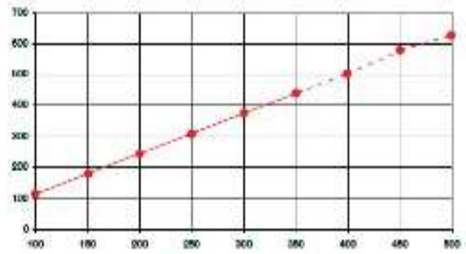
Hammer Model	**GP300**
Part Number	**600393**
Shank	**MD3.5**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**95 MM**
Hammer flat size	**64mm (2.520")**
Weight	**24 Kg (52.91 lbs)**
Outside diameter	**85mm (3.35")**
Length (shoulder to shoulder)	**885mm (34.84")**
Minimum weight on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

Parts List

Hammer type	GP300		Maintenance Kits	
Shank	MD3.5		Service Kit	Repair Kit
Part number	600393			
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		
13	Snap Ring	783051	1	1
14	Retaining Ring band	792040	1	1
15	Bit Retaining Ring	604457		1
16	Chuck	604456		1
	Foot Valve	602922		1

*Alternative 600394 IR3.5 Shank

Air Consumption



4" Super Dominator 400

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.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
108mm - 150mm (4 1/4 - 5 7/8")	DHD340A	100 - 507psi (7 - 35 bar)

Hammer Overview

Hammer Model	**SDOM400**
Part Number	**600258**
Shank	**DHD340A**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**108 MM**
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

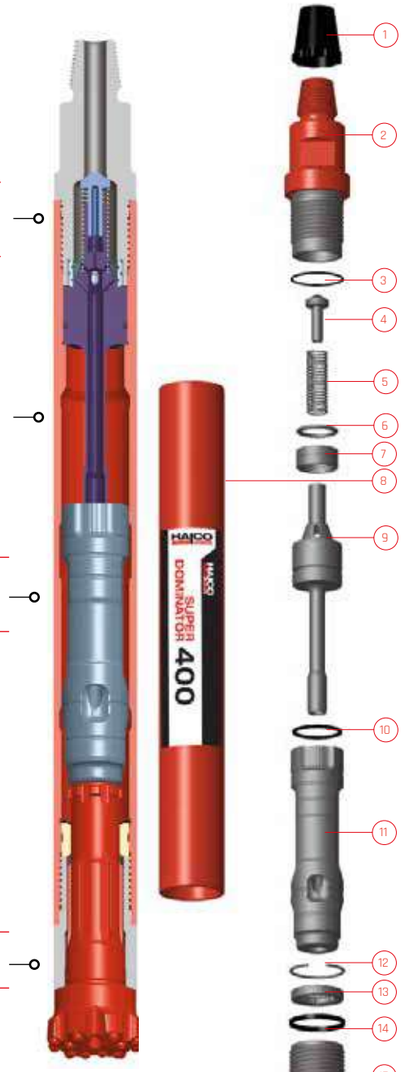
Part Number	**600229**
Thread connection	**2 3/8" API Reg Pin Plain Diameter**

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

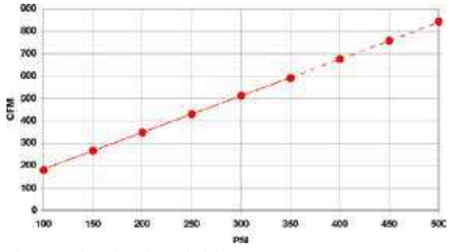
Revised chamber volumes and cycle timing to optimise performance.

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

Halco 4 shank reduces contact stresses and wear rates.



Air Consumption



Figures are based on theoretical data

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
108mm - 150mm (4 1/4 - 5 7/8")	HALCO 4	100 - 507 psi (1 - 30 bar)

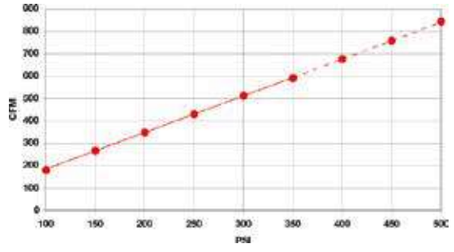
Hammer Overview

Hammer Model	**Super Dominator 400**
Part Number	**600224**
Shank	**Halco 4**
Thread connection	**2 3/8" API Reg Pin**
Minimum bit diameter	**108 mm**
Hammer flat size	**65 mm (2.560")**
Weight	**38 Kg (83.77 lbs)**
Outside diameter	**98 mm (3 7/8")**
Length (shoulder to shoulder)	**1065 mm (42")**
Minimum weight on bit	**250 Kg (550 lbs)**
Maximum weight on bit	**500 Kg (1100 lbs)**

Parts List

Hammer type	Super Dominator 400		Maintenance Kits	
Shank	HALCO 4			
Part number	600224		Service Kit	Repair Kit
Item	Description	Part No.	SK30	RK52
1	Thread Protector	200111		
2	Top Adaptor	603215		
3	O-Ring	768040	2	2
4	N.R.V.	602633		1
5	N.R.V. Spring	760108	2	2
6	Shim - 4.9mm	602634		1
	Shim 5.3mm	602635		1
	Shim - 5.7mm	602636		1
7	Compression Spring	760107		1
8	Air Distributor	603266		
9	O'Ring	768050	2	2
10	Cylinder	603390		
11	Piston	603396		
12	Snap Ring	783029	1	1
13	Containment Band	792037	2	2
14	Bit Retaining Ring	603793		1
15	Chuck Lock Ring	602733	2	2
16	Chuck	603273		1
17	End Cap	741019		
	Foot Valve	601641		1

Air Consumption



Figures are based on theoretical data

4" Super Dominator 400

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.

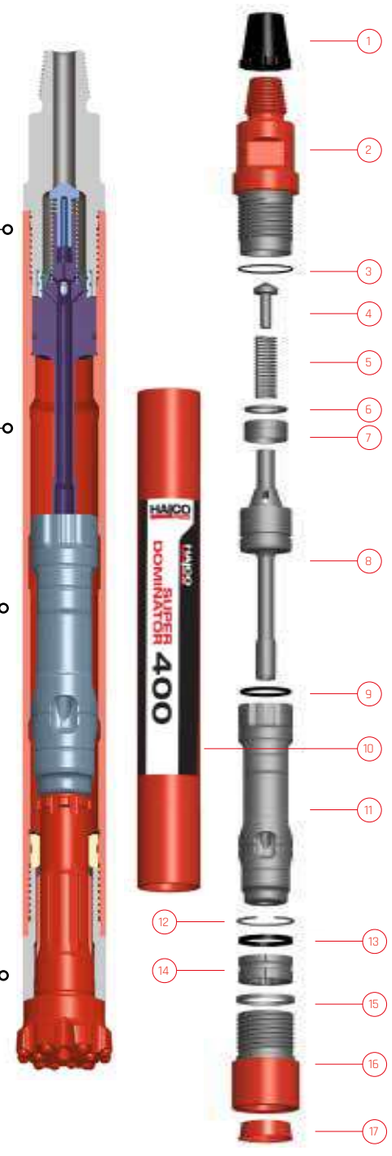
The Super Dominator 400 is designed for maximum performance at high pressures.

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 shank reduces contact stresses and wear rates.



4" Super Dominator 450

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.

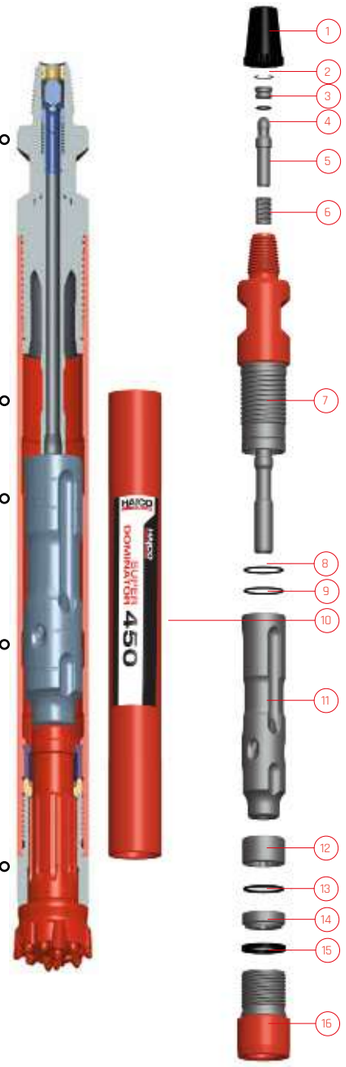
One piece top adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
110mm - 140mm 4 5/16 - 5 1/2"	Halco 4.5	100 - 507 psi (7 - 35 bar)

Hammer Overview

Hammer Model	**SDOM450**
Part Number	**600382**
Shank	**Halco 4.5**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**110 MM**
Hammer flat size	**65mm (2.56")**
Weight	**38.5 Kg (84.7 lbs)**
Outside diameter	**100.5mm (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)**

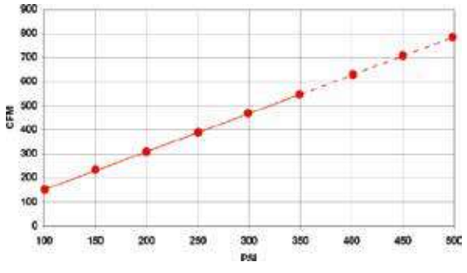
Parts List

Hammer type	SDOM400		Maintenance Kits	
Shank	Halco 4.5			
Part number	600382		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**

Air Consumption



Figures are based on theoretical data

4" Super Dominator 450HD

SUPER DOMINATOR 450HD

The Super Dominator 450HD has been specifically designed to provide more impact 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 450HD 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 450HD requires no shimming which simplifies servicing. It also has no liner which increases the piston power output.

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

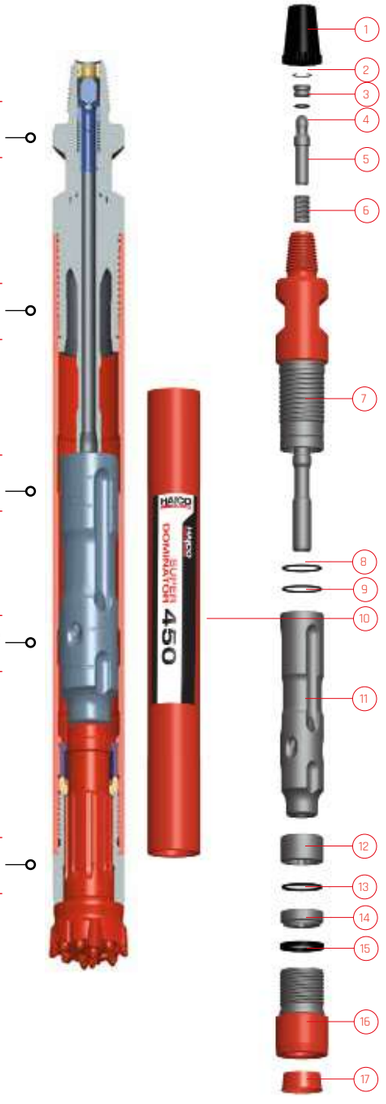
Choke system to allow adjustment of air flow to improve flushing.

Revised chamber volumes and cycle timing to optimize performance.

Robust simple piston design for optimum strength and performance.

Revised cylinder porting to maximise air flow efficiency.

12 spline shank reduces contact stress and wear rates.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
110mm - 140mm 4 5/16 - 5 1/2"	Halco 4.5	100 - 507 psi (7 - 35 bar)

Hammer Overview

Hammer Model	**SDOM450HD**
Part Number	**600421**
Shank	**Halco 4.5**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**115MM**
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)**

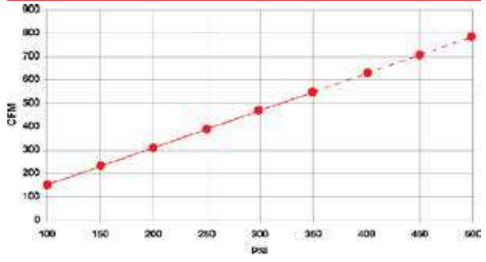
Parts List

Hammer type	Super Dominator 450HD		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	2	2
3	N.R.V. Seat	603919		1
4	O-Ring	768187	2	2
5	Non Return Valve	603918		1
6	N.R.V. Spring	760142		2
7	Top Adaptor	600677		
8 & 9	O-Ring (2)	768190	2	2
10	Cylinder	602555		
11	Piston	604392		
12	Guide Bush	604314		1
13	O-Ring	768189	2	2
14	Bit Retaining Ring	603948		1
15	Chuck Lock Ring	602733	2	2
16	Chuck	DP516		1
17	End Cap	741019		
	Foot Valve	603951		2

Alternative thread connections

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

Air Consumption



Figures are based on theoretical data

4" GP400 - DHD340

GP 400

The GP400 is a high performance hammer which can drill 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.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
108mm - 140mm 4 1/4 - 5 1/2"	DHD 340 TD 40	100 - 435 psi (7 - 30 bar)

Hammer Overview

Hammer Model	**GP400**
Part Number	**600466**
Shank	**DHD340**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**108 MM**
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

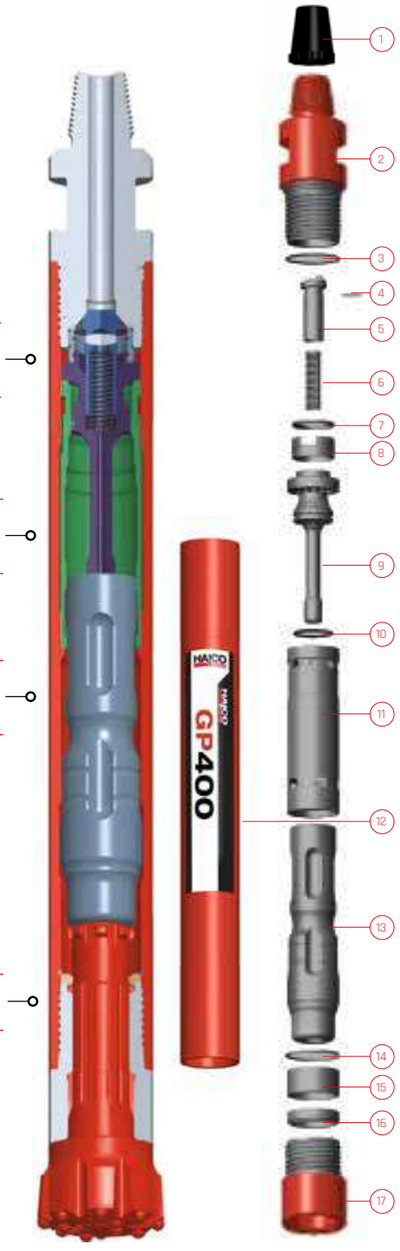
Hammer type	GP400		Maintenance Kits	
Shank	DHD340		Service Kit	Repair Kit
Part number	600466			
Item	Description	Part No.	SK72	RK123
1	Thread Protector	200111		
2	Top Adaptor	602646		
3	O-Ring	768190	1	1
4	Choke - Solid	604480	1	1
	Choke - 1/8"	604481	1	1
	Choke - 3/16"	604482	1	1
5	Non Return Valve	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

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

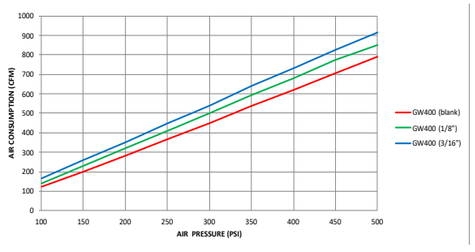
Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

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



Air Consumption



Figures are based on theoretical data

4" Mach 44

MACH 44

The Mach 44 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures.

With a proven track record of performance and reliability, the Mach 44 operates at a high frequency which makes it ideal for broken unstable ground conditions.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
110mm - 140mm 4 5/6 - 5 1/2"	Halco 4	100 - 435 psi (7 - 30 bar)

Hammer Overview

Hammer Model	**MACH44**
Part Number	**600070**
Shank	**Halco 4**
Thread connection	**2 3/8" API Reg Pin Up**
Minimum bit diameter	**110 MM**
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

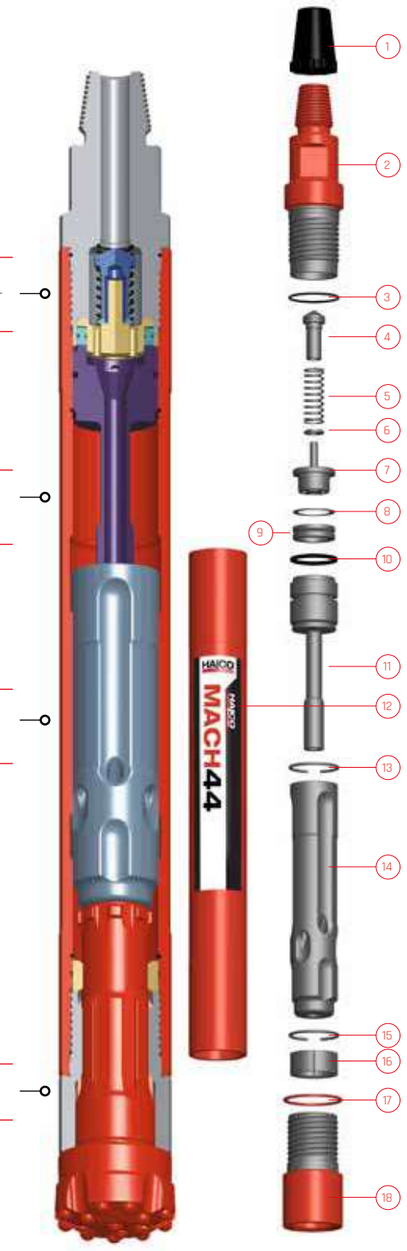
Hammer type	MACH44		Maintenance Kits	
Shank	Halco 4		Service Kit	Repair Kit
Part number	600070			
Item	Description	Part No.	SK02	RK02
1	Thread Protector	200111		
2	Top Adaptor	601632		
3	O-Ring	768040	1	1
4	Non Return Valve	602330		1
5	N.R.V. Spring	760084	1	1
6	N.R.V. Seat	601778		1
7	N.R.V. Finger	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

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

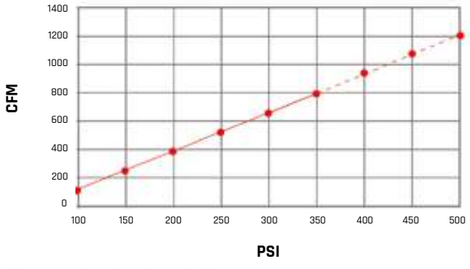
Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

The Halco shank reduces contact stress and wear rates.



Air Consumption



Figures are based on theoretical data

5" Dominator 500

DOMINATOR 500

The Dominator 500 is suitable for drilling at a wide range of air pressures making it a class leader in performance.

The Dominator 500 is ideal for General purpose and Drill & Blast applications. The Dominator 500 has a one-piece top adaptor with N.R.V fitted to eliminate shimming and it has no liner which increases the piston blow energy.

The Dominator 500 uses a few tools for maintenance, making it easy to maintain and service.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
127mm - 165mm 5 - 6 1/2"	Halco 5	100 - 507 psi (7 - 35 bar)

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**
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

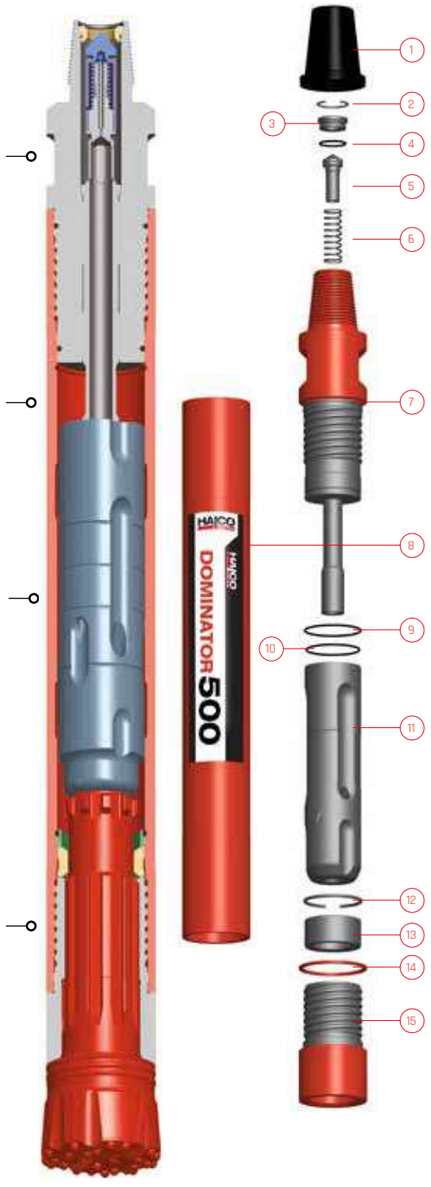
Hammer type	DOM500		Maintenance Kits	
Shank	HALCO 5		Service Kit	Repair Kit
Part number	600120			
Item	Description	Part No.	SK72	RK123
1	Thread Protector	201701		
2	Snap Ring	783028	1	1
3	N.R.V. Seat	602703		1
4	O-Ring	768144	1	1
5	Non Return Valve	602330		1
6	N.R.V. Spring	760084	1	1
7	Top Adaptor	602704		
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

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

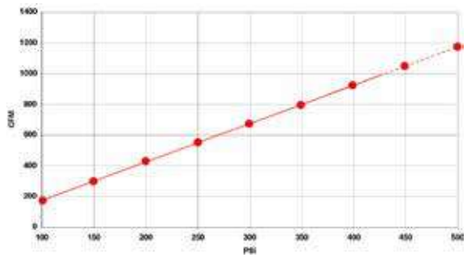
Revised chamber volumes and cycle timing to optimise performance.

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

The Halco 5 shank reduces contact stress and wear rates.



Air Consumption



Figures are based on theoretical data

5" Super Dominator 500

SUPER DOMINATOR 500

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

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
140mm - 165mm 5 1/2 - 6 1/2"	DHD350	100 - 507 psi (7 - 35 bar)

Hammer Overview

Hammer Model	**SDOM500**
Part Number	**600267**
Shank	**DHD350**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**140 MM**
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		Service Kit	Repair Kit
Part number	600267			
Item	Description	Part No.	SK02	RK02
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

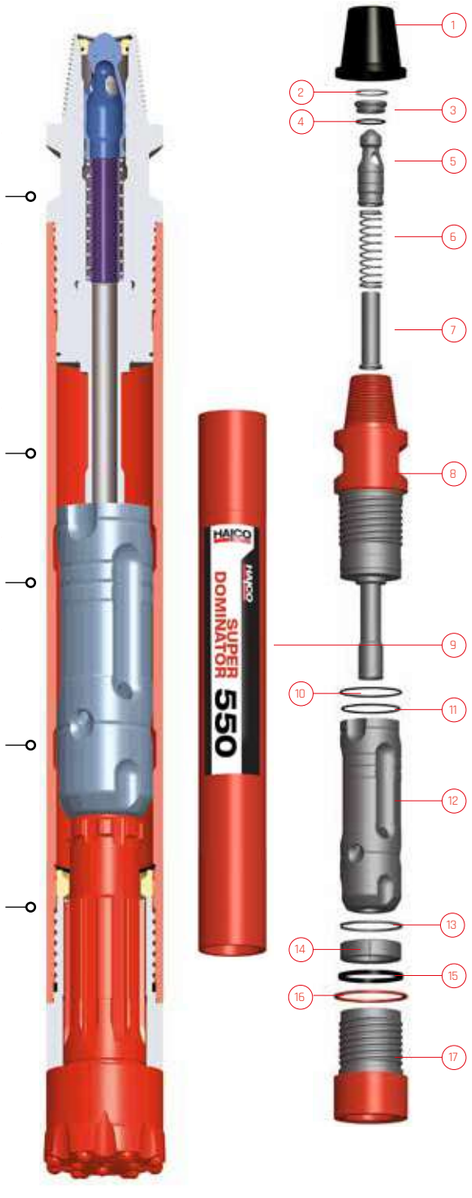
One-piece top adaptor reduces internal parts. No make-up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimise performance.

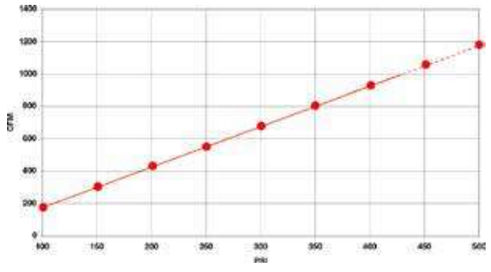
Simplified piston geometry for improved balance and location within the cylinder.

Heavy duty cylinder to extend hammer life.

QL50 shanks reduce contact stresses and wear rates.



Air Consumption



Figures are based on theoretical data

5" Super Dominator 550HD

SUPER DOMINATOR 550HD

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 550HD has no liner which increases the piston blow energy and reduces parts required.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
140mm - 165mm 5 1/2 - 6 1/2"	DHD350	100 - 507 psi (7 - 35 bar)

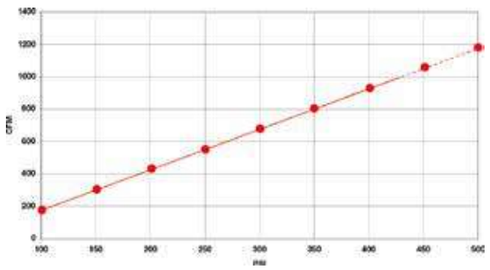
Hammer Overview

Hammer Model	**SDOM550HD**
Part Number	**600293**
Shank	**DHD350**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**140 MM**
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		Service Kit	Repair Kit
Part number	600293			
Item	Description	Part No.	SK72	RK123
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		

Air Consumption



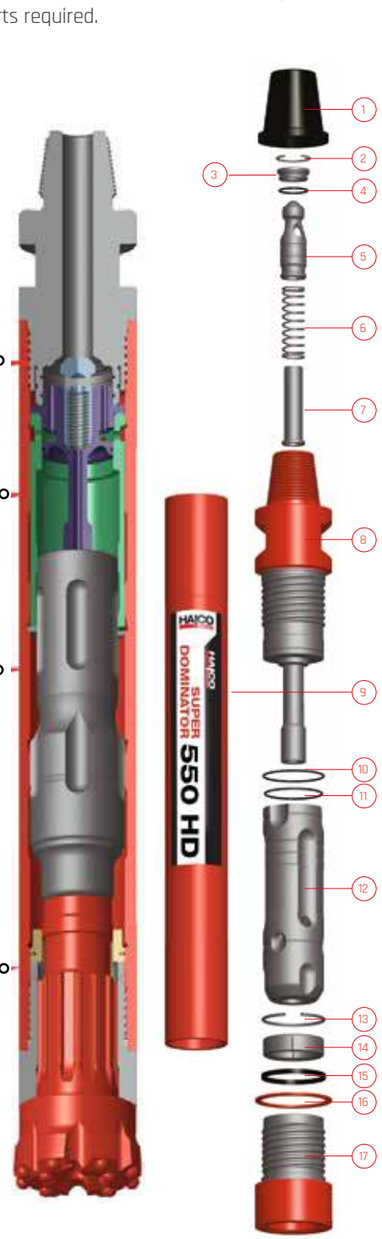
Figures are based on theoretical data

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
140mm - 165mm 5 1/2 - 6 1/2"	QL50	100 - 507 psi (7 - 35 bar)

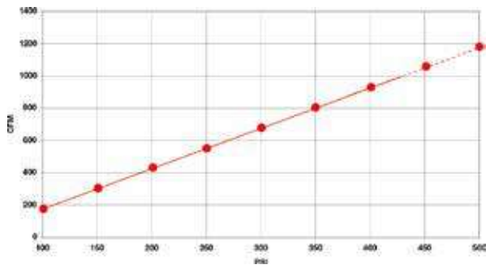
Hammer Overview

Hammer Model	**SDOM550HD**
Part Number	**600294**
Shank	**QL50**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**140 MM**
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		Service Kit	Repair Kit
Part number	600294			
Item	Description	Part No.	SK02	RK02
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	O-Ring	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	603252		

Air Consumption



Figures are based on theoretical data

5" Super Dominator 550HD

SUPER DOMINATOR 550HD

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 550HD has no liner which increases the piston blow energy and reduces parts required.

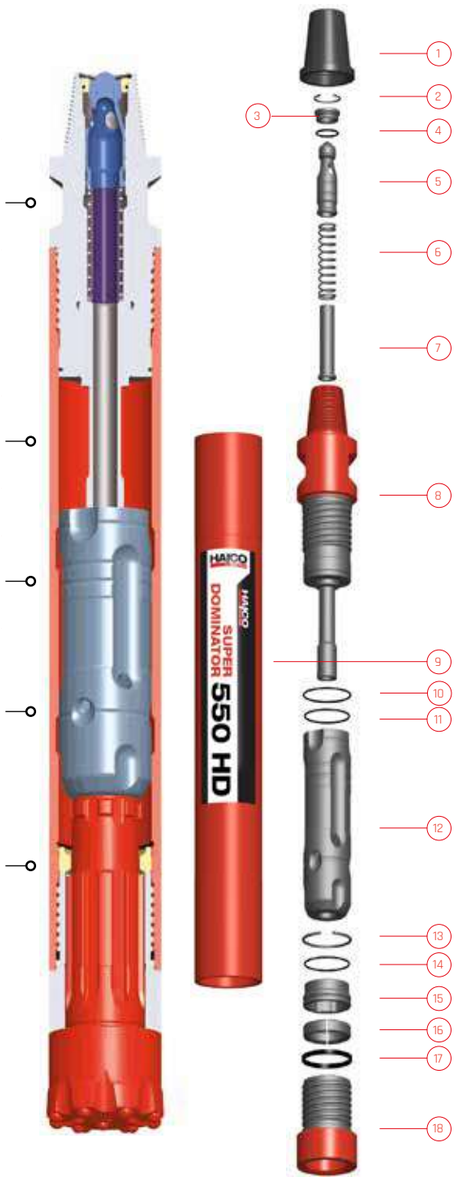
One-piece top adaptor reduces internal parts. No make-up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to 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.



5" GP500 - DHD350

GP500

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

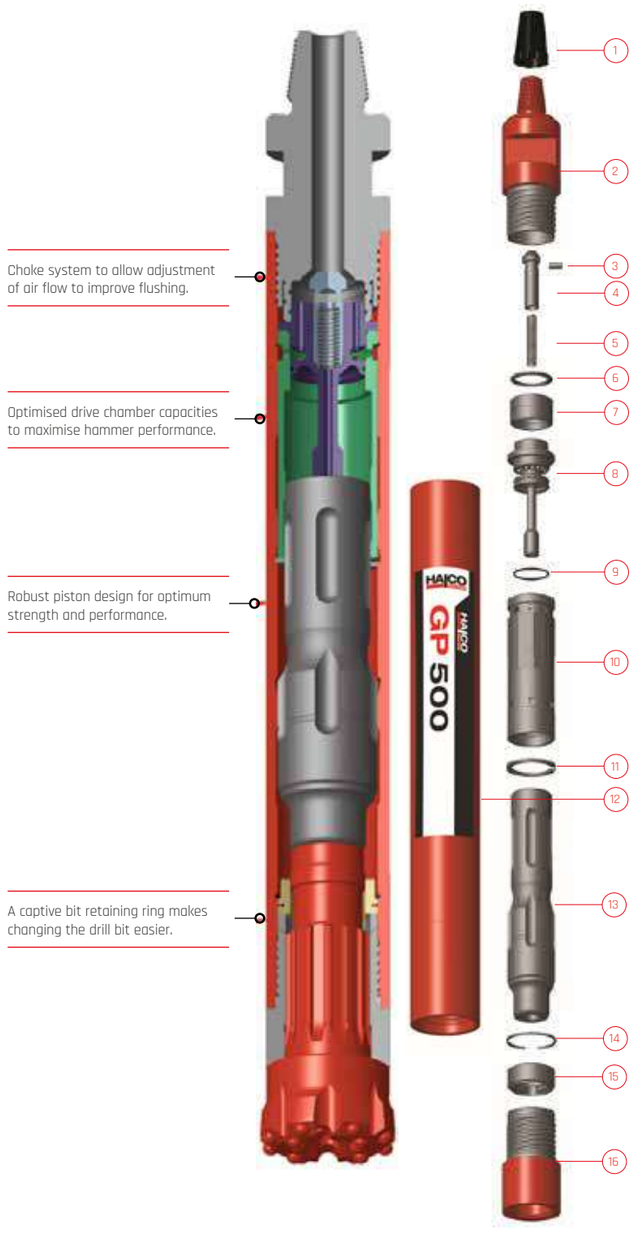
It features a choke facility which helps to adjust air flow through the hammer.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
140mm - 165mm 5 1/2 - 6 1/2"	DHD350	100 - 435 psi (7 - 30 bar)

Hammer Overview

Hammer Model	**GP500**
Part Number	**600426**
Shank	**DHD350**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**140 MM**
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)**



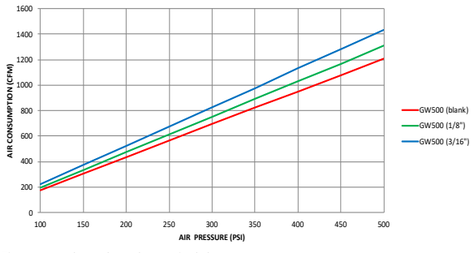
Parts List

Hammer type	GP500		Maintenance Kits	
Shank	DHD350			
Part number	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 - 4.5mm	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**

Air Consumption



Figures are based on theoretical data

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
140mm - 165mm 5 1/2 - 6 1/2"	QL50	100 - 435 psi (7 - 30 bar)

Hammer Overview

Hammer Model	**GP500**
Part Number	**600448**
Shank	**QL50**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**130 MM**
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)**

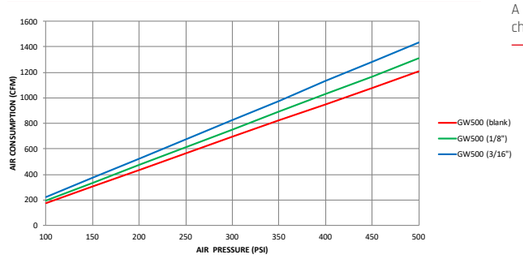
Parts List

Hammer type	GP500		Maintenance Kits	
Shank	QL50			
Part number	600448		Service Kit	Repair Kit
Item	Description	Part No.	SK83	RK158
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
17	Bit Retaining Ring	604933		1
18	Chuck Lock ring	604949		
19	Chuck	604934		
	Foot Valve	603252		1

Alternative thread connections

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

Air Consumption

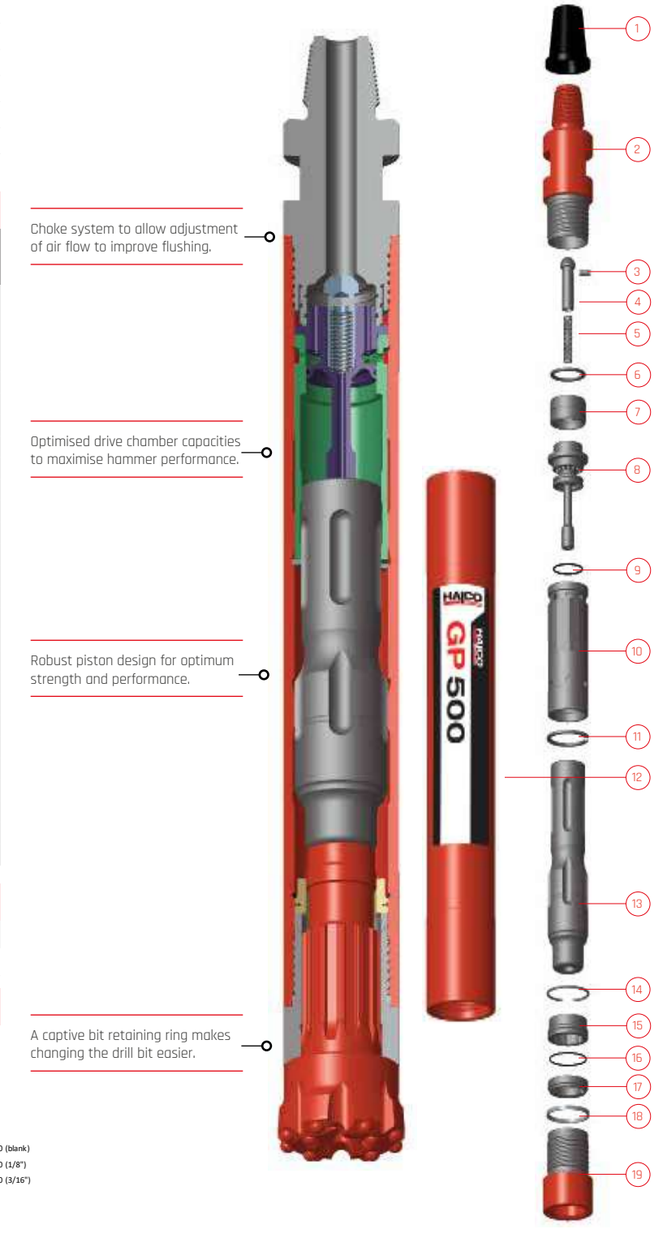


5" GP500 - QL50

GP500 - QL50

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.



5" Mach 50

MACH 50

The Mach 50 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures.

With a proven track record of performance and reliability, the Mach 50 operates at a high frequency which makes it ideal for broken unstable ground conditions.

The hammer is fitted with a reversible cylinder to prolong the service life, it also requires only a few tools to service and maintain.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
127mm - 165mm 5" - 6 1/2"	HALCO 5	100 - 435 psi (7 - 30 bar)

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**
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		Service Kit	Repair Kit
Part number	600046			
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 up 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

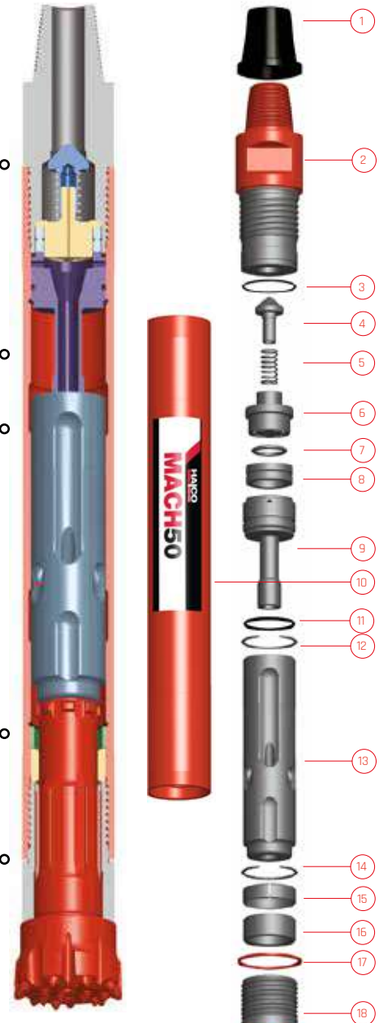
Top Adaptor with internal N.R.V. (Non Return Valve) replaceable air distributor.

Reversible cylinder.

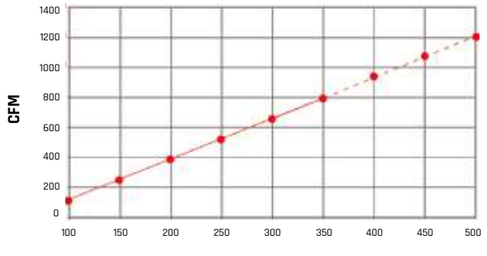
Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimise performance.

Halco Mach 50 shank reduces contact stresses and wear rates.



Air Consumption



6" Super Dominator 600

SUPER DOMINATOR 600

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.V.R. (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 - 500psi (7 - 35bar). Drilling diameters of 152mm - 241mm (6 1/8 - 9 1/2").

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
152mm - 241mm 6" - 9 1/2"	DHD 360	100 - 500 psi (7 - 35 bar)

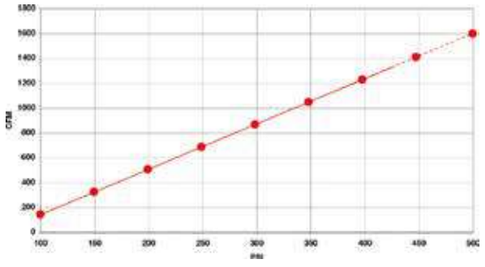
Hammer Overview

Hammer Model	**SDOM600**
Part Number	**600272**
Shank	**DHD360**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**152 MM**
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.		
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

Air Consumption

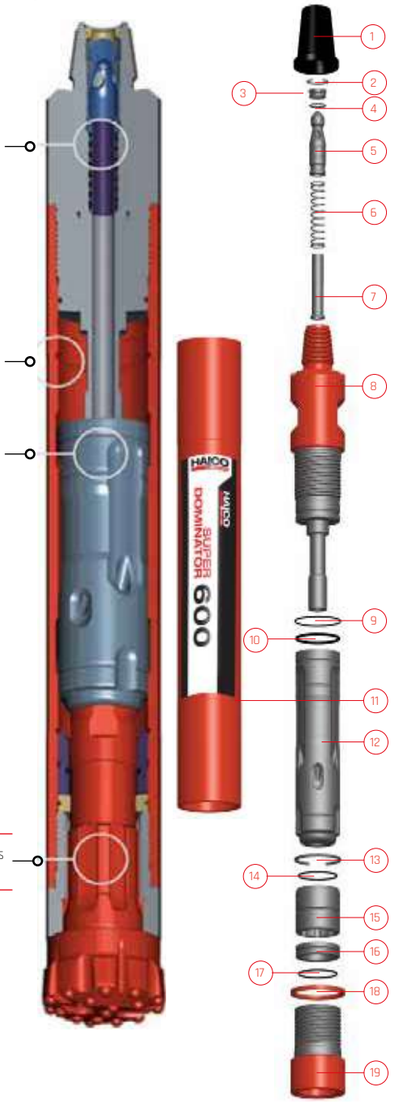


One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

Revised chamber volumes and cycle timing to optimise performance.

Simplified piston volumes and cycle timing to optimise performance.

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



6" Super Dominator 650HD Snub

SUPER DOMINATOR 650HD SNUB

The Super Dominator 650 HD combines the raw power of the Super Dominator 600 with the extended hammer life in abrasive conditions due to its heavy duty and reversible cylinder.

The unique one piece top adaptor with N.R.V (Non Return Valve) makes it easy to maintain and service.

Super Dominator 650 requires only a few simple tools to service and maintain the hammer.

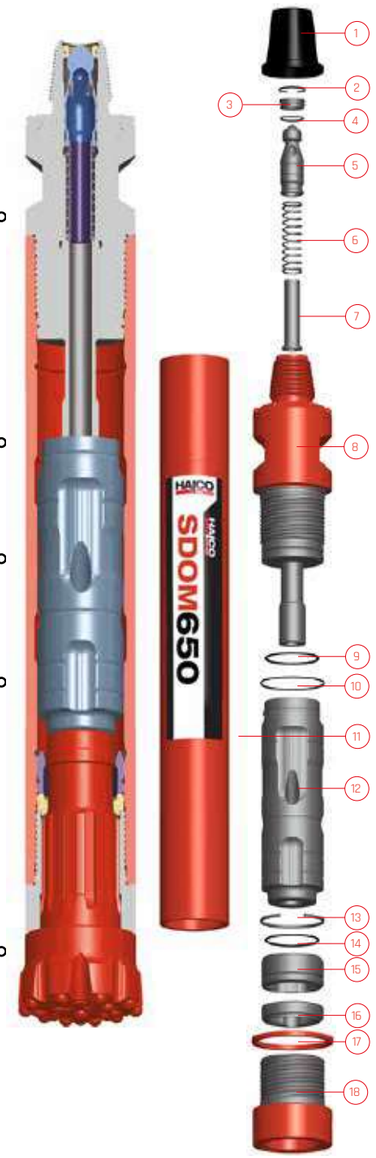
One piece top adaptor reduces internal parts. No make-up required.

Revised reversible chamber volumes and cycle timing to optimise performance.

Simplified piston geometry for improved balance and location within cylinder.

Reversible cylinder.

The QL 60 shank reduces contact stresses and wear rates.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
165mm - 220mm 6 1/2" - 8 5/8"	QL60	100 - 500 psi (7 - 35 bar)

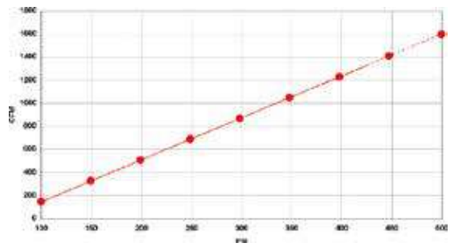
Hammer Overview

Hammer Model	**SDOM650HD Snub**
Part Number	**600467**
Shank	**QL60**
Thread connection	**3 1/2" API Reg Pin with carbides**
Minimum bit diameter	**165 MM**
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.	SK03	RK04
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

Air Consumption



6" GP600

GP 600

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

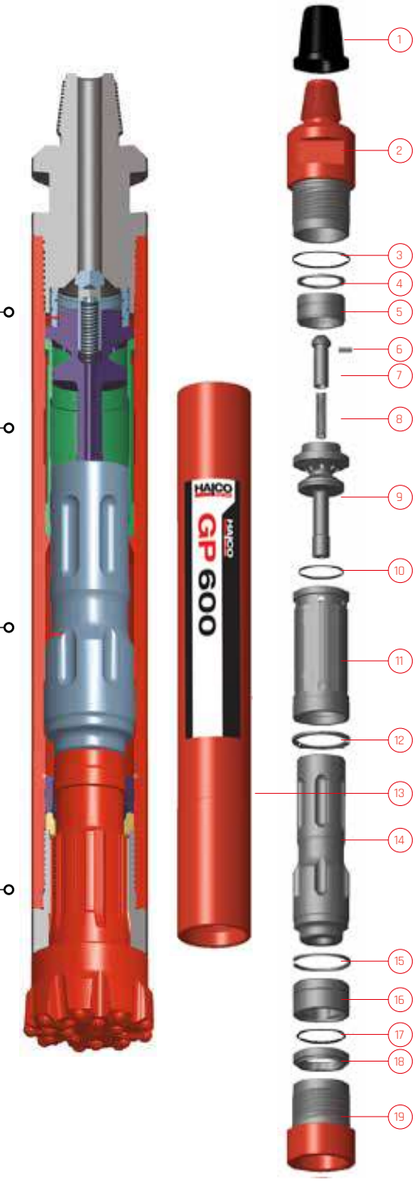
It features a choke facility which helps to adjust air flow through the hammer.

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.

12 spline QL60 shank reduces contact stress and wear rates.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
152mm - 203mm 6 1/8 - 8"	QL60 DHD 360	100 - 500 psi (7 - 35 bar)

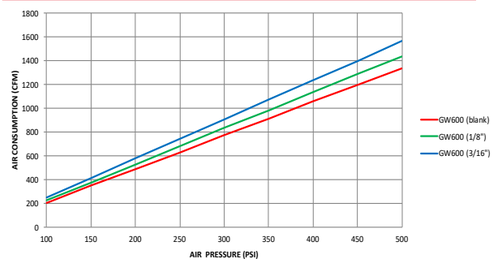
Hammer Overview

Hammer Model	**GP600**
Part Number	**600427**
Shank	**QL60**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**152 MM**
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 Distributor	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	Guide Bush	604518		1
17	O-Ring	747105	1	1
18	Bit Retaining Ring	604693		1
19	Chuck	604692		1
	Foot Valve	602852		1

Air Consumption



Figures are based on theoretical data

6" GP600 - QL60HD

GP600HD - QL60HD

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.

AT A GLANCE:

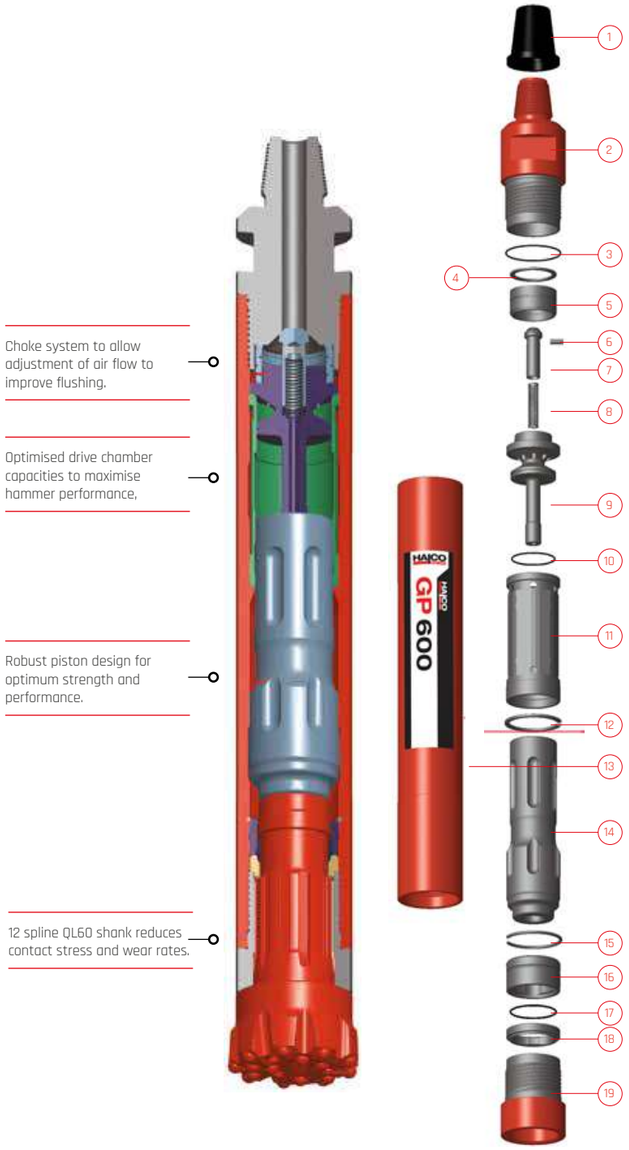
SIZE	SHANK	AIR PRESSURE
156mm - 203mm 6 1/8 - 8"	QL60	100 - 500 psi (7 - 35 bar)

Hammer Overview

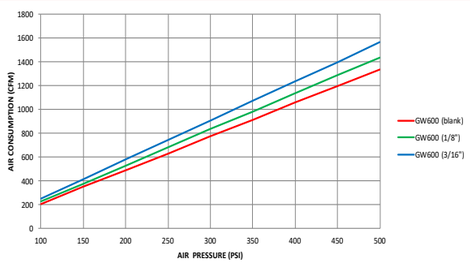
Hammer Model	**GP600HD**
Part Number	**600480**
Shank	**QL60**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**156 MM**
Hammer flat size	**101mm (3.976")**
Weight	**86 Kg (189.2 lbs)**
Outside diameter	**146mm (5.75")**
Length (shoulder to shoulder)	**1035mm (40.7")**
Minimum weight on bit	**500 Kg (1100 lbs)**
Maximum weight on bit	**1500 Kg (3300 lbs)**

Parts List

Hammer type	GP600HD		Maintenance Kits	
Shank	QL60		Service Kit	Repair Kit
Part number	600480			
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	Guide Bush	604518		
17	O-Ring	747105		1
18	Bit Retaining Ring	604693		1
19	Chuck	605022		1
	Foot Valve			



Air Consumption



6" GP600HD - DHD360

GP600HD - DHD360

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.

AT A GLANCE:

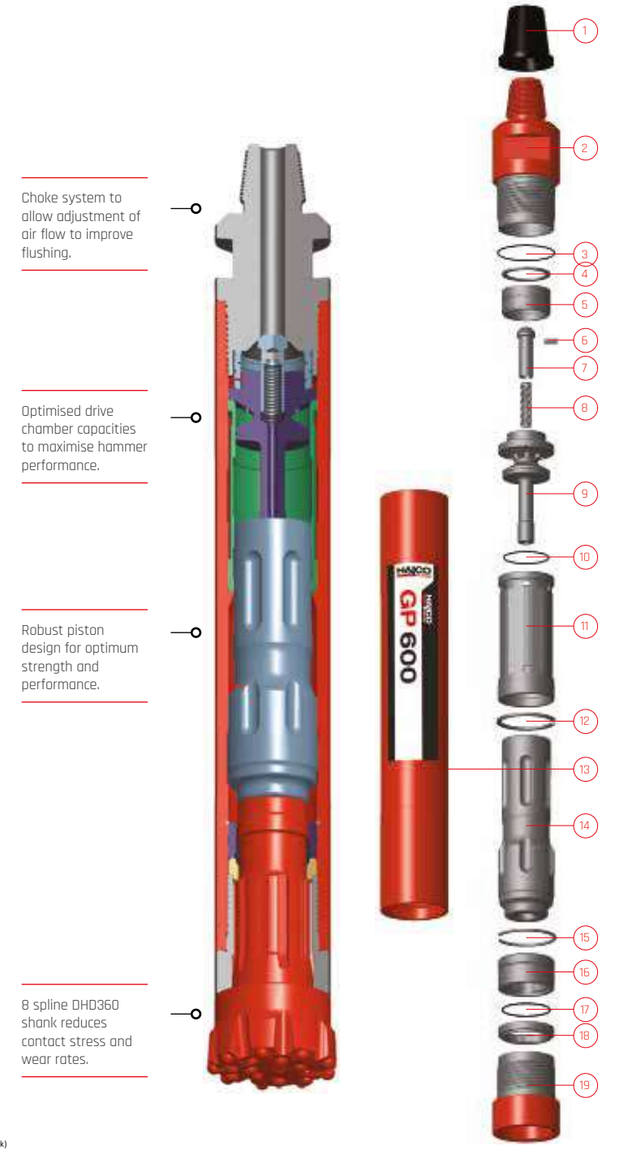
SIZE	SHANK	AIR PRESSURE
156mm - 203mm 6 1/8 - 8"	DHD360	100 - 500 psi (7 - 35 bar)

Hammer Overview

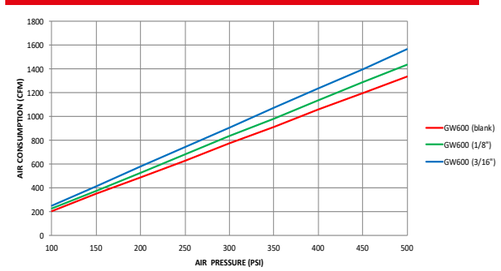
Hammer Model	**GP600HD**
Part Number	**600449**
Shank	**DHD360**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**156 MM**
Hammer flat size	**101mm (3.976")**
Weight	**86 Kg (189 lbs)**
Outside diameter	**144.75mm**
Length (shoulder to shoulder)	**1035mm (40.7")**
Minimum weight on bit	**500 Kg (1100 lbs)**
Maximum weight on bit	**1500 Kg (3300 lbs)**

Parts List

Hammer type	GP600HD		Maintenance Kits	
Shank	DHD360		Service Kit	Repair Kit
Part number	600449			
Item	Description	Part No.	SK68	
1	Thread Protector	201701		
2	Top Adaptor	604562		
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	N.R.V.	604444		1
5	N.R.V Spring	760079	1	1
8	Air Distributor	604514		
10	O-Ring	768043	1	1
11	Liner	604930		
12	Square Snap Ring	604929	1	1
13	Cylinder	604938		
14	Piston	604942		
15	Snap Ring	783056		1
16	Guide Bush	604941	1	1
17	O-Ring	747105	1	1
15	Bit Retaining Ring	604940		1
17	Chuck	604939		1
	Foot Valve	601595		1



Air Consumption



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
152mm - 203mm 6 1/8 - 8"	HALCO 6	100 - 435 psi (7 - 30 bar)

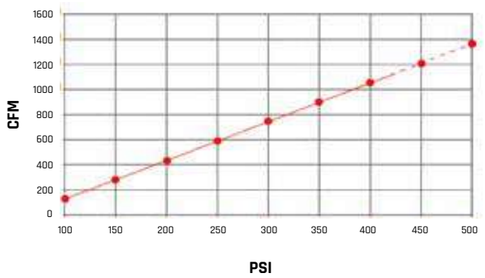
Hammer Overview

Hammer Model	**MACH 60**
Part Number	**600035**
Shank	**Halco 6**
Thread connection	**3 1/2" API Reg Pin Up**
Minimum bit diameter	**152 MM**
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		
3	Non Return Valve	601560		1
4	N.R.V. Spring	760079	1	1
5	N.R.V. Housing	601558		
6	Compression Ring	601562	1	1
7	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

Air Consumption



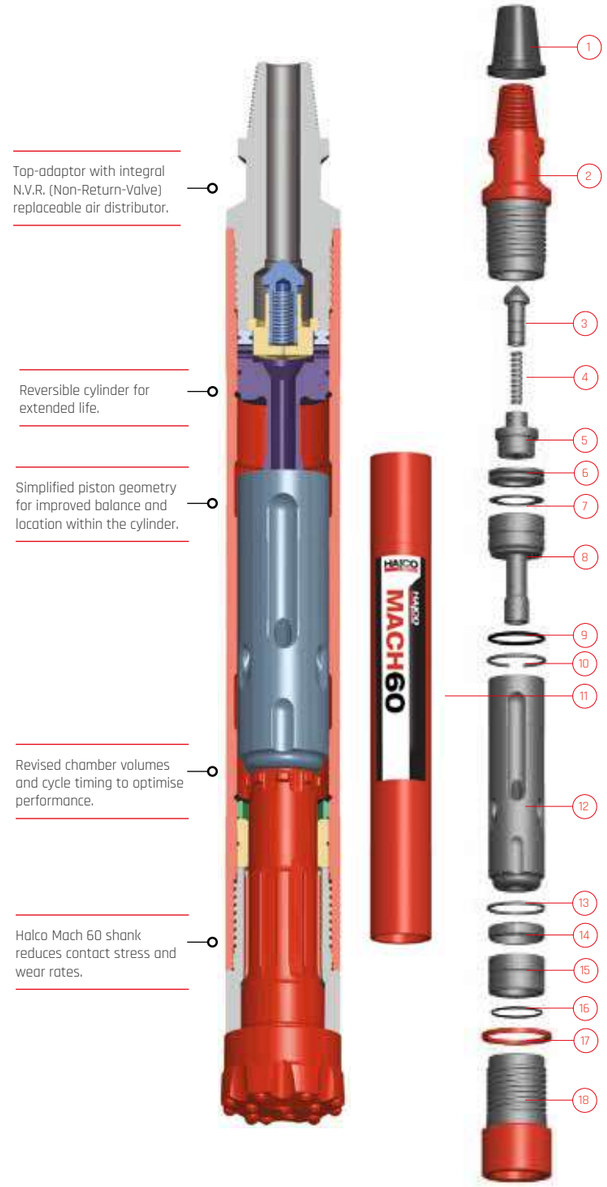
6" Mach 60

MACH 60

The Mach 60 is a general purpose hammer suitable for all rock conditions at a wide range of air pressures.

With a proven track record of performance and reliability, the Mach 50 operates at a high frequency which makes it ideal for broken unstable ground conditions.

The hammer is fitted with a reversible cylinder to prolong the service life, it also requires only a few tools to service and maintain.



8" Dominator 800

DOMINATOR 800

The Dominator 800 is a general purpose hammer suitable for a wide range of air pressures.

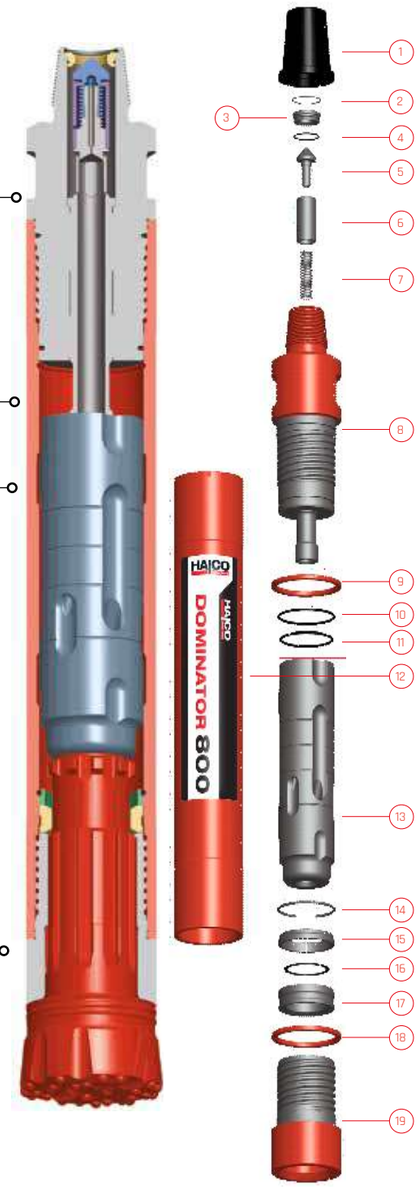
A low to mid range air volume hammer with a one piece top adaptor. The Dominator 800 has a unique air distributor finger which is integral with the top adaptor and requires no shimming which simplifies servicing.

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 optimise performance.

Simplified piston geometry for improved balance and location within cylinder.

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



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
200mm - 311mm 7 7/8 - 12 1/4"	DHD 380	100 - 500 psi (7 - 35 bar)

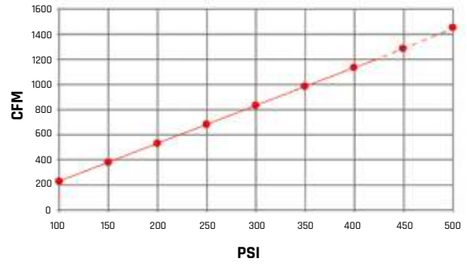
Hammer Overview

Hammer Model	**DOM800**
Part Number	**600309**
Shank	**DHD380**
Thread connection	**4 1/2" API Reg Pin**
Minimum bit diameter	**200 MM**
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		Service Kit	Repair Kit
Part number	600309			
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	Containment Band	603549	1	1
17	Bit Retaining Ring	603043		1
18	Chuck Spacer	603576	1	1
19	Chuck	603495		1
	Foot Valve	601819		1

Air Consumption



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
200mm - 311mm 7 7/8 - 12 1/4"	QL80	100 - 500 psi (7 - 35 bar)

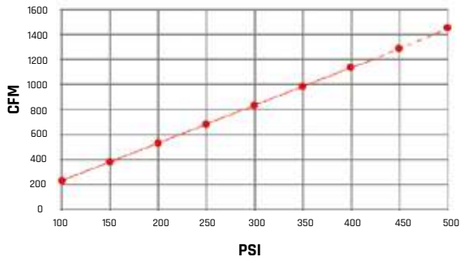
Hammer Overview

Hammer Model	**DOM800**
Part Number	**600374**
Shank	**QL80**
Thread connection	**4 1/2" API Reg Pin**
Minimum bit diameter	**200 MM**
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		Service Kit	Repair Kit
Part number	600374			
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	Guide Bush	604346		1
17	Bit Retaining Ring	604347		1
18	Chuck Spacer	603576	1	1
19	Chuck	604345		1
	Foot Valve	603334		1

Air Consumption



8" Dominator 800

DOMINATOR 800

The Dominator 800 is a general purpose hammer suitable for a wide range of air pressures.

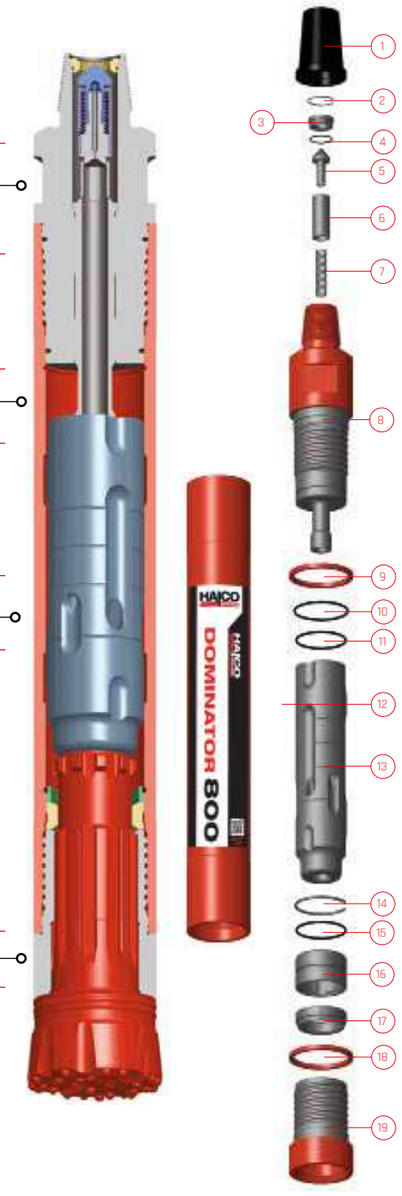
A low to mid range air volume hammer with a one piece top adaptor. The Dominator 800 has a unique air distributor finger which is integral with the top adaptor and reduces requirements for shimming.

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.

Heavy duty cylinder for extended hammer life.



8" Dominator 800

DOMINATOR 800

The Dominator 800 is a general purpose hammer suitable for a wide range of air pressures.

A low to mid range air volume hammer with a one piece top adaptor. The Dominator 800 has a unique air distributor finger which is integral with the top adaptor and reduces requirements for shimming.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
200mm - 311mm 7 7/8 - 12 1/4"	HALCO 8	100 - 500 psi (7 - 35 bar)

Hammer Overview

Hammer Model	**DOM800**
Part Number	**600310**
Shank	**Halco 8**
Thread connection	**4 1/2" API Reg Pin**
Minimum bit diameter	**200 MM**
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

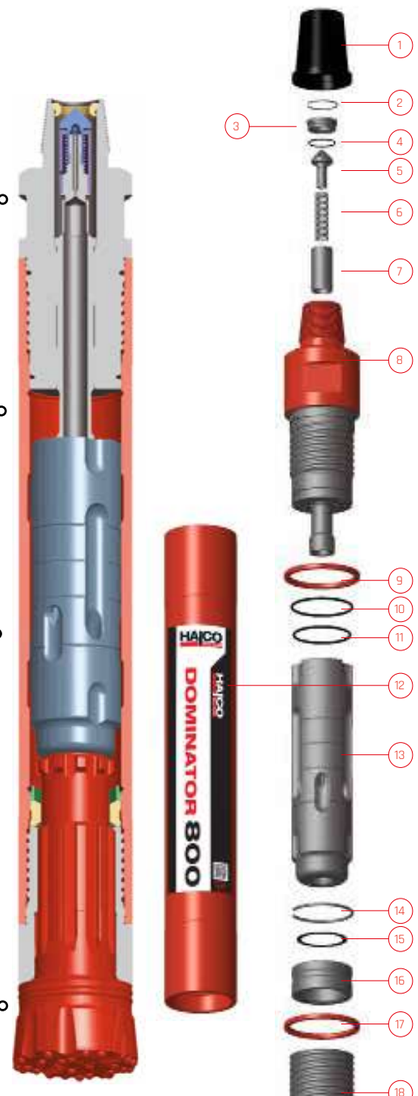
Hammer type	DOM800		Maintenance Kits	
Shank	Halco 8		Service Kit	Repair Kit
Part number	600310			
Item	Description	Part No.	SK25	RK78
1	Thread Protector	207295		
2	Snap Ring	783034	1	1
3	N.R.V. Seat	602887		1
4	O-Ring	768150	1	1
5	Non Return Valve	602285		1
6	N.R.V. Shield	603696		1
7	N.R.V. Spring	760108	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

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

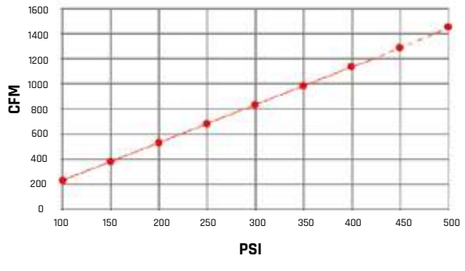
Revised chamber volumes and cycle timing to optimize performance.

Simplified piston geometry for improved balance and location within cylinder.

Heavy duty cylinder for extended hammer life.



Air Consumption



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
222mm - 270mm 8 3/4 - 10 5/8"	QL80	100 - 500 psi (7 - 35 bar)

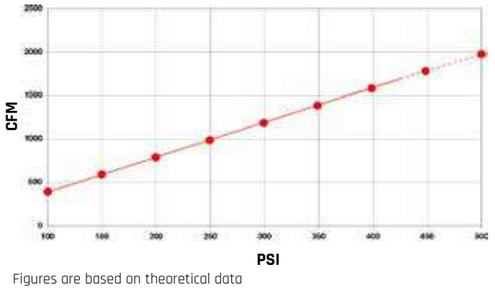
Hammer Overview

Hammer Model	**DOM850**
Part Number	**600245**
Shank	**QL80**
Thread connection	**4 1/2" API Reg Pin**
Minimum bit diameter	**222 MM**
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		Service Kit	Repair Kit
Part number	600245			
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

Air Consumption



Figures are based on theoretical data

8" Dominator 850

DOMINATOR 850

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 piston and valveless air cycle providing 50% increase in stroke.

The Dominator 850 has a reversible cylinder for prolonged hammer life and benefits from a one piece top adaptor with N.R.V (Non Return Valve), this makes it easier to maintain and service the hammer.

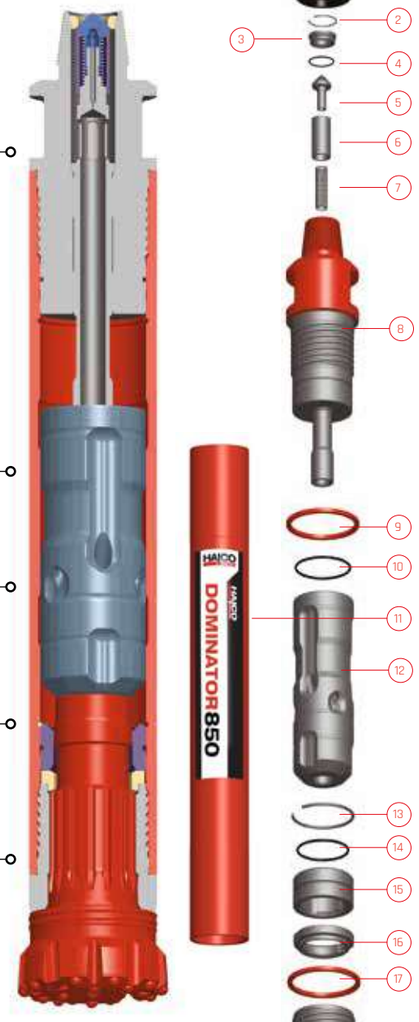
One piece top-adaptor reduces internal parts. No make up required. External N.R.V. for easy maintenance.

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

Reversible cylinder.

Revised chamber volumes and cycle timing to optimise performance.

IR QL80 shank reduces contact stresses and wear rates.

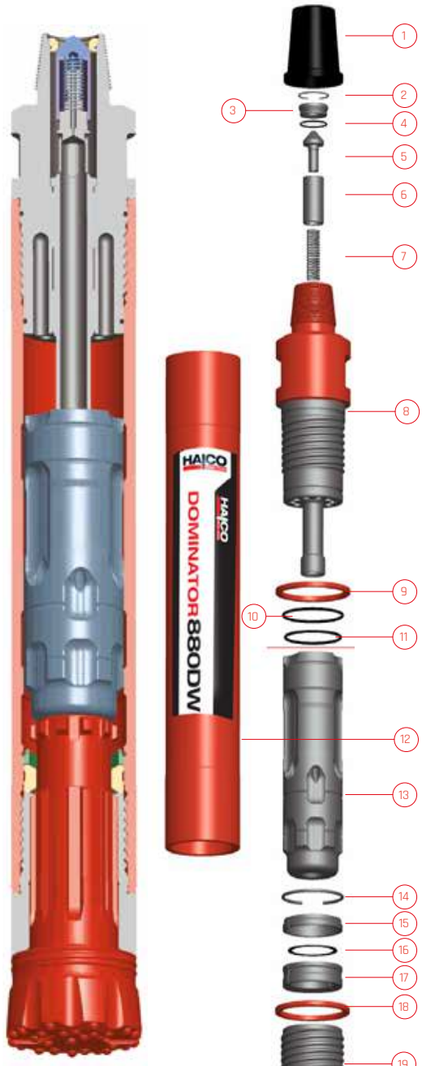


8" Dominator 880 DW

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 880 DW allows for an increased piston weight and improved performance.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
200mm - 311mm 7 7/8 - 12 1/4"	DHD 380	100 - 507 psi (7 - 35 bar)

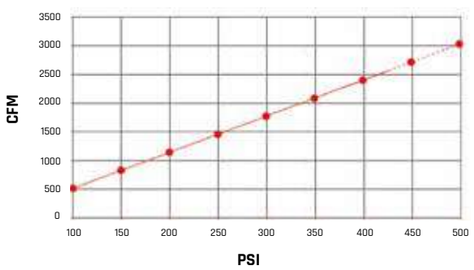
Hammer Overview

Hammer Model	**DOMINATOR 880 DW**
Part Number	**600261**
Shank	**DHD 380**
Thread connection	**4 1/2" API Reg Pin**
Minimum bit diameter	**200 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 DW		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	601819		1

Air Consumption



Figures are based on theoretical data

YOUR DRILLING EXPERT
HALCO Rock Tools

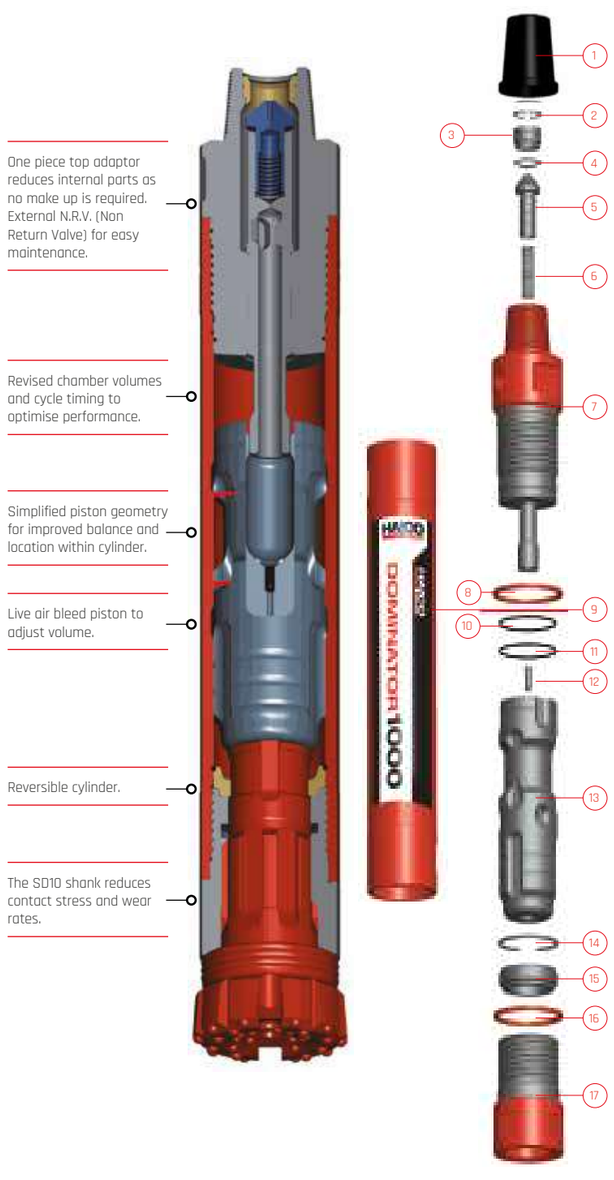
10" Dominator 1000

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.

The Dominator 1000 benefits from a one piece top adaptor with N.R.V (Non Return Valve), this makes it easier to maintain and service the hammer.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
254mm - 381mm 10 - 15"	SD10	100 - 435 psi (7 - 30 bar)

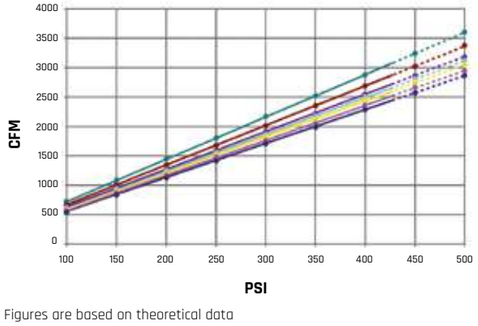
Hammer Overview

Hammer Model	**DOM1000**
Part Number	**600248**
Shank	**SD10**
Thread connection	**6 5/8" API Reg Pin**
Minimum bit diameter	**254 MM**
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	Circlip	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
12	Bleed Plug - Blank	602499		
	Bleed Plug - 3mm	602500		
	Bleed Plug - 4mm	602501		
	Bleed Plug - 5mm	602502		
	Bleed Plug - 6mm	602503		
	Bleed Plug - 8mm	602874		
13	Piston	603433		
14	Snap Ring	783040	1	1
15	Bit Retaining Ring	603435		1
16	Chuck Spacer	603432	1	1
17	Chuck	603436		1
	Foot Valve	603186		1

Air Consumption



Figures are based on theoretical data

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
300mm - 445mm 11 7/8" - 17 1/2"	SD12	100 - 435 psi (7 - 30 bar)

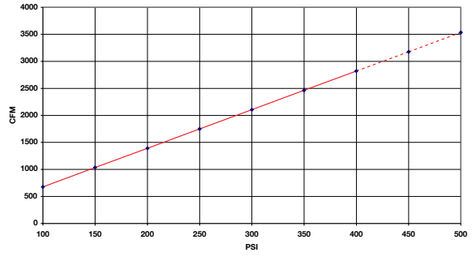
Hammer Overview

Hammer Model	**Mach 120**
Part Number	**600108**
Shank	**SD12**
Thread connection	**6 5/8" API Reg Pin**
Minimum bit diameter	**300 MM**
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

Air Consumption

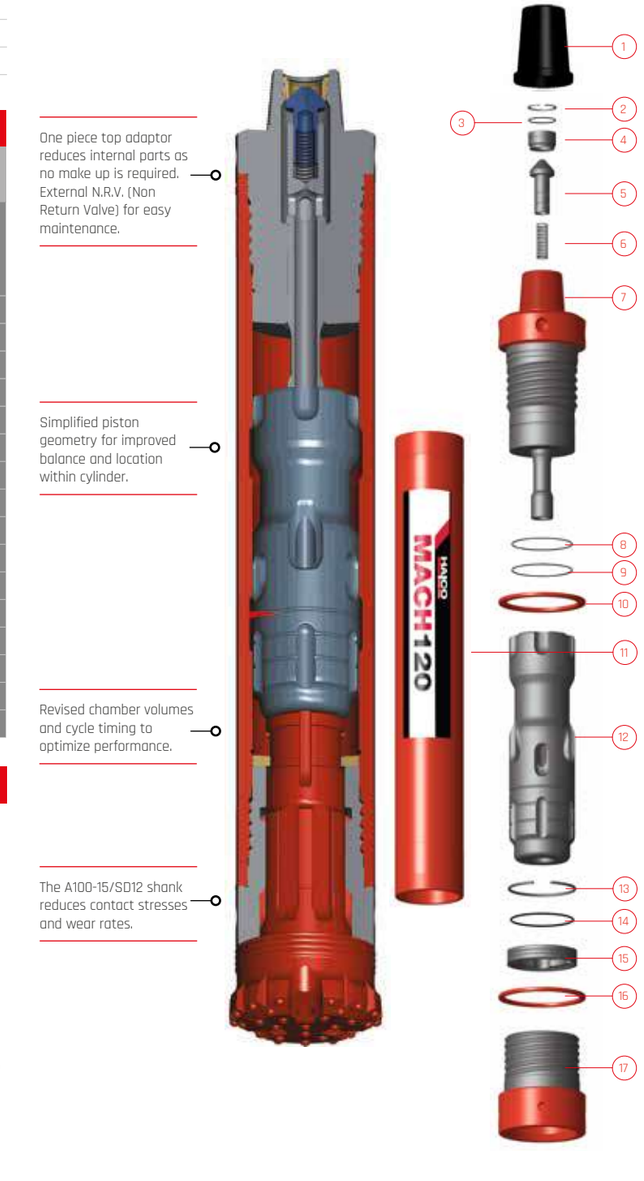


12" Mach 120

Mach 120

Mach 120 has a working pressure range of 170-350 psi (12-24bar) whilst its optimum performance is reached at air pressures of 200psi (14 Bar) and above.

Mach120 has no liner which increases the 140kg piston's blow energy and reduces parts required.w



12" Mach 122

Mach 122

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.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
300mm - 445mm 11 7/8" - 17 1/2"	SD12	100 - 435 psi (7 - 30 bar)

Hammer Overview

Hammer Model	**Mach 122**
Part Number	**600108**
Shank	**SD12**
Thread connection	**6 5/8" API Reg Pin**
Minimum bit diameter	**300 MM**
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

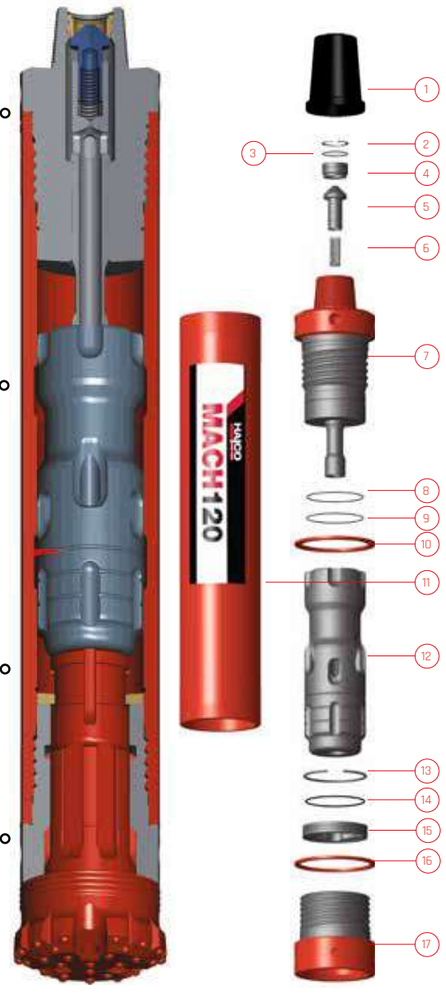
Hammer type	Mach 122		Maintenance Kits	
Shank	SD12		Service Kit	Repair Kit
Part number	600108			
Item	Description	Part No.	SK12	RK19
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor	602639		
8 & 9	O-Ring	768137	2	1
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

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

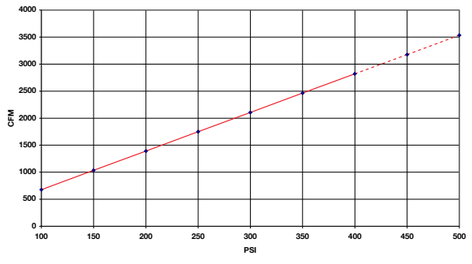
Simplified piston geometry for improved balance and location within cylinder.

Revised chamber volumes and cycle timing to optimize performance.

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



Air Consumption



12" Mach 132

Mach 132

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.

AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
381mm - 489mm 15 - 29 1/4"	DHD112	100 - 435 PSI (7 - 30 bar)

Hammer Overview

Hammer Model	**Mach 132**
Part Number	**600142**
Shank	**DHD112 Pin Drive**
Thread connection	**6 5/8" API Reg Pin**
Minimum bit diameter	**381 MM**
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

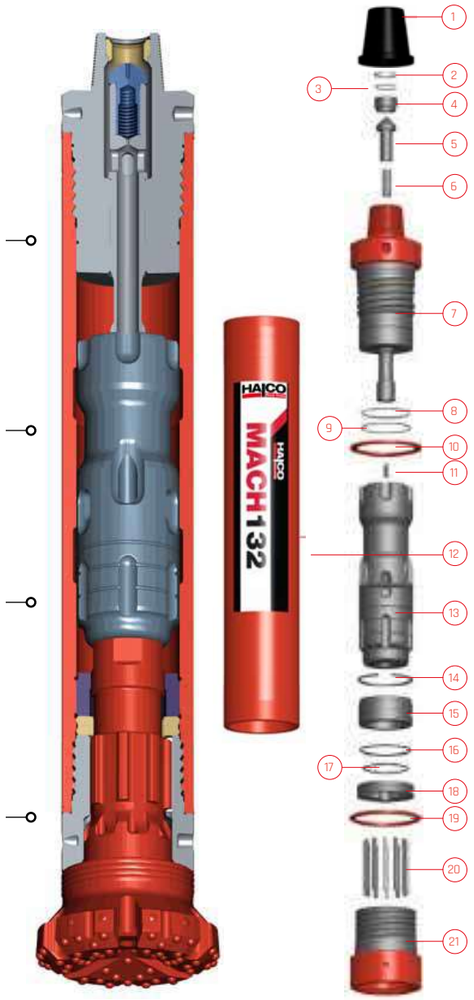
Hammer type	Mach 132		Maintenance Kits	
Shank	DHD112 Pin Drive		Service Kit	Repair Kit
Part number	600142			
Item	Description	Part No.	SK14	RK23
1	Thread Protector	200112		
2	Circlip	777001	1	1
3	O-Ring	768133	1	1
4	N.R.V. Seat	602286		1
5	Non Return Valve	602288		1
6	N.R.V. Spring	760055	1	1
7	Top Adaptor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

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

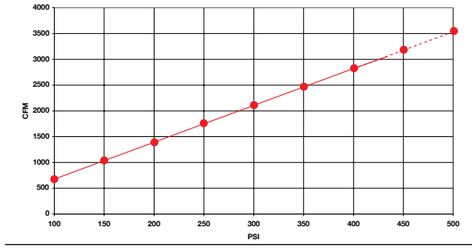
Simplified piston geometry for improved balance and location within the cylinder.

Revised chamber volumes and cycle timing to optimize performance.

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



Air Consumption



12" Superior 1200

Superior 1200

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

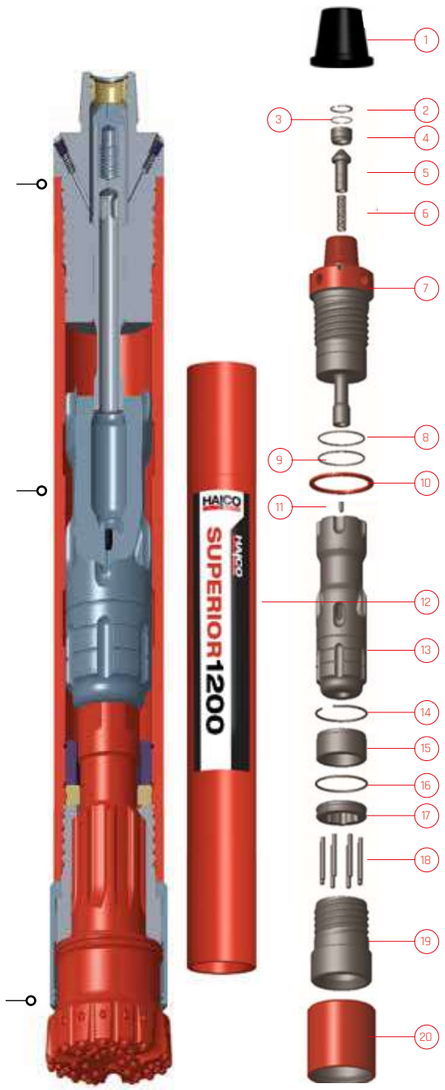
This hammer is suitable for a wide range of air pressures. Its optimum performance is reached at air pressures of 200psi (14 bar) and above.

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.

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
381 - 660mm (15" - 19 1/4")	DHD112	100 - 435psi (7 - 30 bar)

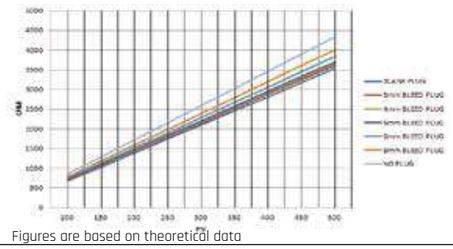
Hammer Overview

Hammer Model	**Superior 1200 - Thrd ctch**
Part Number	**600435**
Shank	**DHD112 Pin Drive**
Thread connection	**6 5/8" API Reg Pin**
Minimum bit diameter	**381mm**
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)**

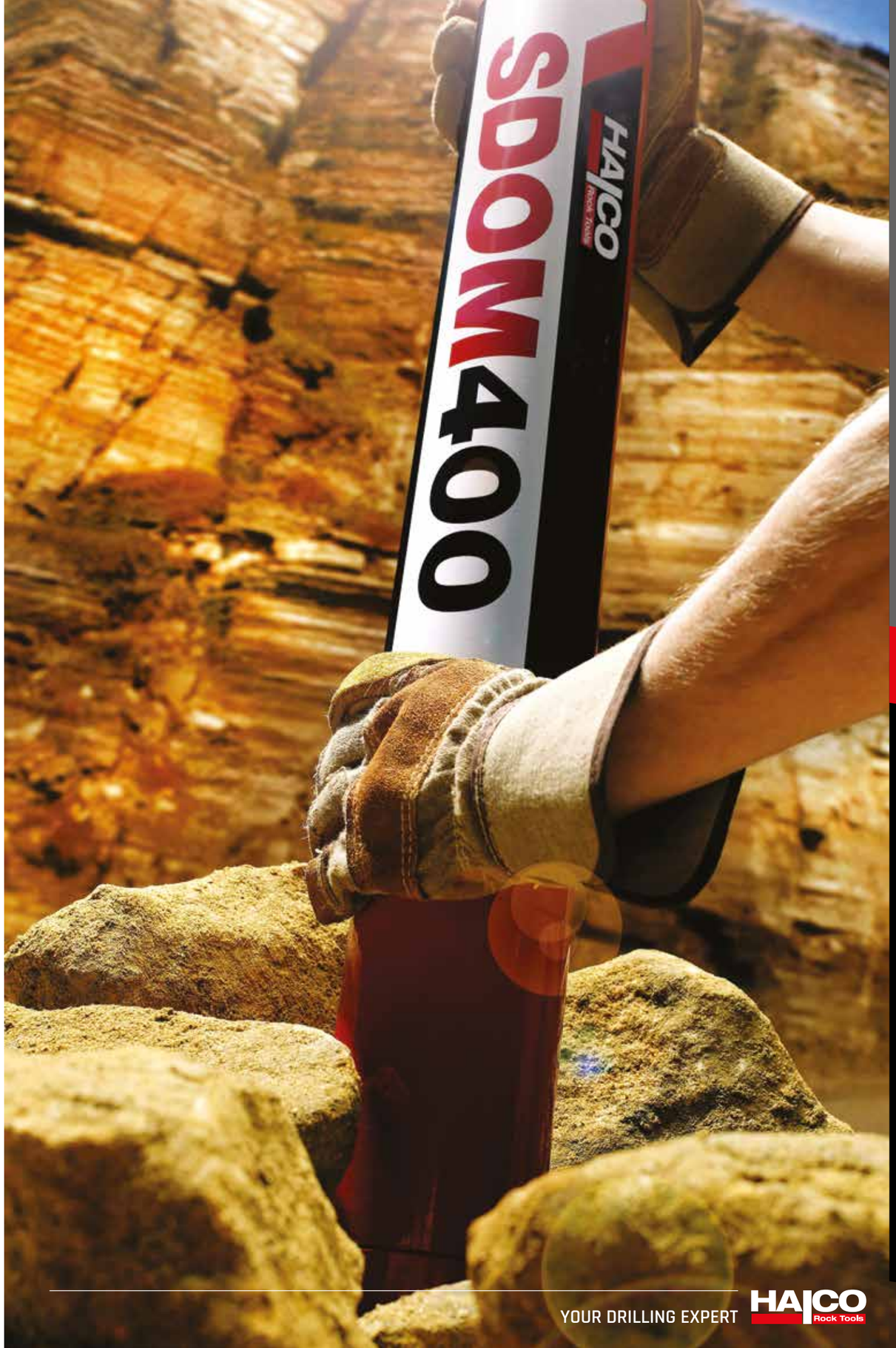
Parts List

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
7	Top Adaptor	605000		
8&9	O-Ring	768137	2	2
10	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	Spacer	602366		1
12	Cylinder	604875		
13	Piston	604503		
14	Snap Ring	783021	1	1
15	Bit Guide Bush	602531		1
16	O-Ring	768184	1	1
	Viton Band Containment	603819	1	1
17	Bit Retaining Ring	602530		1
18	Drive Pin Set (8)	600564	1	1
19	Bit Catcher Chuck	604727		1
20	Threaded Catcher			
	Foot Valve	602522		

Air Consumption



Figures are based on theoretical data



18" Superior 1800

Superior 1800

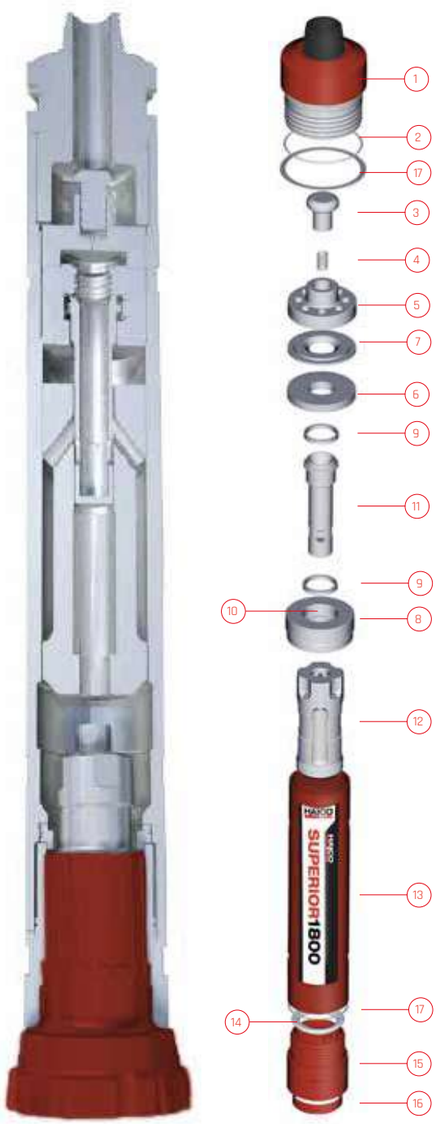
The Superior 1800 has been designed for high performance drilling in medium to hard rock conditions. Design features include a jetted back head and a variable air bleed piston to enable greater up hole velocity.

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

Variable bypass porting has been added to the top adapter.

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.



AT A GLANCE:

SIZE	SHANK	AIR PRESSURE
457 - 660mm 18 - 26"	NUMA180, SD-18 QL 200	100 - 435 psi (7 - 30 bar)

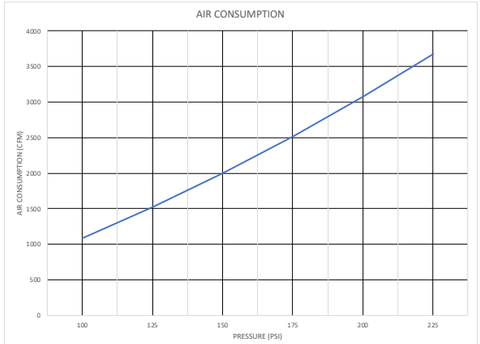
Hammer Overview

Hammer Model	**Superior 1800**
Part Number	**600191**
Shank	**NUMA 180**
Thread connection	**8 5/8" API Reg Pin**
Minimum bit diameter	
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		Maintenance Kits	
Shank	NUMA 180			
Part number	600191		Service Kit	Repair Kit
Item	Description	Part No.	SK98	RK155
1	Top Adaptor 8-5/8" Pin	605060		
2	Top Adaptor 'O' Ring	768224	1	1
3	Check Valve	605047		1
4	Check Valve Spring	760164	1	1
5	Valve Chest	605048		
6	Compression Buffer	605049		1
7	Buffer Cover	605050		
8	Tube Holder	605051		
9	Tube Buffers (2)	605052		2
10	Tube 'O' Ring	768225	1	1
11	Control Tube	605053		
12	Piston	605054		
13	Cylinder	605055		
14	Bit Retaining Ring	605056		1
15	Chuck	605057		1
16	Chuck Bearing	605058	1	1
17	Breakout Washer	605059	1	1

Air Consumption



Drill Bits

YOUR DRILLING EXPERT

Drill Bit Overview

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

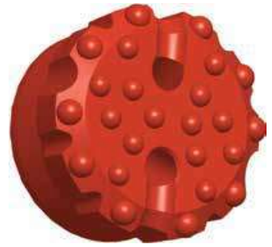
As with all Halco hammers it is crucial that you choose the right drill bit otherwise it will cost you both in time and money. We pride ourselves on having a comprehensive range of drill bits on offer so you can be sure that you will definitely find a suitable bit for any project you are undertaking.

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 available 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.

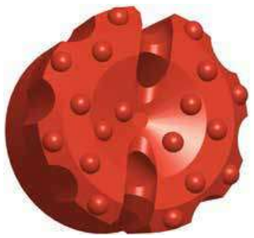


Flat Face

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.

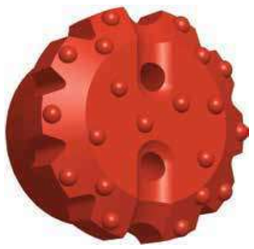


Concave

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.



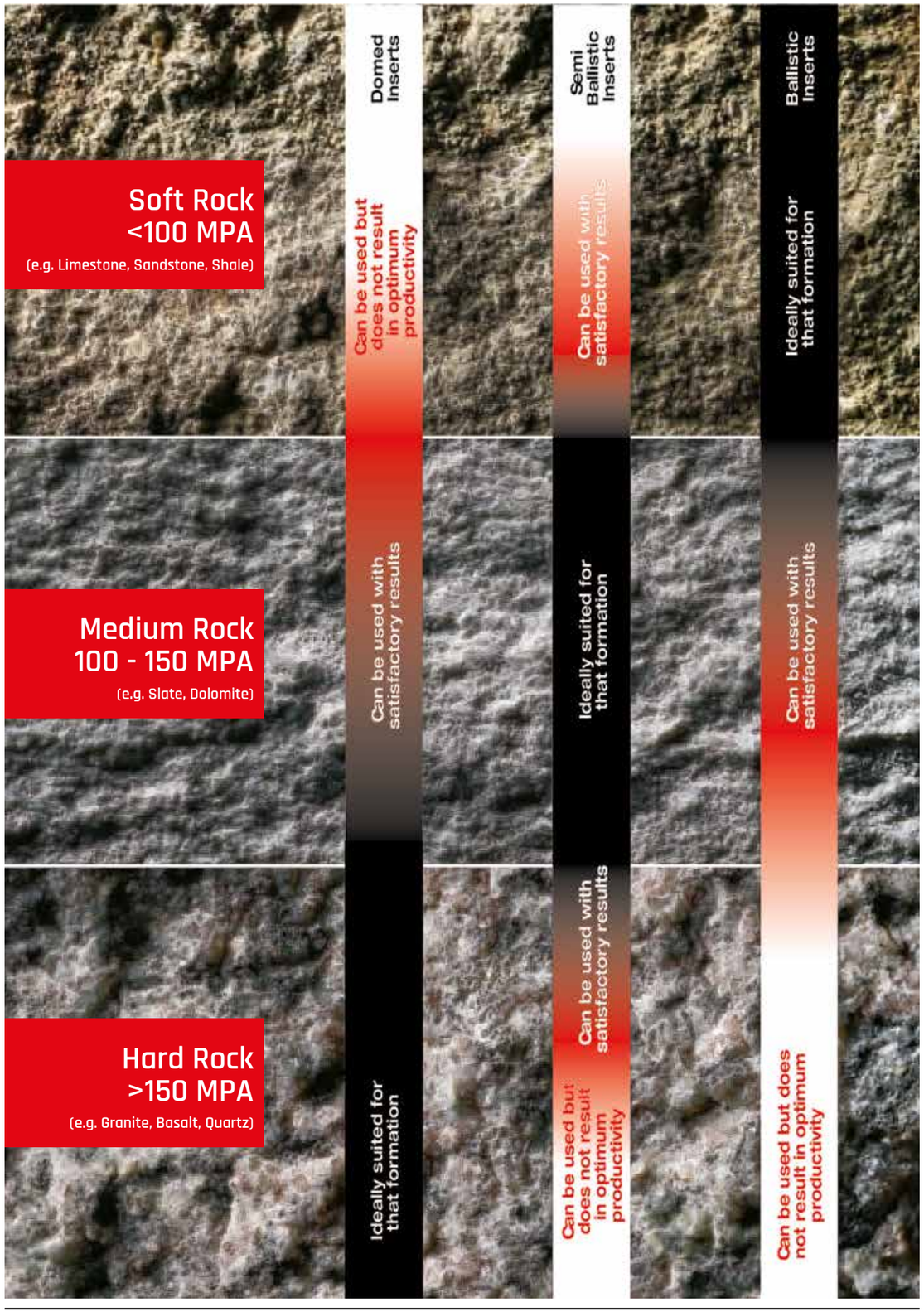
Convex

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

Semi-Ballistic Inserts

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

Drill Bit Insert Guide



Shank Guide

DOMINATOR 100 / DOM 10
45 mm (1.77")
168 mm (6.61")
10 Spline

MACH 20 / DOM 20
165 mm (6.50")
6 Spline

MACH 303
49 mm (1.93")
170 mm (6.69")
8 Spline

MD 3.5
58.5 mm (2.3")
181 mm (7.12")
8 Spline

DHD 3.5 / I.R. 3.5 / DOM 30
58.5 mm (2.3")
181 mm (7.12")
8 Spline

SD 450
60 mm (2.36")
210 mm (8.27")
12 Spline

MACH 44 / HALCO 4
56 mm (2.2")
245 mm (9.65")
8 Spline

DHD 340A / Cop 44 / DHD 4
56 mm (2.2")
210 mm (8.27")
8 Spline

TD40 / COP 44 G / QLX 40
57mm 2.24")
209mm 8.23")
12 Spline

MACH 50 / HALCO 5
52 mm (2.05")
266 mm (10.47")
8 Spline

SD 5
52 mm (2.05")
260 mm (12.68")
8 Spline

DHD 350R / Cop 54 / DHD 5
64 mm (2.52")
261 mm (10.28")
8 Spline

QL 50 / TD 50 / Cop 54GE
52.5 mm (2.07")
240 mm (9.45")
12 Spline

MACH 60 / HALCO 6
51 mm (2.00")
320 mm (12.6")
8 Spline

SD 6
51 mm (2.00")
322 mm (12.68")
8 Spline

DHD 360 / DHD 6 / Cop 64
51 mm (2.00")
306 mm (12.05")
8 Spline

QL 60 / TD60/65/70 / Cop 64G
60 mm (2.36")
254 mm (10.00")
12 Spline

Mach 80 / HALCO 8
51 mm (2.00")
350 mm (13.78")
8 Spline

SD 8
56.5 mm (2.22")
320 mm (12.60")
8 Spline

DHD 380 / Cop 84 / DHD 8
50 mm (1.97")
350 mm (13.78")
10 Spline

QL 80 / TD 80
54 mm (2.13")
332 mm (13.07")
16 Spline

TD 90
54mm 2.13")
332mm 13.07")
16 Spline

SD 10
55 mm (2.17")
365 mm (14.01")
8 Spline

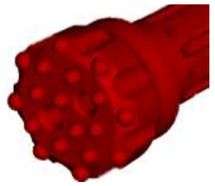
DHD 112
56mm (2.20")
491mm (19.33")
8 Spline Pin Drive

DHD 112S
52.5 mm (2.07")
635 mm (25.04")
12 Spline Pin Drive

SD 12
44.5 mm (1.95")
470 mm (18.50")

QL 120
69.5 mm (2.74")
492 mm (19.37")

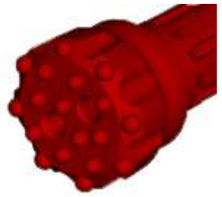
1" Halco 1



Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650017	55	2	Flat Face	Domed	2	11mm (6)	9mm (2)
650032	64	2 1/2	Flat Face	Domed	2	11mm (6)	9mm (2)
653001	64	2 1/2	Flat Face	Semi-Ballistic	2	11mm (6)	9mm (3)

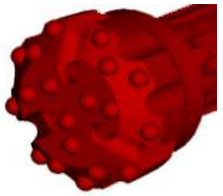
2" Halco 2



Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650952	70	2 3/4	Flat Face	Domed	2	11mm (6)	9mm (4)
650953	76	3	Flat Face	Domed	2	11mm (6)	9mm (5)
650954	76	3	Flat Face	Ballistic	2	11mm (6)	9mm (5)

3" IR3.5



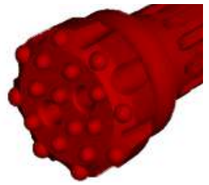
Convex

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650622	90	3 1/2	Convex	Semi Ballistic	2	11mm (6)	11mm (7)
650623	90	3 1/2	Convex	Domed	2	11mm (6)	11mm (7)
650609	95	3 3/4	Convex	Semi Ballistic	2	11mm (8)	11mm (7)
650621	100	4	Convex	Domed	2	11mm (8)	11mm (7)
650610	100	4	Convex	Semi Ballistic	2	11mm (8)	11mm (7)
650624	104	4 1/10	Convex	Domed	2	13mm (8)	11mm (8)

3" MD3.5

Convex

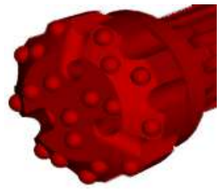
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653354	95	3 3/4"	Convex	Semi Ballistic	2	14mm (6)	14mm (5)
653628	105	4 1/4	Convex	Ballistic	2	11mm (10)	11mm (3)



Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653384	95	3 3/4	Flat Face	Domed	2	14mm (6)	14mm (5)
653349	100	4	Flat Face	Domed	2	11mm (8)	11mm (8)

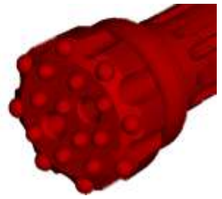
4" DHD340 Bits



Convex

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650968	108		Convex		Semi Ballistic	2	13mm (12)	12mm (3)
653091	110	4 5/16	Convex		Parabolic	2	14mm (8)	14mm (6)
650526	115	4 1/2	Convex		Parabolic	2	13mm (12)	13mm (4)
650967	115	4 1/2	Convex		Parabolic	2	13mm (12)	13mm (4)
653482	127	5	Convex	✔	Ballistic	3	13mm (15)	13mm (5)
653094	140	5 1/2	Concave	✔	Domed	3	16mm (9)	14mm (9)
653683	150	5 7/8	Convex	✔	Domed	2	13mm (12)	13mm (5)
653682	150	5 7/8	Convex	✔	Ballistic	2	13mm (12)	13mm (5)

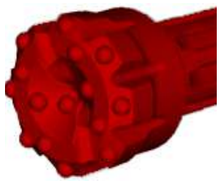
Note * Oversize sold without warranty



Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650955	115	4 1/2	Flat Face		Domed	2	14mm (8)	13mm (10)
653623	115	4 1/2	Flat Face		Domed	2	16mm (8)	13mm (6)
650965	130	5 1/8	Flat Face	✔	Domed	2	14mm (8)	14mm (10)

Note * Oversize sold without warranty

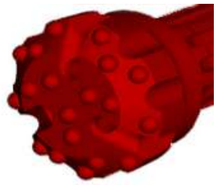


Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650625	115	4 1/2	Concave		Domed	2	14mm (8)	13mm (6) DWB
650680	120	4 3/4	Concave		Domed	2	13mm (8)	13mm (6) DWB
653094*	140	5 1/2	Concave	✔	Domed	3	16mm (9)	14mm (9)

Note * Oversize sold without warranty

4" Halco 4.5 Bits



Convex

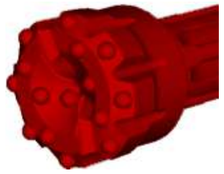
Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653223	110	4 5/16	Convex		Domed	2	14mm (8)	14mm (6)
653217	110	4 1/3	Convex		Ballistic	2	14mm (7)	14mm (7)
653224	115	4 1/2	Convex		Domed	2	14mm (8)	14mm (7)
653209	115	4 1/2	Convex		Ballistic	2	14mm (8)	14mm (7)
653197	127	5	Convex	✔	Ballistic	2	14mm (9)	14mm (9)

Note * Oversize sold without warranty

Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653230	115	4 1/2	Flat Face		Domed	2	14mm (8)	13mm (10)
653650	127	5	Flat Face	✔	Domed	2	16mm (8)	13mm (8)

Note * Oversize sold without warranty



Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653268	127	5	Concave	✔	Domed	2	14mm (8)	13mm (8)

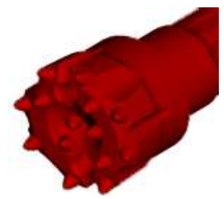
Note * Oversize sold without warranty

4" Halco 4 Bits

Convex

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650931	110	4 5/16	Convex		Domed	2	13mm (12)	13mm (3)
650932	115	4 1/2	Convex		Domed	2	14mm (8)	13mm (8)
650933	120	4 3/4	Convex		Domed	2	14mm (8)	13mm (8)
650466	127	5	Convex	✔	Domed	2	13mm (12)	13mm (4)
650444	140	5 1/2	Convex	✔	Domed	2	13mm (12)	13mm (5)
650445	150	5 7/8	Convex	✔	Domed	2	13mm (12)	18mm (5)

Note * Oversize sold without warranty

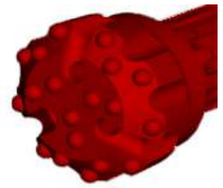


Concave

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650925	127	5	Concave	Semi Ballistic	2	13mm (8)	13mm (8)

Note * Oversize sold without warranty

5" QL50 Bits



Convex

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653238	130	5 1/8	Convex	Ballistic	3	14mm (9)	14mm (9)
653593	140	5 1/2	Convex	D/B	3	14mm (9)	14mm (9)

Flat Face

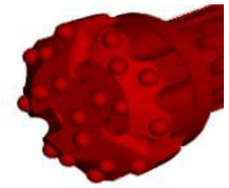
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653235	140	5 1/2	Flat Face	Domed	2	16mm (8)	16mm (8)LGD

Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
670249	140	5 1/2	Concave		Domed	2	16mm (8)	16mm (7)
670250	146	5 3/4	Concave		Domed	2	16mm (8)	16mm (8)
653639	152	6	Concave	✔	Domed	3	16mm (15)	14mm (5)
670700	152	6	Concave	✔	Domed	2	16mm (8)	16mm (8)
653715	165	6 1/2	Concave	✔	Domed	3	16mm (15)	14mm (6)

Note * Oversize sold without warranty

5" Halco 5 Bits

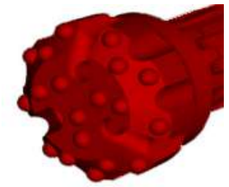


Convex

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bit	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650461	127	5	Convex		Domed	2	13mm (10)	13mm (3)
650838	127	5	Convex		Domed	2	11mm (12)	11mm (6)
650578	140	5 1/2	Convex		Domed	2	16mm (11)	16mm (3)
650463	150	5 7/8	Convex		Domed	2	16mm (11)	16mm (3)
650464	165	6 1/2	Convex	✔	Domed	2	16mm (12)	16mm (4)

Note * Oversize sold without warranty

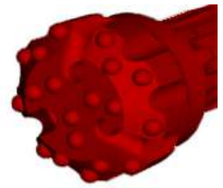
5" Mission 50 Bits



Convex

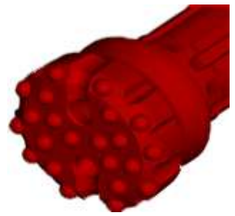
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
671105	140	5 1/2	Convex	Ballistic	3	16mm (9)	16mm (9)

6" QL60 Bits



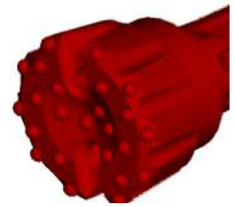
Convex

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653651	171	6 3/4	Convex	Parabolic	3	18mm (13)	18mm (6)



Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653352	165	6 1/2	Flat Face	Domed	2	18mm (10)	18mm (12)
653553	171	6 3/4	Flat Face	Domed	2	18mm (10)	18mm (12)

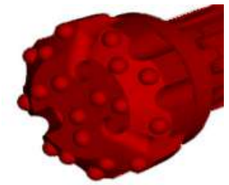


Concave

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
670210	150	6	Concave	Domed	2	16mm (12)	16mm (4)
671131	155	6	Concave	Domed	2	16mm (8)	16mm (8)
670334	159	6 1/4	Concave	Domed			
670208	165	6 1/2	Concave	Domed	2	19mm (8)	16mm (8)
670216	165	6 1/2	Concave	Domed	2	16mm (8)	16mm (8)
670582	165	6 1/2	Concave	Domed	2	16mm (10)	16mm (9)
670592	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (11)
670718	171	6 3/4	Concave	Domed	3	19mm (9)	16mm (11)
670449	171	6 3/4	CC CV	Domed	2		
653118	171	6 3/4	Concave	Domed	2	16mm (8)	16mm (10)
670665	178	7	Concave	Domed	3	16mm (9)	16mm (11)
653128	178	7	Concave	Domed	2	20mm (8)	16mm (11)
670722	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)
653227	190	7 1/2	Concave	Domed	2	16mm (10)	16mm (14)
671064	200	7 7/8	Concave	Domed	3	19mm (9)	16mm (18)
670220	203	8	Concave	Domed	2	16mm (10)	16mm (13)

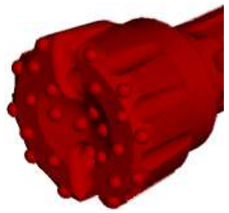
Note * Oversize sold without warranty

6" DHD360 Bits



Convex

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650783	152	6	Convex	Domed	2	16mm (15)	16mm (5)
650795	165	6 1/2"	Convex	Domed	2	16mm (15)	16mm (5)

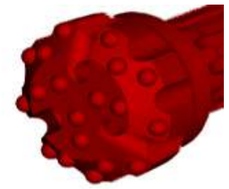


Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
670076	150	6	Concave		Domed	2	16mm (8)	16mm (8)
650783	152	6	Concave		Domed	2	16mm (15)	16mm (5)
670088	165	6 1/2	Concave		Domed	3	16mm (8)	16mm (8)
650789	165	6 1/2	Concave		Domed	2	16mm (8)	16mm (10)
653038	170	6 2/3	Concave		Domed	2	16mm (8)	16mm (10)
653097	180	7	Concave	✔	Domed	2	16mm (8)	16mm (10)
653098	190	7 1/2	Concave	✔	Domed	2	16mm (10)	16mm (14)

Note * Oversize sold without shank warranty

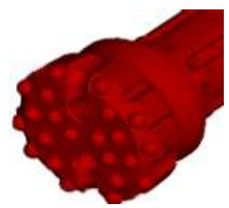
6" Halco 6



Convex

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650585	152	6	Convex		Domed	2	16mm (12)	16mm (4)
650440	200	7 7/8	Convex	✔	Domed	3	16mm (12)	16mm (8)
650441	225	8 6/7	Convex	✔	Domed	3	16mm (15)	16mm (11)
650457	245	9 5/8	Convex	✔	Domed	3	16mm (15)	16mm (12)

Note * Oversize sold without warranty

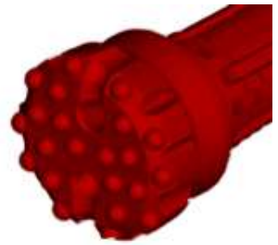


Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650354	191	7 1/2	Flat Face	✔	Domed	3	16mm (13)	16mm (8)

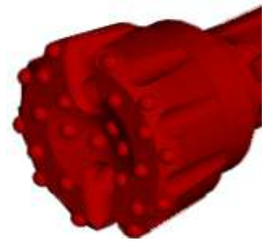
Note * Oversize sold without warranty

8" QL80 Bits



Flat Face

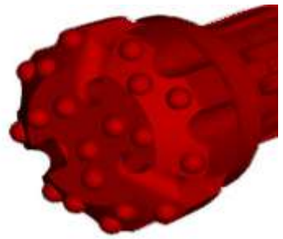
Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653490	203		Flat Face	Domed	2	18mm (10)	18mm (16)



Concave

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653379	203	8	Concave	Domed	2	18mm (10)	18mm (14)
670415		8	Concave	Domed	2	19mm (10)	16mm (14)
671097	222	8 3/4	Concave	Domed	2	18mm (10)	18mm (16)
671116	225	8 7/8	Concave	Domed	3	18mm (9)	18mm (9)
670763	225	8 7/8	Concave	Domed		19mm (10)	19mm (8) 16mm (8)
653711	229	9	Concave	Domed	3	18mm (27)	18mm (9)
671100	229	9	Concave	Domed	3	19mm (21)	16mm (9)
670763	251	9 7/8	Concave	Domed	2	19mm (18)	16mm (8)

8" Halco 8



Convex

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650571	225		Convex		Domed	3	16mm (16)	16mm (10)
650746	254	10	Convex	✔	Domed	2	20mm (15)	20mm (5)
653510	290		Convex	✔	Domed	4	16mm (20)	16mm (18)
650365	311	12 1/4	Convex	✔	Domed	3	20mm (18)	20mm (11)

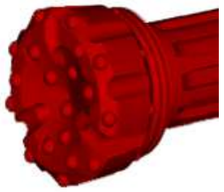
Note * Oversize sold without warranty

8" DHD380 Bits

Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650898	300	11 4/5	FLAT FACE	✔	DOMED	2	20mm (22)	20mm (12)

Note * Oversize sold without warranty

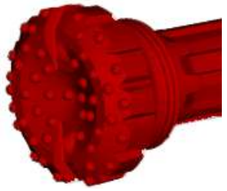


Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650977	200	7 7/8	Concave		Domed	2	16mm (14)	20mm (10)
650373	203	8	Concave		Domed	2	20mm (10)	16mm (14)
650074	216	8 1/2	Concave		Domed	3	13mm (9)	20mm (20)
670437	222	8.3/4	Concave		Domed	2	19mm (14)	19mm (5)
650022	241	9 1/2	Concave		Domed	2	20mm (18)	16mm (10)
650389	254	10.0	Concave		Domed	2	20mm (18)	16mm (11)
653041	311	12 1/4	Concave	✔	Domed	2	20mm (22)	20mm (20)

Note * Oversize sold without warranty

10" SD-10 Bits



Concave

Part Number	Diameter mm	Diameter Inches	Face design	Oversize Bits	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650648	254	10	Concave		Domed	2	20mm (10)	20mm (8) 16mm (11)
650650	305	12	Concave		Domed	3	20mm (21)	20mm (13)
650071	311	12.1/4	Concave	✔	Domed	2	20mm (22)	20mm (24)
650072	381	15	Concave	✔	Domed	3	20mm (27)	20mm (38)

Note * Oversize sold without warranty

12" DHD112 Bits

Extended Head bit catcher Concave

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653631	381	15	Concave	Domed	3	20mm (36)	18mm (24)
653704	422	16 5/8	Concave	Domed	3	20mm (61)	16mm (15)
653552	444	17 1/2	Concave	Domed	3	22.2mm (48)	18mm (18)

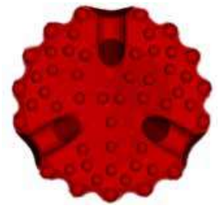
12" SD-12 Bits

Concave

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
650383	311	12 1/4	Concave	Domed	3	20mm (21)	20mm (10)
650376	445	17 1/2	Concave	Domed	3	20mm (48)	20mm (31)

Note standard concave bits have no fishing thread

18" NUMA 180 Bits



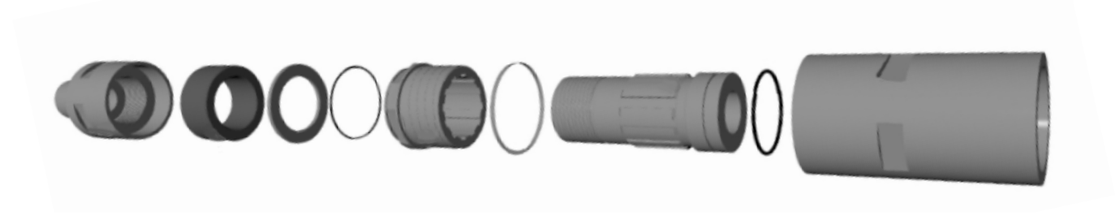
Flat Face

Part Number	Diameter mm	Diameter Inches	Face design	Button shape	Flushing holes	Gauge carbide diameter & Qty	Face carbide diameter & Qty
653762	660	26"	Flat Face	Domed	3	20mm (42)	20mm (89)

Shock Absorbers 2 - 6"

Size	2"	3"	4"	5"	6"
Complete Shock Absorber	**600688**	**600689**	**600690**	**600691**	**600692**
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)

Shock Absorbers 8 - 10"



Size	8"	10"
Complete Shock Absorber	**600693**	**600694**
Effective Length (Shoulder to Shoulder)	585mm (23")	635mm (25")
Outside Diameter	178mm (7")	216mm (8.5")
Thread Connection	4 1/2" API Reg	6 5/8" API Reg
Net Weight	84kg (185.2lb)	98kg (216.1lb)

Shock Absorber 12"

Size	12"
Complete Shock Absorber	**600695**
Effective Length (Shoulder to Shoulder)	724mm (28.5")
Outside Diameter	254mm (10")
Thread Connection	6 5/8" API Reg
Net Weight	215kg (474lb)

SIM-CASX

Casing advancing system for overburden and loose rock formations.

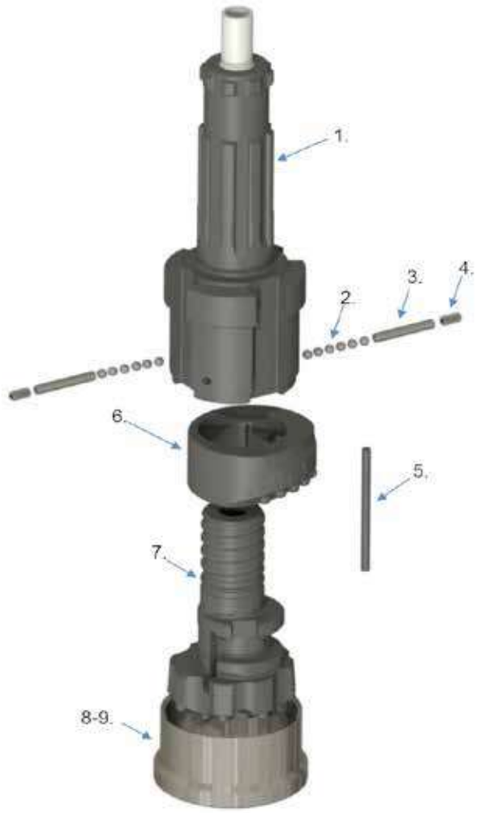
Halco's eccentric Sim-Cas system is still one of the most cost effective solutions for casing installation when drilling in difficult ground conditions. The eccentric system negates the need to leave expensive ring bits in the hole when installing permanent casing.

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 m3	1000 litres = 1 m3

Air Flow	Example
1 cfm = 0.0283 m3/min	100 cfm = 2.83 m3/min
1 cfm = 0.4719 litre/sec	100 cfm = 47.19 litre/sec
1 m3/min = 35.315 cfm	10 m3/min = 353.15 cfm
1 m3/min = 16.667 litre/sec	10 m3/min = 166.67 litre/sec
1 litre/sec = 2.1189 cfm	100 litre/sec = 211.89 cfm
1 litre/sec = 0.0600 m3/min	100 litre/sec = 600 m3/min

Air Pressure	Example
1 psi = 0.0689 bar	100 psi = 6.89 bar
1 psi = 0.0703 kg/cm2	100 psi = 7.03 kg/cm2
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/cm2	10 bar = 10.197 kg/cm2
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/cm2	10 atm = 10.332 kg/cm2

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

Notes

Notes

HALCO Rock Tools

YOUR DRILLING EXPERT

10507 – DESIGNED AND PRODUCED BY
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Halco Rock Tools
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