

Earth Pro *Solids*

ASTEFC FULL LINE

HORIZONTAL DIRECTIONAL DRILLS



BREAKTHROUGH SOLUTIONS

FULL LINE HORIZONTAL DIRECTIONAL DRILLS

Astec EarthPro C Series HDD represents commitment to quality and customer satisfaction

The entire line-up of Astec EarthPro Horizontal Directional Drills has been improved and refined with the introduction of the C Series designation.

Introduced in 2004 with the DD-3238, the line of compact HDD units now includes five models with thrust/pullback from 6,000 to 45,000 lbs — the DD-65 Mini Max, DD-1416, DD-2024, and DD-3238. Future versions of these four existing models will carry the “C” designation as part of the model number. The Astec EarthPro DD-4045 is a new design and incorporates the new features, but will not bear the “C” in its name.

Astec engineers responded to feedback from customers, evaluated service history, and examined existing designs to identify ways to increase the durability, reliability, performance, and ergonomics of these popular machines.

Designers sourced new, more reliable components where available. Frames and hardware were strengthened. Machine tolerances and alignment areas were carefully evaluated and tightened where appropriate to achieve better fit and function.

The engineers continued their quest for continuous improvement by identifying areas to make routine service and maintenance easier and quicker. Grease fittings were added to increase durability. Pivot points were upgraded to machined-fit bushings where practical and appropriate.

Additional checks and balances were incorporated throughout the manufacturing process to address any inconsistencies before the final check off. Dyno-testing verifies performance in more units.

As a final step before shipping, every machine receives a rigorous 37-point final check to ensure all areas meet certified quality standards. Quality-control specialists check fluid levels and the condition of hoses and fittings, ensure all hardware is in place, verify that all systems are functioning properly, and confirm all safety equipment is in place and working as it should.

Nearly every item addressed might be dismissed as a minor point by other manufacturers, say Astec officials. But taken as a whole, these pieces represent Astec’s ongoing commitment to quality products and customer satisfaction. The C Series designation is one more reason customers can choose Astec with confidence. To further bolster that confidence, every C series drill and the DD-4045 now come standard with the Astec 357 Protection Plan, one of the best warranties in the industry.



RELIABLE DESIGN

ASTEC DRILLS FEATURE RACK AND PINION DESIGN DERIVED FROM ASTEC UNDERGROUND DRILLING EQUIPMENT, A SISTER COMPANY, AMERICAN AUGERS AND DRILLS, THE LEADERS OF RACK & PINION DESIGN.

PROVEN PERFORMANCE

DEPENDABLE ENGINES FROM JOHN DEERE, CUMMINS, AND CATERPILLAR ENSURE TOP NOTCH PERFORMANCE AND EASY SOURCING OF PARTS & SERVICE IN LOCATIONS WORLDWIDE.

INCREASED FLOW

ENCLOSED ONBOARD MUD PUMPS PROVIDE INCREASED FLOW TO HELP FLUSH CUTTINGS FROM THE HOLE AND MAINTAIN HOLE INTEGRITY.



THE RIGHT SIZE

THESE COMPACT UNITS PACK PERFORMANCE IN A COMPACT PACKAGE FOR EASY TRANSPORTATION TO THE JOBSITE AND MANEUVERABILITY AROUND OBSTACLES IN THE LANDSCAPE.



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 , THE INNOVA-



SERIOUS SECURITY

ALL ASTEC EARTHPro HORIZONTAL DIRECTIONAL DRILLS NOW COME STANDARD WITH OUR 357 PROTECTION PLAN. NEW MACHINES CARRY A 3-YEAR WARRANTY ON WORKMANSHIP, A 5-YEAR WARRANTY ON THE ENGINE, AND A 7-YEAR WARRANTY ON THE RACK & AT NO ADDITIONAL COST.



PROTECTIVE EQUIPMENT

OPERATOR SAFETY IS A PRIORITY WITH A ZAP-ALERT SYSTEM, THE ES!LOK® EXIT-SIDE LOCKOUT SYSTEM, AND AN EMERGENCY SHUT DOWN SWITCH AT THE DRILLER'S CONSOLE AS STANDARD EQUIPMENT.



OPERATOR FRIENDLY

NEW MULTI-FUNCTION LCD SCREENS PROVIDE INCREASED ABILITY TO MONITOR AND MAINTAIN THRUST, ROTATION, AND OTHER VITAL ENGINE FUNCTIONS WHILE THE ERGONOMICALLY DESIGNED JOYSTICK DESIGN PROVIDES EASE OF OPERATION.



THE FORCE YOU NEED

FROM 6,000 LBS (2.72 TONNES) OF THRUST/PULLBACK ON THE DD-65C TO 40,000 LBS (18.14 TONNES) OF THRUST/PULLBACK ON THE DD-4045, THERE'S PLENTY OF POWER FOR THE TOUGHEST JOBS.



FULL LINE HORIZONTAL DIRECTIONAL DRILLS



DD-4045

- 40,000 lbs (18.14 Tonnes) maximum thrust/pullback
- 4,500 ft-lb (6,101 Nm) rotary torque
- Quad rack and pinion carriage drive
- "Cruise control" capability
- Carries 520 ft (158.5 m) of drill pipe
- Patent-pending dual multi-function joystick controls with multi configuration option
- Quick, easy set up
- LCD multi-function operational screen
- Two-speed floating carriage
- Cummins® QSB4.5 turbo diesel with 156 hp (116.33 kW)



DIMENSIONS

Length.....	257 in (6,527 mm)
Width.....	87 in (2,210 mm)
Width at tracks (est.).....	83 in (2,108 mm)
Transport Height.....	86.25 in (2,190.75 mm)
Approximate Operating Weight.....	21,620 lbs (9,806.67 Kg)

DD-3238C



- 32,000 lbs (14.5 Tonnes) maximum thrust/pullback
- 3,800 ft-lb (5,152 Nm) rotary torque
- Dual rack and pinion carriage drive; two-speed floating carriage
- "Cruise control" capability
- Carries 500 ft (152.4 m) of drill pipe
- Single multi-function joystick controls
- LCD multi-function operational screen
- John Deere® 4045T diesel with 125 hp (93.2 kW)

DIMENSIONS

Length	242 in (6.15 m)
Width	89 in (2,260.6)
Transport Height.....	77 in (1,955.8 mm)
Approximate operating weight — including 500 ft (152.4 M)	
.....	17,740 lbs (16,329 kg)

DD-2024C



- 20,000 lbs (9.07 Tonnes) maximum thrust/pullback
- 2,400 ft-lb (3,354 Nm) rotary torque
- Quad rack and pinion carriage drive; two-speed floating carriage
- "Cruise control" capability
- Carries 400 ft (122 m) of drill pipe
- Single multi-function joystick controls
- LCD multi-function operational screen
- Cummins B3.3 turbo diesel with 83 hp (61.89 kW)

DIMENSIONS

Length	207 in (5.25 m)
Width	tracks: 51.5 in (1.30 m)
Transport Height.....	73.5 in (1,866.9 mm)
Approximate operating weight — including 400 ft (122 m) of pipe	
.....	10,500 lbs (4,763 kg)

DD-1416C



- 14,000 lbs (6.35 Tonnes) maximum thrust/pullback
- 1,600 ft-lb (2,170 Nm) rotary torque
- Dual rack and pinion carriage drive; two-speed floating carriage
- "Cruise control" capability
- Carries 400 ft (122 m) of drill pipe
- Single multi-function joystick controls
- Multi-function LCD operational screen
- Cummins B3.3 diesel with 65 hp (48.5 kW)

DIMENSIONS

Length	207 in (5.25 m)
Width	51.5 in (1.30 m)
Transport Height.....	73.5 in (1,866.9 mm)
Approximate operating weight — including 400 ft (122 M)	
.....	10,500 lbs (4,763 kg)

DD-65C



- 6,000 lbs (2.72 Tonnes) maximum thrust/pullback
- 500 ft-lb (677.9 Nm) rotary torque
- Rack and pinion carriage drive
- Single multi-function joystick controls
- Carries 150 ft (45.72 m) of drill pipe
- Caterpillar® C1.1 diesel engine with 26 hp (19.4 kW)

DIMENSIONS

Length	124 in (3.15 m)
Width	35.5 in (.90 m)
Transport Height.....	65 in (1,651 mm)
Approximate operating weight — without pipe	
.....	2,600 lbs (1,179.3 kg)

FM130 & FM330 FLUID MIXING SYSTEMS



FM-130 & FM-330 Drilling Fluid Mixing System

Shared specifications

Both the FM-130 and FM-330 Fluid Mixing Systems consist of a reservoir tank mounted to a frame-type skid for ease of lifting or solid mounting, and a gasoline-powered (diesel optional on the FM-330) centrifugal pump, venturi mixing tee assembly and a hopper, all mounted to another frame-type skid for ease of lifting or solid mounting. An optional curbside fill kit that contains all necessary hoses and hardware components for connecting to a water source such as a hydrant is available.

TANK

- Polyethylene with access hatch on top

MIXING SYSTEM

Type Proprietary dual shear mixing system, venturi jetted
 Hopper Fixed in place, vacuum induced anti bridging

FM-330 Drilling Fluid Mixing System

ENGINE

- High-efficiency GX390 Honda, gasoline-powered, electric start
- Rating 13 hp (9.7 kW)
- Fuel Capacity 1.72 U.S. gallons (6.5 L)
- Oil Capacity 1.2 quarts (1.1 L)

Optional engine:

Hatz air-cooled diesel engine with pull start.

- Rating 10 hp (7.4 kW)
- Fuel Capacity 1.32 U.S. gallons (5 L)
- Oil Capacity 1.6 quarts (1.5 L)

TANK

- Fluid mixing 500 or 1,000 U.S. gallons (1,893 or 3,785 L)

FLUID HANDLING SYSTEM

- Rated Capacity up to 330 gpm (1,249 L/min)
- Circulating Pump centrifugal pump
- Seal mechanical long life

DIMENSIONS

500-gal (1,893 L) tank
 80 x 30.75 in (2.03 x 7.81 m)
 Height 73 in (1.85 m)
 Weight 470 lbs (213 kg)

1,000 gal (3,785 L) tank 102 x 4.75 in (2.59 x 1.09 m)
 Height 78 in (1.98 m)
 Weight 930 lbs (421 kg)

Mix Hopper Unit 51.38 x 18.56 in (1.31 x .47 m)
 Height 41.5 in (1.05 m)
 Weight 225 lbs (102.06 kg)

Recommended for use with horizontal directional drills with 12,000 to 60,000 lbs (5,443.12 to 27,215.54 kg) thrust/pullback.

FM-130 Drilling Fluid Mixing System

ENGINE

- High-efficiency GX160 Honda, gasoline-powered, pull start
- Rating 5.5 hp (4.0 kW)
- Fuel Capacity 0.95 U.S. gallons (3.6 L)
- Oil Capacity 0.63 quarts (0.6 L)

TANK

- Fluid mixing 300 U.S. gallons (1,135.6 L)

FLUID HANDLING SYSTEM

- Rated Capacity up to 130 gpm (492.1 L/min)
- Circulating Pump centrifugal pump
- Seal mechanical long life

DIMENSIONS

300-gal (1,135.6 L) tank 50 x 34.5 in (1.27 x .88 m)
 Height 68.56 in (1.74 m)
 Weight 296 lbs (134.26 kg)

Mix Hopper Unit 51.38 x 18.56 in (1.31 x .47 m)
 Height 41.5 in (1.05 m)
 Weight 225 lbs (102.06 kg)

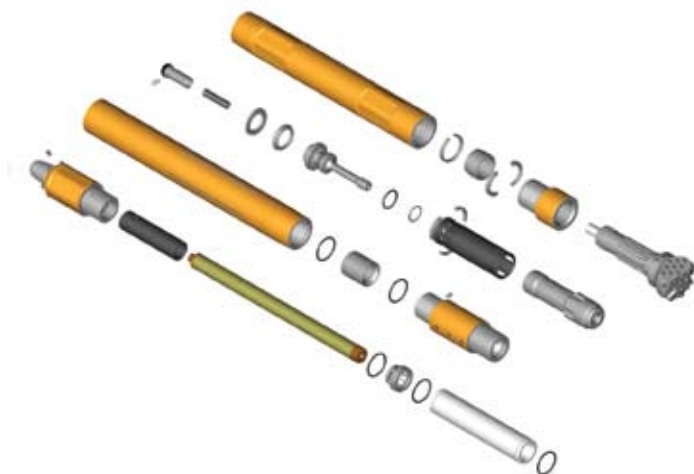
Recommended for use with horizontal directional drills with up to 12,000 lbs (5,443.12 kg) thrust/pullback.

HARD ROCK DRILLING SYSTEM

- Astec Hard Rock Drilling Systems deliver considerable increase in rock penetration compared to competitive HDD rock systems.
- Powered by high-volume air pressure, these hammers require a minimal amount of water — the HDD 40, for example, requires only 2 to 4 gpm (7.6 to 15.1 LPM) — for cooling and lubrication, which means less cleanup and expense than with conventional drilling.
- Air hammers work with your drill's existing pipe — there's no need for special pipe.
- Tapered API threads on backhead and chuck ensure easy coupling/uncoupling of hammer.
- Support station oiler mixes air, water, and oil, then delivers it to the hammer.
- Slant-faced bit allows the tool to steer in soft soil conditions.
- Two-degree bent sub allows easy steering in tough conditions.
- All critical internal components are heat treated under strict control to maximize tool longevity.
- Induction-hardened sleeve for optimum wear resistance even in the most abrasive conditions.



THE HARD ROCK DRILLING SYSTEM INCLUDES:



- Hammer
- Support station oiler
- 30-ft. hose
- 20-ft. hose
- 2° bent sub
- 2 whip checks
- Starlight controller
- Bits:
 - HDD-40 4 in (101.6 mm)
 - HDD-50 5 in (127 mm)
 - HDD-60 6 in (152.4 mm)
 - HDD-80 pull reamer 8 in (203.2 mm),
10 in (254 mm), and 12 in (304.8 mm)

* The Hard Rock Drilling System can be used with all DCI Subsite locating systems.

PROTECT YOUR INVESTMENT



Proper maintenance performed at the appropriate time can provide impressive returns in the long run. Not only does it

ensure your machinery is running at peak performance, it also protects you against added cost of downtime on the jobsite. The Astec Proshield Preventive Maintenance Program features conveniently packaged kits to make performing periodic maintenance quick and simple.

Complete

Astec Proshield Preventive Maintenance Kits contain everything you need to perform the scheduled maintenance of your particular machine at the appropriate service intervals. You simply provide the fluids.

Correct

Each kit has the appropriate parts to ensure proper fit and function for your specific model.

Convenient

Get everything you need in only one stop. There's no need to run all over town searching for an out-of-stock filter or poring over hard-to-read books.



Model	50-Hour Kit	250-Hour Kit	500-Hour Kit	1,000-Hour Kit
DD-65C	AU116332	AU116333	AU116334	AU116335
DD-1416C	AU116336	AU116337	AU116338	AU116339
DD-2024C	AU116340	AU116341	AU116342	AU116343
DD-3238C	-	AU116345	-	-
DD-3238C*	AU116344	-	AU116346	AU116347
DD-3238 C**	AU116348	-	AU116349	AU116350
DD-4045	AU121933	AU121934	AU121935	AU121936

**Short filter **Long filter*

IMPORTANT: Astec Underground reserves the right to change these specifications without notice and without incurring any obligation relating to such change. This literature has been published for world-wide circulation. Availability of some models and equipment builds vary according to the country in which the equipment is used. The illustrations and text may include optional equipment and accessories and may not include all standard equipment. Your Astec dealer/distributor will be able to give you details of the products and their specifications available in your area.

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable. © 2009 ASTEC UNDERGROUND. All Rights Reserved. ASTEC_Full Line HDD_9_09