BLUE DEMON

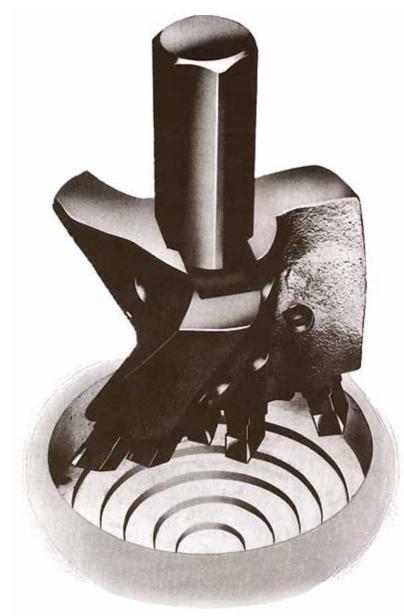
BD, BDA, and BDC DRILL HEADS

FOR AUGER DRILLING

SPEED DRILLING • CUT COSTS IN CONSTRUCTION, MINING, WATER WELLS, SEISMOGRAPH WORK









Auger with BD Head drills blast hole.

The Blue Demon BD with BD-2 bits is a 3-wing, prop-type drill head that can increase auger drilling rates by 50% or more in soft to medium formations.

Instead of tearing or gouging, the BD Drill Head shears off rock in a shaving action. This eliminates strain on bits and lengthens their effective service life. It also reduces weight needed for rapid penetration and resultant possibility of bits balling up.

Step Drilling Pattern

The BD is precision manufactured to obtain maximum effectiveness from each cutting surface with minimum bit wear. This is accomplished by setting bits in a "step" pattern so that each cuts only a small portion of the hole.

An important plus feature is the twin-bit arrangement along the outer surface. If the sizing bit is damaged, the extra bit will cut in its place and maintain hole size without interrupting work.

Wide Choice of Sizes, Shanks



BD Drill Heads are offered in six sizes for drilling holes from $4^{1}/_{2}^{1}$ to $10^{15}/_{16}^{1}$. Available with $1^{1}/_{2}^{1}$ square, 2^{1} square, $1^{1}/_{8}^{1}$ hex, $1^{5}/_{8}^{1}$ hex, 2^{1} hex and threaded shanks. All shanks are keyed and securely welded to heads before shipment.

BDA DRILL HEAD

The BDA brings all the advantages of the Blue Demon BD to air drilling. It's a specially designed tool that substantially increases penetration rates and reduces costs in soft to medium rock formations.

When compared with ordinary drill heads with rotating bits, the BDA will cut up to twice the footage daily in soft shales, clays, shells, soft limestone, red beds and other rocks of low compressive strengths. In addition, it offers the following important features:

- "Step" drilling pattern for fastest penetration
- BD-2 Bits
- Twin bits on outer surface for added protection
- No independent moving parts to become clogged
- Requires only a moderate weight for full effectiveness
- Precision machined head
- Durable, trouble-free
- Six sizes for drilling holes from $4\frac{1}{2}$ " to $10^{15}/_{16}$ "
- Choice of 2³/₈", 2⁷/₈", 3¹/₂", and 4¹/₂" API shanks (other threaded shanks on request)



Drilling water well with Blue Demon BDA Drill Head.



Cutaway sketch of step drilling pattern as cut by Blue Demon BD and BDA Drill heads. Lead bit drills 1½" hole. It is followed by other bits that shear and ream final hole size. Bits are set at an angle to assure fastest penetration without scraping, chipping or gouging.



BDC DRILL HEAD

The Blue Demon BDC Drill Head was developed to drill in harder formation rock with the same shearing action as our BD and BDA Drill Heads. The BDC Drill Head utilizes the same body, but with a round hole to accept our BDC-550 CS1 conical bit. This tool comes with a sleeve retainer for maximum holding power in the tool, but can be easily removed from the head with our C-550 Puller 50. The capped carbide is designed to maximize tool life even in the most abrasive conditions. The BDC Drill Head is available in all the same sizes as the BD and BDA Drill Heads and can be made with hex, square, or API threaded connections.







C-550 Puller 50

BDC-550 CS1 conical bit

The capped carbide is designed to maximize tool life.

Precision machined · Extremely durable · Easy to change

BD-2 Carbide Bit

BD-2 Bit is precision machined to closest possible tolerances for long, trouble-free service. Its oversized carbide cuts faster—never balls up—retains its original effectiveness far longer.

Tapered shank of the BD-2 drive fits into the drill head without wedges or set screws. It can't wobble or work loose. And, unlike blade-type drill heads, BD-2 Bits are easily replaced with hammer and punch.



BD-2 Bits can be replaced in seconds. Simply place the punch in the hole beneath the bit and tap with a hammer. The bit pops out. Then insert a new bit and tap lightly to seat.

Bits for BD, BDA, and BDC Heads are sold separately. For BD and BDA heads, specify BD-2 bit, BD2-LC bit, or BD2-W bit. For the BDC Head specify the BDC-550 CS1 bit.



Peaked carbide designed for tougher cutting conditions.

Model	Hole Size in Inches*	Number of Bits per head
BD, BDA, or BDC 4	4½	5
BD, BDA, or BDC 5	5 ¹⁵ / ₁₆	8
BD, BDA, or BDC 6	6½	7
BD, BDA, or BDC 7	7 ¹⁵ / ₁₆	10
BD, BDA, or BDC 9	9	11
BD, BDA, or BDC 10	10 ¹⁵ / ₁₆	17

^{*} Other sizes available on request.

- * These measurements may vary plus or minus ½1/6" on BD auger-type heads, specify type of shank 1½" square, 2" square, 1½" hex, 1½" hex, 2" hex and spline.
- * BDC Drill Heads come in the same sizes as the BD and BDA Drill Heads and are offered with square or hex shank or API pin.
- * These measurements may vary plus or minus ½1/16". BDA Drill Heads are offered with 2¾1", 2½1", 3½1", and 4½1" API shanks. Other threaded shanks on request.

AUGER BITS



BD-1 Scraper Bit can be used in a variety of auger applications. The BD-1 is $1^7/8^{11}$ wide.

BD-3 has a ⁵/₈" carbide and is designed to fit most common auger heads.

BD-2 has a tapered shank that drive fits into the drill head without wedges or set screws. It can't wobble or work loose. BD-2 bits are easily replaced with hammer and punch.







CLAW BIT

These tools are best suited for soft and medium formations. They can be used with air or fluid drilling. They feature rapid penetration rates similar to a drag bit. Cutting tools are available from $3\frac{1}{8}$ " to $17\frac{1}{2}$ ".









AB-FD-1 and AB-FD-1W are drag style bits used for cutting abrasive materials or to shave solid rock efficiently.

CORE BARREL TEETH & BLOCK











P.O. Box 724 Lebanon, GA 30146 Toll Free: 800-282-6760 Direct: 770-591-2021

FAX: 770-591-6356

Email: sales@bluedemon.com

www.bluedemon.com