

## ECM-350— a rugged air drill for pioneering work

This agile, powerful drill climbs steep grades over roughest ground, and takes the punishment. You've seen thousands of them on construction jobs of all kinds around the world.

It's a fine quarry drill, too. With an Ingersoll-Rand portable air compressor, you've got a high-performance team that gets more work done faster, more efficiently, and keeps doing it longer than anything else in its class.

The basic ECM-350 design has seen many improvements in its years of service—but every drill produced has set the world standard for reliability and performance in its time.



### Traction, brakes ideal for rough ground.

Each track is powered independently by an 11.4-hp piston air motor and an enclosed gear drive. The spring-applied, hydraulically-released disc brakes are equally

effective in forward or reverse.

Controlled hydraulic flow cushions track oscillation to minimize shock loads. Oscillation may be locked out to permit a solid setup for drilling.

### Trap-door centralizer.

Simple, rugged design flips open at the touch of a foot. Locks shut with a quick-release pin. No latches, no springs.



### Extendible boom reaches more holes.

The 1.5-m (5') boom extension reaches out over banks, and multiplies the number of holes you can drill before moving. You can drill a line of holes simply by extending the boom.

The 1.2-m (4') hydraulic guide extension also reduces setup time; adjust it for drilling on steep slopes or over ledges.

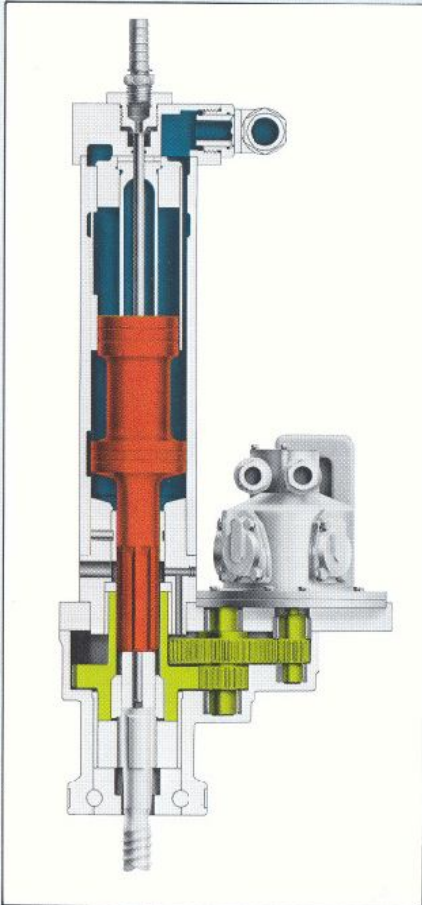
All hydraulic positioning cylinders have lock-check valves.





**New EVL-130 drifter can cut air use and fuel by 30%.**

The next generation of air drifters is here. This revolutionary Ingersoll-Rand air drifter has a new cycle and piston design that have opened a new horizon of drill efficiency. Depending on the compressor used, you can save from 7.5 to 15 liters (2-4 gal.) of fuel per hour.



The EVL-130 drifter is easy to service in the field, if required. To remove the shankpiece, just snap out a split ring and push out two pins. The internals can easily be changed by one man in a few minutes.



**Choice of four valveless drifters.**

Drifter	EVL-130	VL-671	VL-140	VL-120
Hole diameter	64-102 mm (2½-4")	76-102 mm (3-4")	64-102 mm (2½-4")	64-89 mm (2½-3½")
Bore	130 mm (5.125")	170 mm (6.69")	140 mm (5.5")	121 mm (4.75")
Stroke	101 mm (4.00")	92 mm (3.62")	92 mm (3.62")	70 mm (2.75")
Weight	222 kg (488 lb.)	238 kg (525 lb.)	195 kg (430 lb.)	170 kg (375 lb.)
Blows/min.	1200	1850	2100	1900
Air required	Less than 17 m <sup>3</sup> /min. (600 cfm)	25.5 m <sup>3</sup> /min. (900 cfm)	21.2 m <sup>3</sup> /min. (750 cfm)	17 m <sup>3</sup> /min. (600 cfm)

**Powerful feed motor.**

A piston-type air feed motor drives a heavy roller chain, providing 1362 kg (3000 lb.) of pullout power, and all the pulldown you'll ever need.



**Convenient controls.**

Tramming controls are mounted on a swivel plate which can be pin-locked in any of three positions. A safety-lockout tow hitch prevents using the rear position when a compressor is being towed.

Controls for all drilling functions are mounted on the drill tower. A fine-feed regulator helps the operator collar the hole and prevent stuck steels.

**Check these options.**

- Dry dust collector.
- Mist-injection dust control.
- 1362-kg (3000-lb.) winch with reversing throttle and brake.

**Threaded steel and carbide button bits.**

There is a difference! Quality drilling accessories can reduce your drilling costs. I-R carbide button bits, fully-threaded steels, couplings and shankpieces are made to take punishment and live longer. Complete range of sizes. Ask your I-R representative how they can cut your cost per hole.



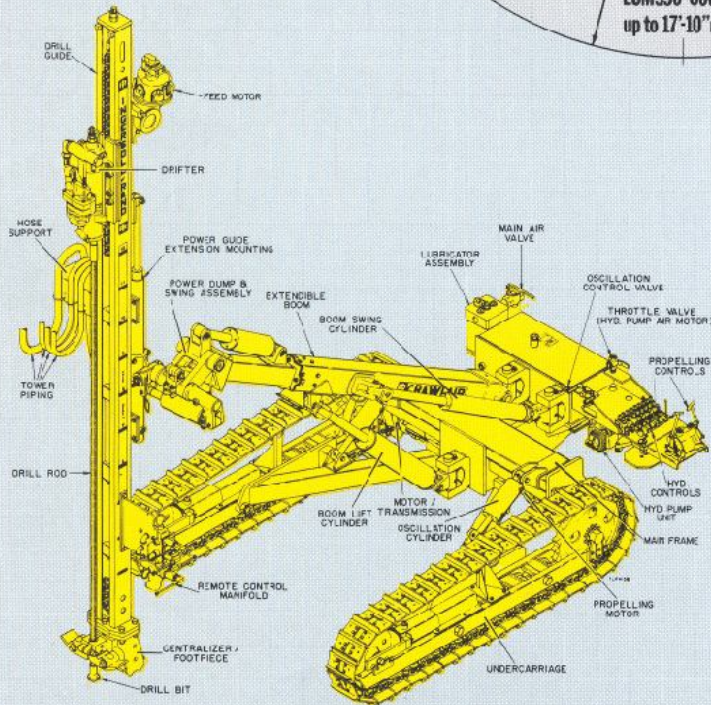
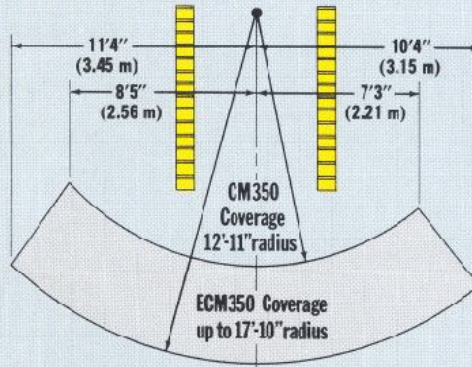
**INGERSOLL-RAND**  
**DRILLING EQUIPMENT**



# ECM-350 Crawlair drill specifications.

Net weight	12,900 lb.	5851 kg
Overall shipping length	12'0"	3645 mm
Width	8'0"	2438 mm
Height (vertical guide)	18'10"	5753 mm
Steel change	12 ft.	3645 mm
Drill travel	14'3"	4356 mm
Max. horiz. boom swing	40° left, 35° right	
Max. vert. boom movement	45° above, 15° below	
Max. guide swing	50° left, 35° right	
Max. guide dump	180°	
Ground clearance	12"	292 mm
Grouser width	10"	254 mm

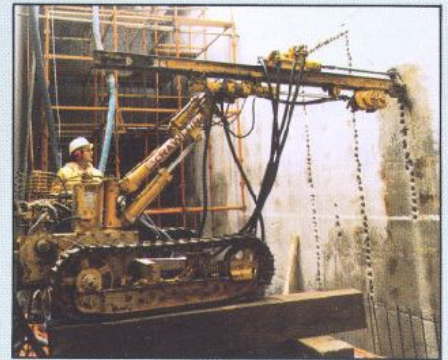
Nothing contained in this brochure is intended to extend any warranty or representation, expressed or implied, regarding the products described herein. Any such warranties or other terms and conditions of sale of products shall be in accordance with Ingersoll-Rand's standard terms and conditions of sale for such products, which are available upon request.



Ingersoll-Rand Co.  
 Rock Drill Division  
 7500 Shadwell Drive  
 Roanoke, VA 24019

Form 4360-1 © 1985 by Ingersoll-Rand Co. Printed in USA

## Complete line of crawler drills.



The LM-100 is ideal for small jobs in confined places; it makes fast work of holes 44-64 mm (1 3/4 to 2 1/2"). Compact, but uses a 3-m (10-ft.) rod change.



The CM-351 is a compact, powerful rig for drifter or downhole drilling of 64-140-mm (2 1/2 to 5 1/2") blastholes. Fixed-length boom. Its 2.2-m (7'3") width makes it easy to transport.



Ingersoll-Rand offers the widest choice of downhole drills, including the world's largest—the Superdrill for holes up to 30" (762 mm) diameter. Valveless hammers use high-pressure air for fast, efficient penetration in hardest rock.

**INGERSOLL-RAND**  
**DRILLING EQUIPMENT**