

**Atlas Copco** Surface drill rigs

# SmartROC T35 and T40



## **Hole Diameter**

SmartROC T35, 64–115 mm (2 1/2 – 4 1/2")

SmartROC T40, 76–127 mm (3 – 5")

*Sustainable Productivity*

**Atlas Copco**

# When Smart Means Easy and Efficient

**SmartROC T35 and SmartROC T40, surface drill rigs for construction and aggregate production, set a high standard for operator friendliness, productivity and fuel efficiency. Built with the operator in mind, an ergonomic user interface makes drilling safer, faster and more effective. Not only are these rigs easier to operate and more productive, but they ensure the lowest cost per cubic meter produced by any comparable rig in their hole range. Simply put, the SmartROC T35 and SmartROC T40 make it easy to be more efficient.**

## **Operator in Focus**

The value of technology is directly related to how easy it is to use. These rigs integrate advanced technology with operator ease-of-use and safety. Inside the cleanly designed and comfortable cabin, the operator has full control over an efficient drilling cycle using two multifunction joysticks and an icon-based instrument panel. These rigs are equipped with an automatic rod adding system, enabling them to drill preset hole depths without operator interaction improving on consumables lifespan.

## **Up to 50% Less Fuel**

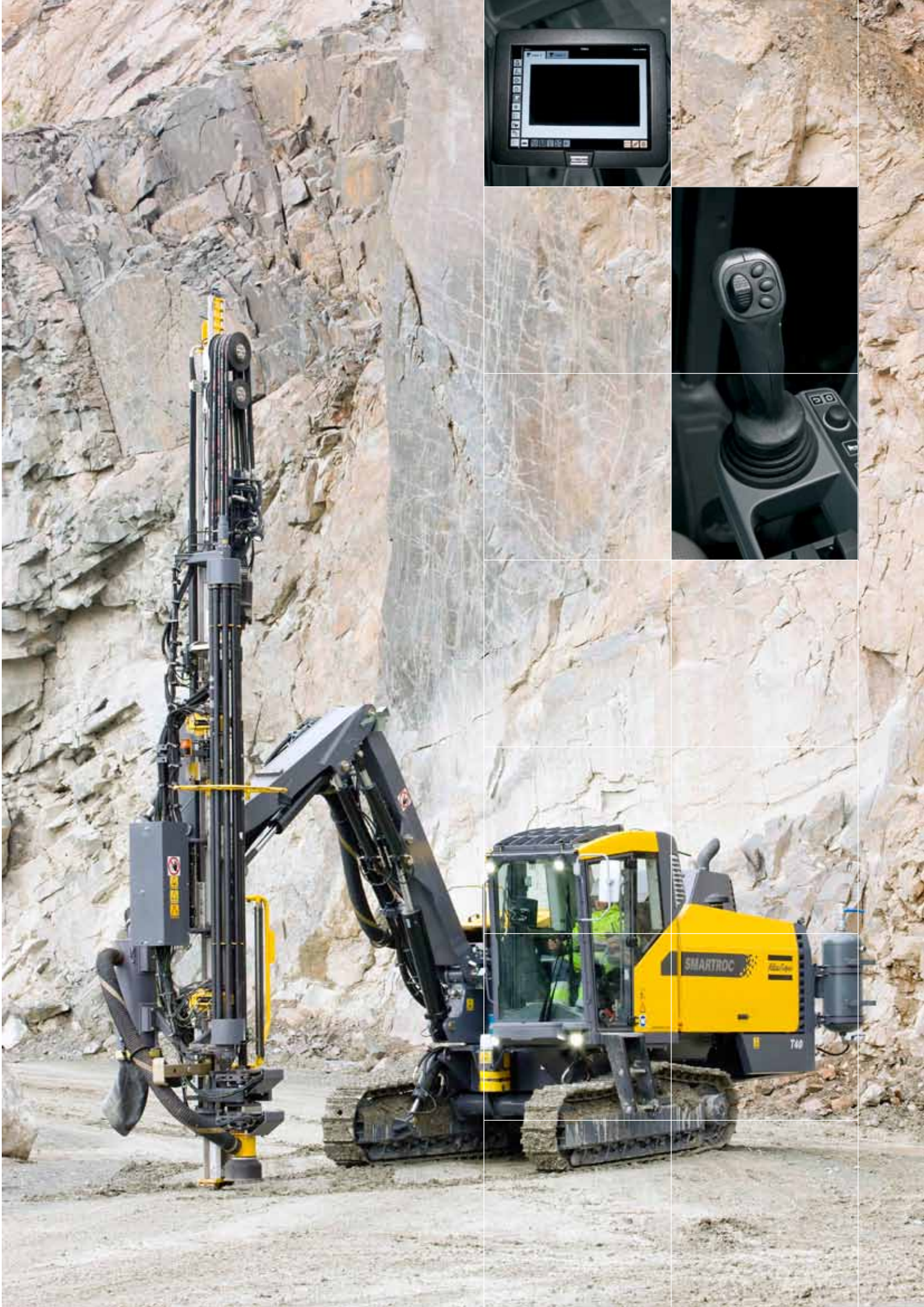
Field tests show these rigs lower fuel consumption up to 50% compared to conventional rigs and equally cut CO<sub>2</sub> emissions, depending on rock conditions. How? The entire system is designed to minimize energy losses. The operator can adjust the flushing air volume and the dust collector fan speed according to need; so that both deliver only what is necessary for the best performance, and nothing more. Engine and compressor speed are self-adjusting according to demand. Three variable hydraulic pumps help lower engine speed during none-drilling time and tramming. Further, an automatic cooler fan control is standard.

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## Main Benefits

- Combines low fuel consumption with high productivity
- Simplified and improved operator interface
- The tool to improve your total quarry process













### **Improved Serviceability**

Compared to similar rigs on the market, SmartROC T35 and SmartROC T40 have 50% less hoses and 70% less couplings reducing the risk of leakage. Hydraulic valves and electric modules are distributed and positioned at the location where they function, allowing for easier access to components. Compared to previous generation rigs, the hydraulic tank is 58% smaller for more space and easier service access.

### **Step up With Radio Remote Control**

SmartROC T35 and SmartROC T40 are the first surface drill rigs in the Atlas Copco family with both cabin and radio remote control functionality. These rigs are prepared for a radio remote control kit. This upgrade will increase the utilization of the rig in uneven terrain and ensure safer operation.

### **Productivity Today and Tomorrow**

The SmartROC T35 and SmartROC T40 are equipped with Atlas Copco's wellproven rock drill control system. Not only is it the most advanced system on the market, but it also allows for future upgrades. Its proportional control of feed, torque, and impact allows these rigs to drill efficiently, even in difficult rock formations.

### **Stronger than Steel**

The aluminum feed beam is lighter than a steel beam and structurally stronger; being considerably more resistant to bending and twisting.

### **Meet Demands for Quieter Drilling**

A distinctive silencer kit or hood is offered as an option with SmartROC T35 and SmartROC T40 drill rigs, making them two of the quietest surface drill rigs on the market. With the silencer kit in place, tests show noise levels drop from 127 dB(A) to 115 dB(A); a total sound reduction of 12 dB(A).

### **Committed to Sustainable Operations**

SmartROC T35 and SmartROC T40 are equipped with Tier 4 engines that fulfill more stringent environmental standards than previous generation engines. NOx emissions are reduced by 50 % and particle matters by 90%, resulting in a substantial environmental improvement.

### **Earn More per Cubic Meter**

SmartROC rigs can be equipped with a hole navigation system (HNS) as an option, enabling drill pattern navigation via GNSS receivers. HNS manages hole position, inclination, correct aiming and the required hole depth as defined in the prepared drill plan. The result is a decrease in the drill and blast cost per cubic meter produced.



### **Two Rock Drills in One**

With the two stroke settings, changing the percussion energy level and impact piston frequency, COP rock drills function like two rock drills in one. The well-proven COP series rock drills offer great energy efficiency. The unique double dampening system increases the contact of the bit to drill surface, resulting in longer rock tool life and straighter holes.

### **High Performance in Rough Terrain**

With a low center of gravity and high ground clearance, these rigs are dependable performers in rough terrain conditions. The optional winch is integrated in the drill rigs' design and does not affect ground clearance. The support leg on both rigs can be used during drilling to stabilize the

rigs. However, its main purpose, unique to its design, is the use of the support leg during tramming for higher stability in rough terrain. A boom reach of 7.6 meters height for horizontal drilling and 5.5 meters forward for vertical drilling give the rigs great flexibility.

### **Always Fit for Work**

Even the best equipment requires regular service to ensure optimal performance. Atlas Copco provides service solutions to safeguard an optimized relationship between productivity, availability and operational cost. Atlas Copco Mining and Rock Excavation Technique has over 2,700 technicians located in over 60 countries. By combining the usage of Atlas Copco genuine parts with service provided by a certified Atlas Copco technician, you'll have a winning combination no matter of where in the world you operate.







Double hose drums with a slot for each hose extends the life of the hoses and does not require greasing.

Hydraulic double drill steel support with movable lower support helps achieve straight holes and fast collaring.

Hydraulic cylinder-feeding system ensures that the adjusted feed force is applied to the drill bit at all times during drilling, resulting in improved rock tool performance and productivity.

LED lights offer better lighting, are more resistant to vibration, and easier to change.

## Quick Facts

### Main Application:

Construction  
Aggregate quarries  
Lime stone quarries

### Drilling Method:

Tophammer

### Rock drill:

SmartROC T35: COP 1840, COP 2540  
SmartROC T40: COP 2560

### Drill Steel:

SmartROC T35: T38, T45, T51  
SmartROC T40: T45, T51

### Maximum Hole Depth:

28 m (92')

### Hole Diameter:

SmartROC T35:  
64–115 mm (2 1/2 – 4 1/2")  
SmartROC T40:  
76–127 mm (3 – 5")

### Engine Power:

Rating at 2 200 rpm: 168 kW (225 HP)

### Rock Drill Output Power:

COP 1840: 20 kW (26.8 HP)  
COP 2540: 23kW (30.8 HP)  
COP 2560: 23kW (30.8 HP)

### Free Air Delivery at 10,5 bar:

SmartROC T35: 127 l/s (270 cfm)  
SmartROC T40: 158 l/s (335 cfm)

## Selection of Options

### Radio Remote Control

The radio remote control unit enables the operator to perform all key functions at a safe distance from the hole, from tramping to setting up and drilling.

### Silenced Kit

SmartROC T35's and SmartROC T40's noise level is approximately 12 dB (A) below that of other rigs on the market, making them two of the world's quietest running rigs.

### Precise Hole Location

The Hole Navigation System (HNS) prevents errors and reduces downtime by using GPS to pinpoint the precise location of the hole.

| Noise and Vibrations levels - SmartROC T35 and T40   |             |
|--|-------------|
| A-weighted sound power level in decibel (ref. 1 pw). Single value declaration                      | 127         |
| A-weighted sound pressure level at work station in decibel (ref. 20 mPa). Double value declaration | 78 +/- 3    |
| A-weighted sound pressure level at 1 m distance in decibel (ref. 20 mPa). Double value declaration | NA          |
| Weighted whole body vibration level (m/s <sup>2</sup> ) (Double value declaration)                 | 0.2 +/- 0.1 |