

# Operator Training Simulator



Atlas Copco Canada Construction and Mining

  
*Atlas Copco*  
A yellow Atlas Copco construction vehicle simulator, likely a bulldozer or grader, is shown in a simulated environment. The vehicle is positioned on the left side of the frame, with its front and side visible. The background is a light blue, hazy landscape.

Taking you to a New Level  
with  
The Next Generation of Training  
RCS and DCS Simulators

# Operator Training Simulator



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## What is our goal?

- improve workplace *safety*.
- reduce wear-and-tear on equipment
- reach performance targets sooner.
  - precision
  - parallelism
  - productivity
- ensure quality operators optimize our equipment.

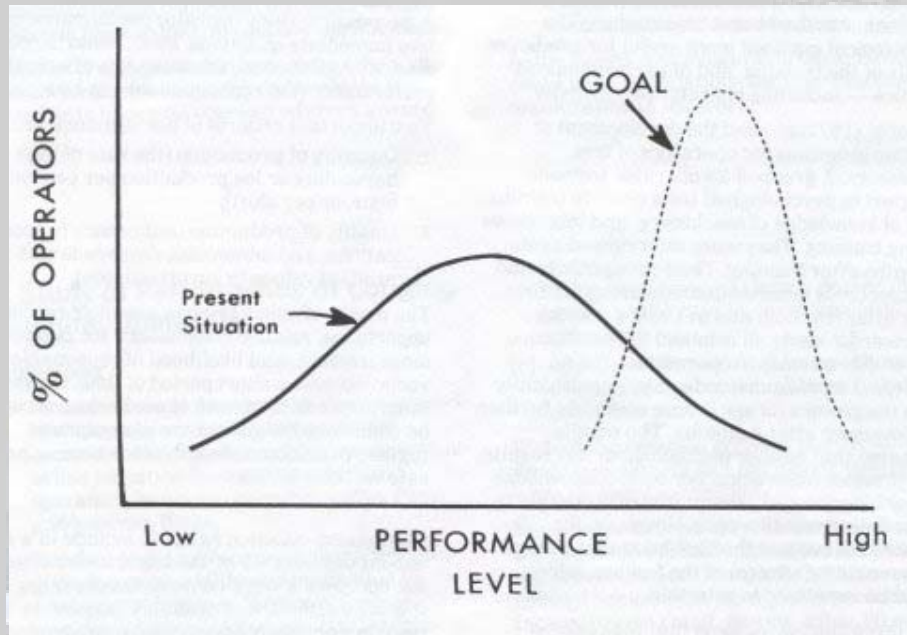
# Operator Training Simulator



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## Why use a simulator?

- learning curve is reduced!
- helps with pre-screening by evaluating natural abilities.
- especially important where workforce is unionized!
- no equipment damage.
- no equipment down for training.



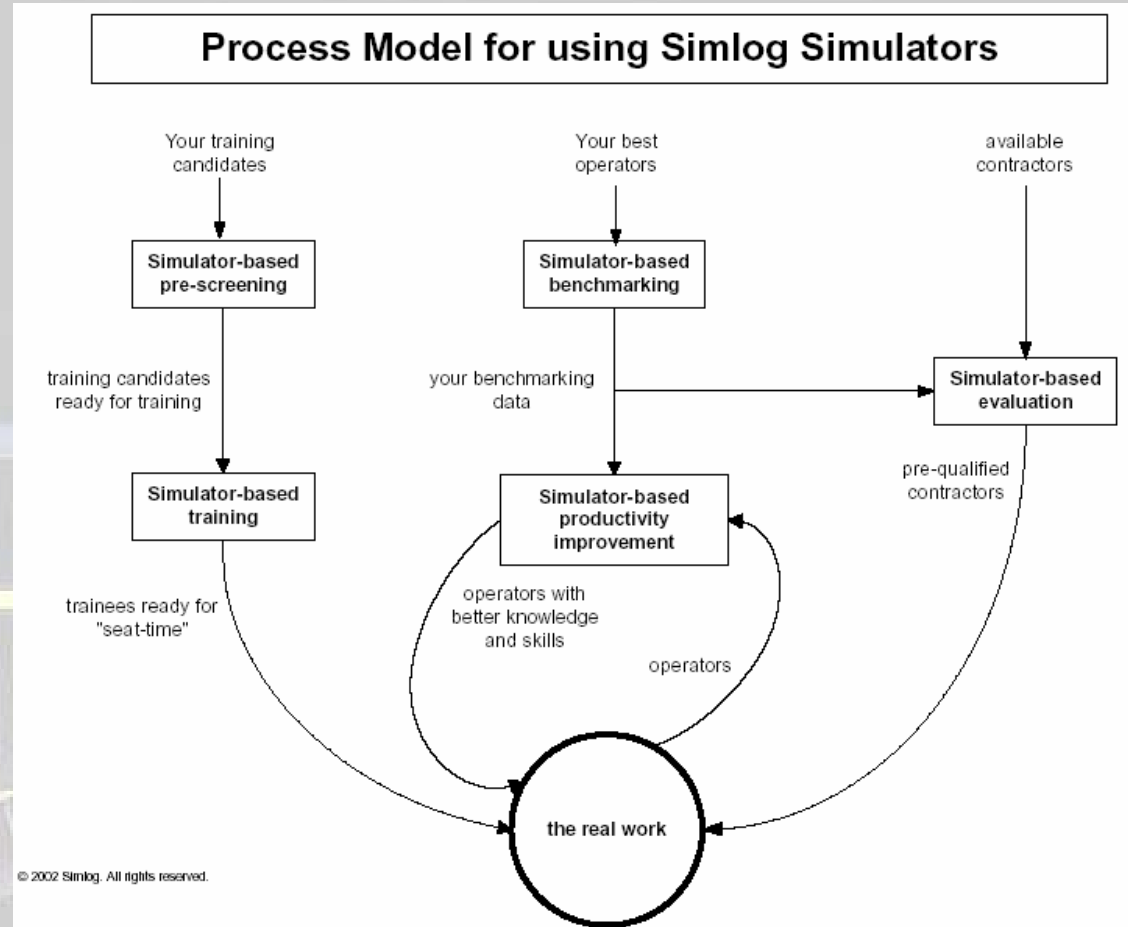
# Operator Training Simulator



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## Training Flow

- The customer gets the Simulator delivered to him and he sets it up. approximately 15min
- Each trainee uses the Simulator until the modules are finished. approximately 8hrs each
- The trainee's logged records are retrieved by modem or on site by the Trainer.
- The results are reviewed by Atlas Copco and a training action plan is presented to the customer.
  - The training action plan would point out good and poor performances, make recommendations for follow up training and what area the trainer would focus on based on what he sees in the results. Customer management can use this to ensure qualified operators are using the rigs.

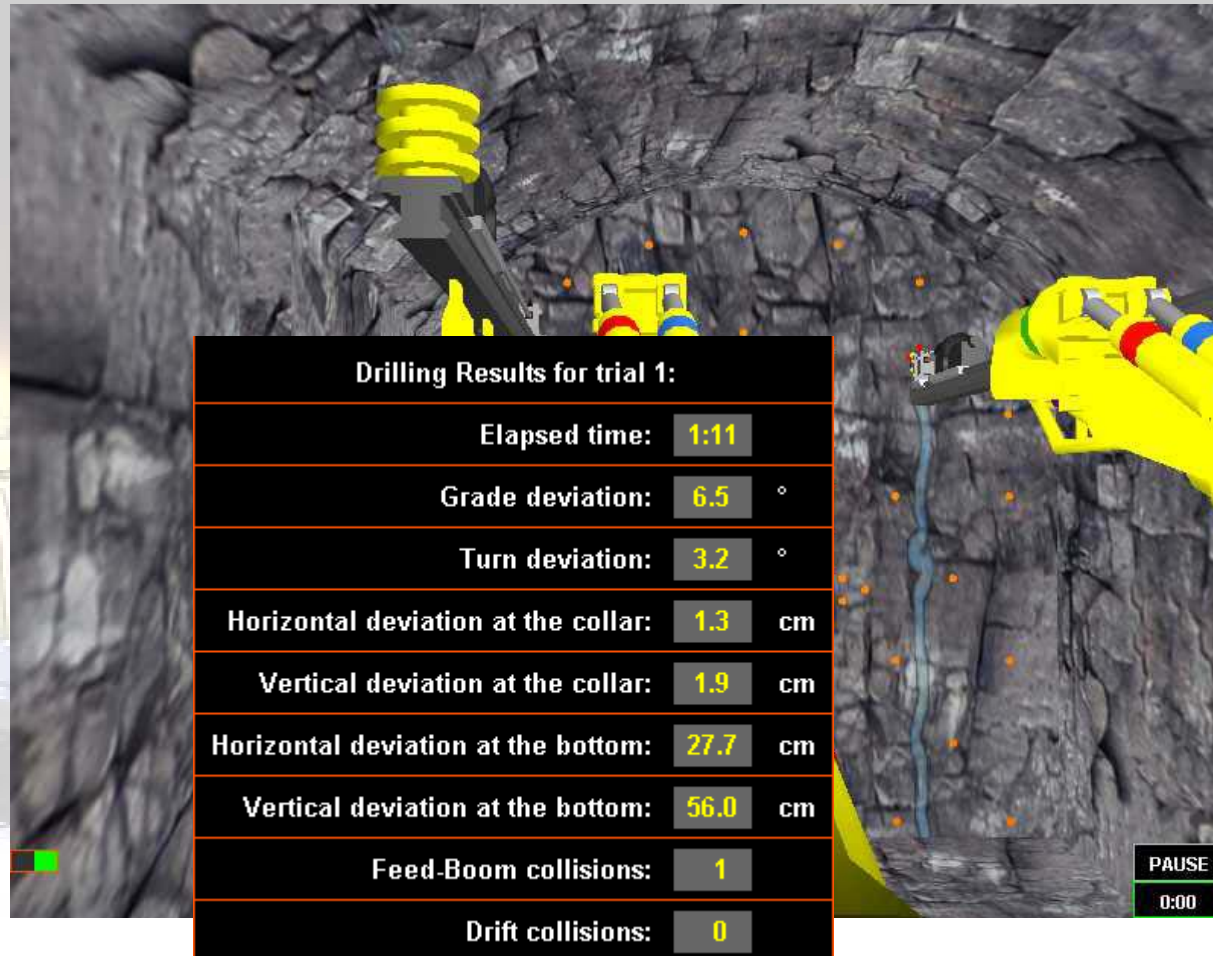


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Realistic graphics with every training aspect logged.



Drilling Results for trial 1:		
Elapsed time:	1:11	
Grade deviation:	6.5	°
Turn deviation:	3.2	°
Horizontal deviation at the collar:	1.3	cm
Vertical deviation at the collar:	1.9	cm
Horizontal deviation at the bottom:	27.7	cm
Vertical deviation at the bottom:	56.0	cm
Feed-Boom collisions:	1	
Drift collisions:	0	

PAUSE  
0:00

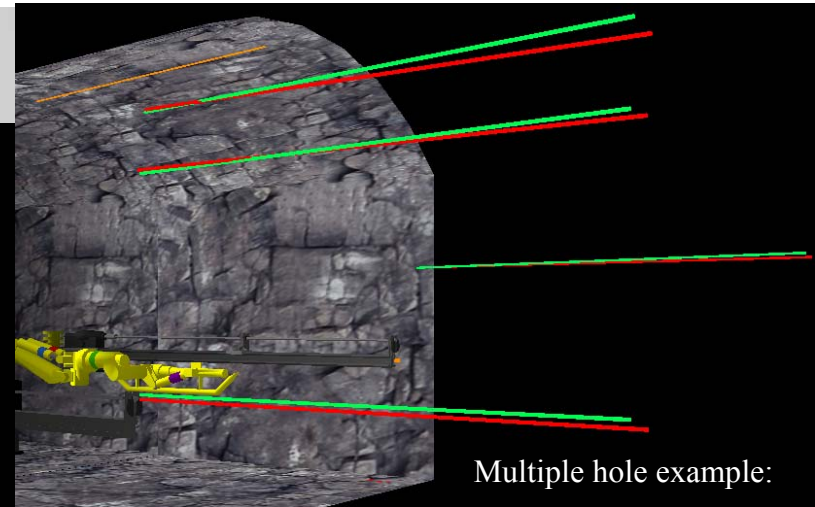
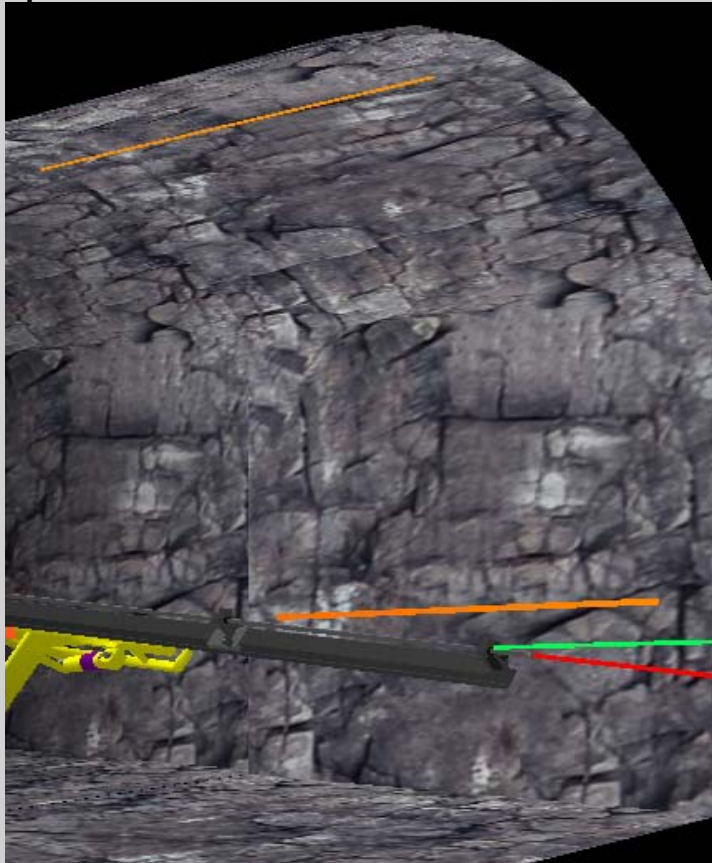


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Here is a view of some holes after they have been drilled and how the results can be used to ensure the operator understands his performance.



Multiple hole example:

In this example the burden at the bottom of the hole will be too much! ([see drilling results](#))

## Drilling Results for trial 1:

Horizontal deviation at the bottom: 27.7 cm

Vertical deviation at the bottom: 56.0 cm

Realistic feedback on how operators performance affects hole quality.

# Operator Training Simulator



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## RCS Rig controls

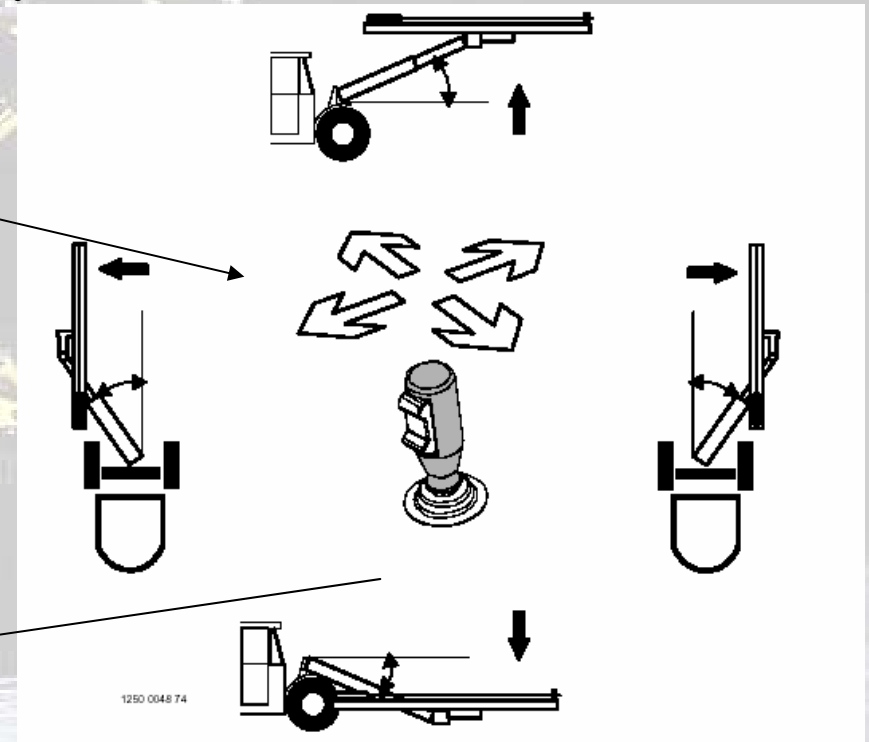
The controls are configured to match the controls that we have today.



Positioning

Drilling, Injection and Bolting

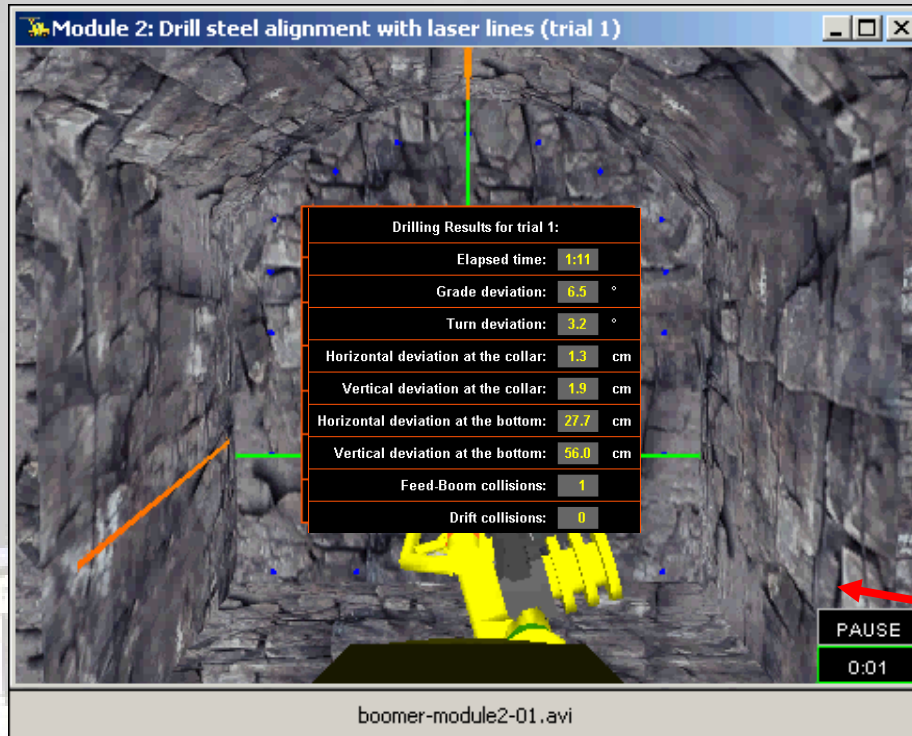
Simulator  
right hand  
controller.



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RCS control version

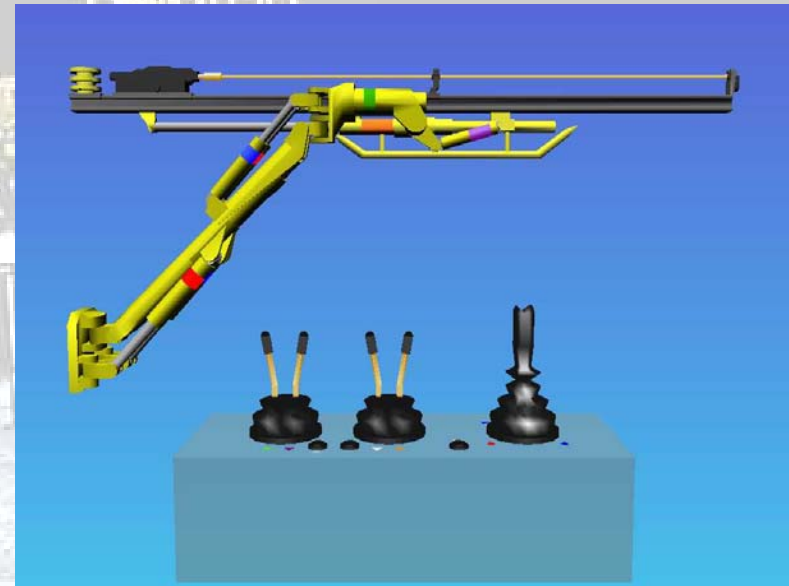
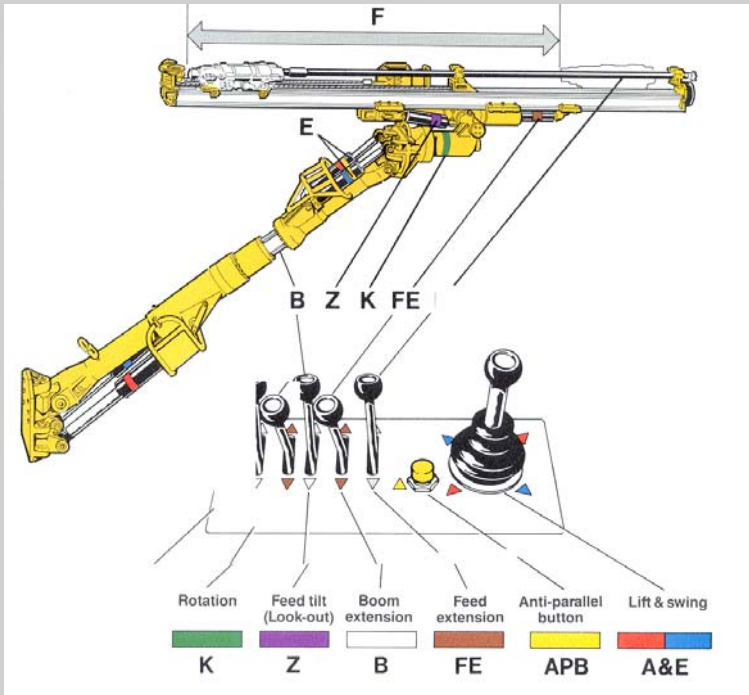


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DCS control version



# Operator Training Simulator



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For the DCS simulator you would get,  
the joysticks Controllers, communication box & Software CD



The control box plugs in to the communication box via the cables. The communication box plugs into your PC via a serial cable.

# Operator Training Simulator



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For the RCS simulator you would get,  
x2 USB joysticks Controllers & Software CD



The USB joysticks plug into your computer\* and then you load the software on that computer.

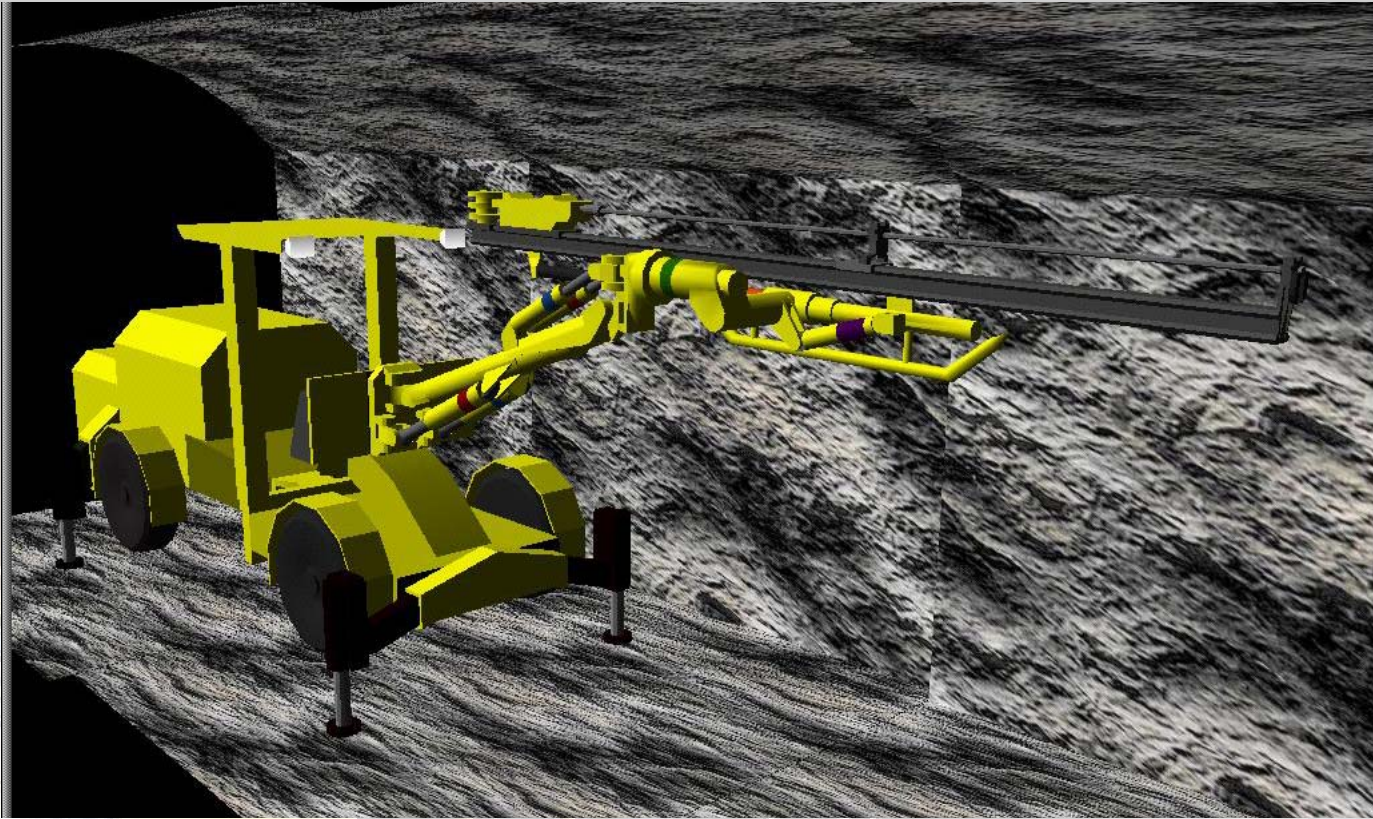
\* Computer must meet minimum requirements



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The Simulator has limitless possibilities for the future.

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For more details see [www.simlog.com](http://www.simlog.com) or contact your local Atlas Copco Construction & Mining sales company.

**Thank You.**

