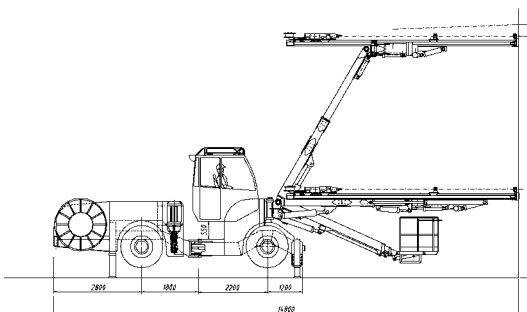
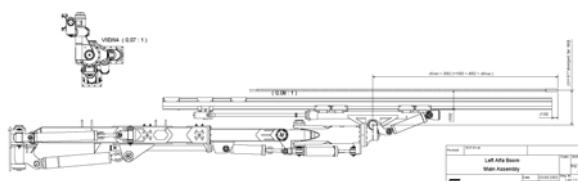


**AMV twin boom jumbo medium size.**  
Bever Control Modular computer controlled systems.

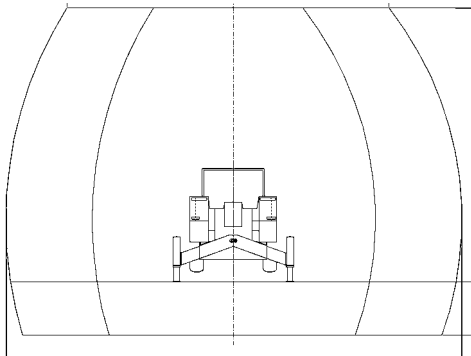


AMV twin boom jumbo  
Articulated chassis, turning radius 5.9 m|  
One man operation cabin  
Semi-Computer assisted drilling  
Full computer assisted drilling  
Cabin lift 0.55 m  
Height 3.0-3.25 m  
Total length 14.800 m  
Weight ca 27 tons

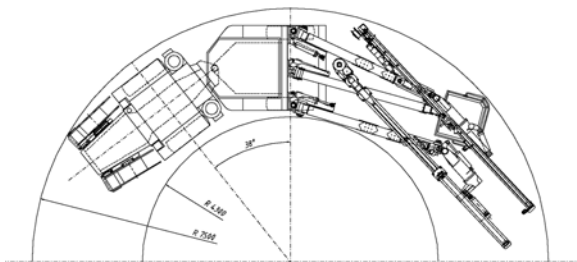


New rugged and low weight Alfa Boom  
design. Standard 18 feet feeders.  
Montabert drifter  
2x75 kW hydraulic power packs  
Weight=2.900 kg  
Boom extension 1.5 m  
Feed extension 2.4 m

Sensors can be fitted in all axis



Coverage  
Suitable for 20 to 90 m<sup>2</sup> tunnel area  
H=8 m  
W=9.3 m at 8 m height  
W=13.2 m max



Articulated chassis,  
turning radius 5.9 m



From the operators cabin. Excellent view of the face. Operator display with touch function and LCD colour display. Joystick for boom and drifter control is mounted on arm-rests. Option on one or two operor display and controls.



Mechanical, hydraulic and electric components on the jumbo are best quality and well protected. Sensors have robust mechanical enclosures, and cables on the booms are protected in hydraulic hoses.



The arrangement is optimised for easy access and maintenance with dust and waterproof protection



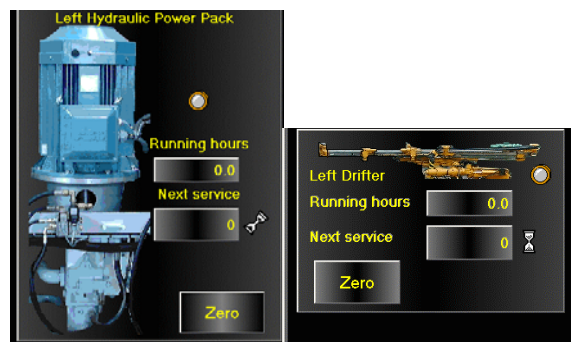
Computer controlled operation. Modular system adapt to customer needs

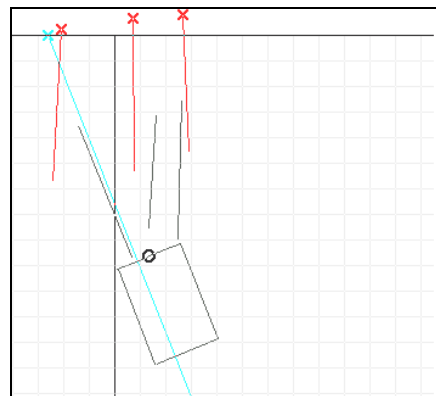
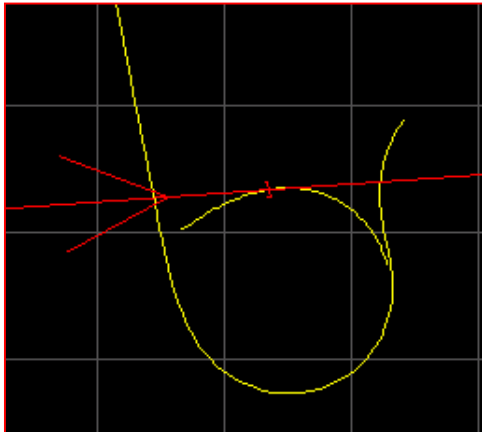
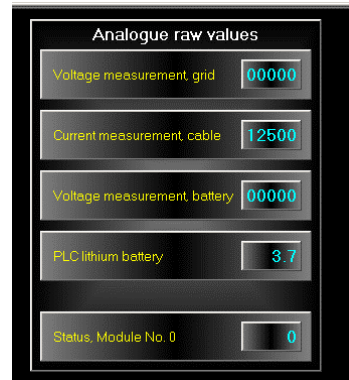
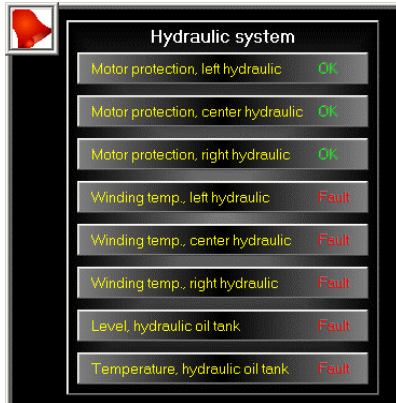
- drifter control and logging
- angle system
- manual drill pattern positioning
- automatic drill pattern positioning

15 inch colour display with touch selection. Convenient arranged joystick in arm chair rests

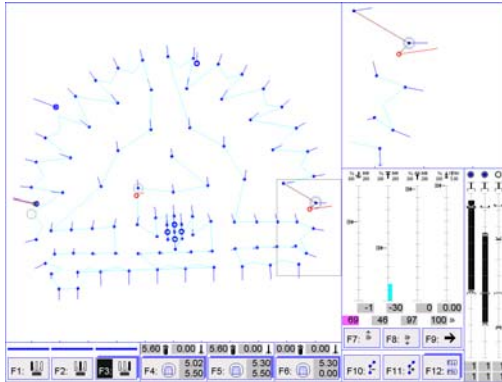


The general instrumentation on chassis equipment is controlled and monitored via a PLC. Operation of PLC is integrated with on board computer system and operated from one screen. The system includes alarm system, and running hours monitoring, warning on service intervals

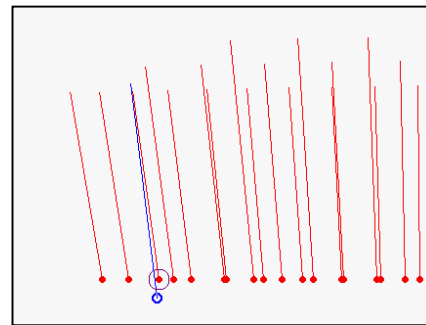
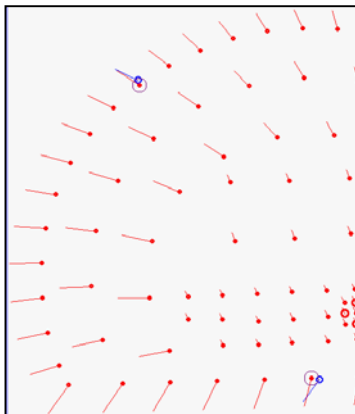




Navigation display on rig computer. Shows actual position at tunnel face



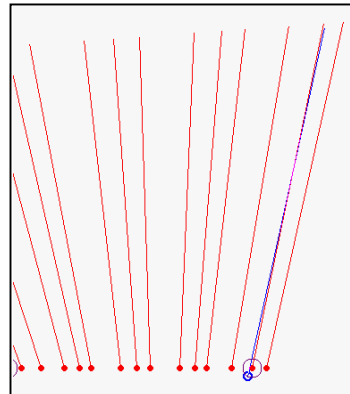
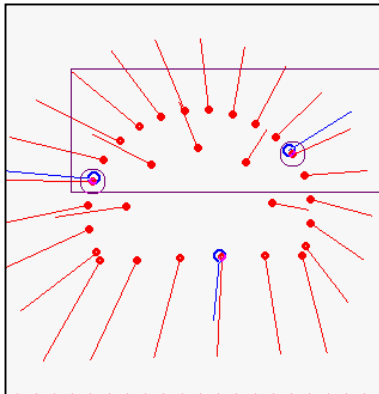
Normal drilling display showing face drill pattern and sequence for automatic positioning



### **BLAST ROUND DRILLING**

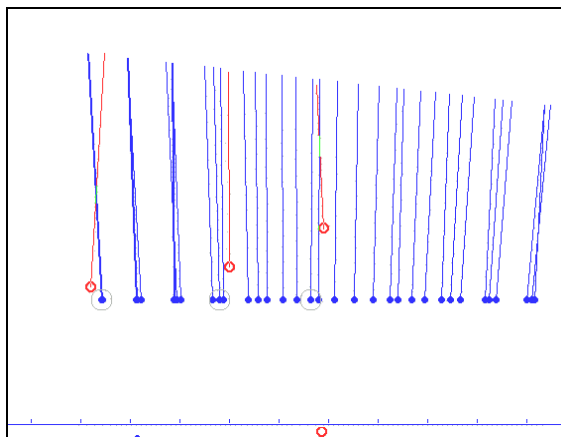
Round drilling and blast pattern adjusted to expanding tunnel cross-section area. Face view and top view can be displayed. From the face view we display actual collar position and look out

Top view below shows planned and actual drilling depth. The depth hole can be accurate controlled to obtain a pre-programmed bottom face. Reduced scaling, smooth blasting and reduced vibration can be obtained



**INJECTION DRILLING (GROUTING)**

Long hole drilling for probing or grouting. Face view and top view, road adding feature gives tools for accurate and reliable long hole drilling. Drill pattern can be preprogrammed in office and automatic adjusted to actual curves in tunnel.



**ROUND DRILLING IN CURVES**

Automatic drill stop adjustment of drill pattern in curves. This includes also automatic adjustment of the lookout angle.