

Control Container



Part No. FA21900F

• Information And Control Center For Microtunneling System •



FEATURES

- The control container consists of the control console, power distribution, Motor Control Centers (MCC) for the slurry pumps, the MTBM drive motor, and a bulkhead panel for the electrical and communication connections.
- Control console includes a computer with monitors that interface to operate and control the machine operations.
- An E-Stop button on the control console will stop all container electrical bulkhead component functions.
- The gas detector in the MTBM is monitored by the control system with visual and audible alarms.
- The input power is monitored for proper three phase electrical power to prevent component damage.
- Project data progress is logged and reports can be generated with integrated software.
- Remote camera provides video communication for viewing the MTBM. System is expandable for additional cameras (optional).
- An audio system is equipped for live, one-way audio monitoring from the microphone installed in the MTBM.
- Container is ISO sized for ease of shipping.
- Climate controlled operator cabin.
- Vandal resistant window and electrical bulkhead.

SPECIFICATIONS

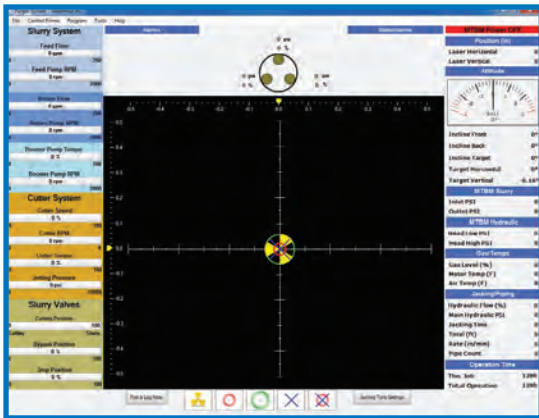
Dimensions (width x length x height)
..... 8 x 20 x 8.5 ft. (2.4 x 6 x 2.6 m)
Container Weight 11,000 lbs. (4,990 kg)
Electrical
Main Disconnect 600 amp, 480V, 3 Phase
Transformer 480V to 575V
Cutter Head Drive VFD 75-250 HP, 575V
Feed Pump VFD 60 HP, 480V
Return Pump VFD 60 HP, 480V
Booster Pump VFD 60 HP, 480V
Power Outlets - Auxiliary Six, 120V
Power Input for console & lights 240V/120V

Communications

Wired Ethernet
Distributed Computing Wago® PLC
Audio One way wired
Video Ethernet
Hardware
Computer Intel® Core™ i5
Graphics Card Dual Monitor
Software
Computer OS Windows® 7 / 32 bit
MTBM Control Software
..... Akkerman Proprietary
OPC Server Kepware®



Operator can easily monitor the status of the target, control, indicator screen displays and control all system components from inside the Control Container. Programmable alarms provide a quick view of system status.



The target screen shows all critical data by means of graphical and numeric meter displays.



The variable frequency drives (VFDs) efficiently control the electric motors for the main MTBM drive, slurry feed, slurry booster, and slurry return systems.



The slurry removal system, steering, cutting head, jacking frame, and emergency stop controls are located on the control console.



A bulkhead panel provides the connections for the electrical and communications.



MCC (Motor Control Center) modules support and house control units, a common bus bar for power to the control units, and a network of raceways to accommodate load and control wires.