

## TECHNICAL SPECIFICATION

### SHOTRETE ROBOT AMV 7450

Rev. 0, 31.01.2020 VS

#### 1. Main Dimensions / Weight

- Overview Drawing: # 31272
- Length: 11300 mm
- Width: 2550 mm
- Height: 4100 mm
- Weight: ca. 31500 kg

#### 2. Main Components

- Concrete piston pump, s-tube or ball valve, theoretical capacity 25m<sup>3</sup>/h, 50bar
- AMV7450 spray boom, enclosed operator cabin
- Mercedes-Benz Arocs 8x4/4 chassis
- 2 hydraulic operated support legs, 420mm vertical movement, 600mm horizontal movement
- Screw compressor for compressed air. 16m<sup>3</sup>/h, 7bar, hydraulic powered.
- Generator, 16kW, 400V, 3-phase, 50 Hz, hydraulic powered.

#### 3. Chassis

- Type: Mercedes-Benz Arocs 3245K 8x4/4
- Engine: Diesel, 449Hp, Euro 6
- Electric system: 24V, 150 A Dynamo
- Gearbox: 12 speed automatic
- Braking system: Disc brakes
- Suspension: Steel, parabolic leaf springs
- Front axle: 2 x 7500 kg
- Rear axle: 2x 13 000 kg
- Diesel tank: 330L / 400L

#### 4. Boom – Coverage area

- Drawing: #31266 + #14114
- AMV 7450 spray boom fitted with enclosed operator cabin
- Proportional controlled movements via joysticks and pedals

#### 5. Central Lubrication System

- Central lubrication system on 7450 spray boom + concrete pump. Manual grease nipples on various other equipment.

## 6. Hydraulic System

- 3 different versions:
  - 7450EL: Electro-hydraulic operation (1000V / 690V)
  - 7450D: Diesel-hydraulic operation
  - 7450H: Electro-hydraulic + Diesel-hydraulic operation
- Hydraulic oil volume: Ca. 645 L
- Hydraulic pumps: Variable axial piston pumps + fixed displacement piston pumps
- Sys. press. spray boom: Ca. 215 bar
- Sys. press. Concr. pump: Ca. 160 bar.
- Oil cooling: Oil-air coolers prop. controlled fan speed.
- Oil type: Shell Tellus S2 V 46
- Filters:
  - High pressure filter, 10my absolute
  - Return oil filter, 10my absolute
  - Leak oil filter, 10my absolute
  - Breather filter, 10my absolute
  - Fine filter, 2my absolute

## 7. Electro system

- Voltage: 1000V / 690V
- Trafo: 25kVA, 1000V / 400V
- Control system: CAN-bus, prop. contr. of pumps, motors and cylinders
- El-cable: 150m, 3x70kv + PE, (7450EL+7450H)
- Shore power: 400V maintenance charging
- Lighting: 24V LED

## 8. Water / Air / Accelerator / Filmo-system

### Water:

- Water tank: ca. 815L
- High pressure washer: 28l/min, 280bar, alternatively 156l/min, 90bar., hydr. operated.
- Max water temp in: 40 °C
- Min. water pressure in: 1 bar
- Water connection: In front, strainer, 50m hose mounted on hydraulic operated reel.
- Spray pistol and spring-operated hose reel for cleaning of the machine.
- Pneumatic operated directional valves
- Level gauge in tank

### Air:

- Screw compressor, controlled via CAN-bus. Max. 16m<sup>3</sup>/min, 7 bar, hydraulic operated
- Air connection in the front and rear of the machine.

### Accelerator:

- Progressing cavity pump, max 20l/min, 15 bar, corrosion resistant material, hydraulic operated

- 2x 1000L IBC containers
- AMV AutoAdd dosing system with flowmeter

**Filmo:**

- 25L pressurized tank
- Spray pistol and spring-operated hose reel mounted on the rear of the machine.

## 9. Operator Cabin

- Enclosed pressurized, mounted on main boom
- Wiper and waterspray for cleaning of front window
- Adjustable operator chair
- HVAC system with built in cooling and heating
- Filter system for HVAC system
- Radio / Music sound system.

## 10. Fire Suppression System

- Half-automatic fire suppression system in engine department and inside the container
- Separate detector line for each system
- Manual activation switch at all operator positions

## 11. Diverse

- Surface treatment: 2-component epoxy-paint, RAL 1007 + RAL 7021
- Documentation / signs: Norwegian / English, paper + digital PDF
- 3" concrete hose
- Operational limitations: -10°C - +30°C