

SCHAEFF TE210



UNCOMPROMISING TUNNEL HEADING MACHINE

Tunnel heading is extremely hard work. Each project is as an expedition to undiscovered regions under the earth's surface. What matters here is the perfect team of people and machinery, for that reason First Square offers you only the Best Equipment.

The TE210 goes ahead due to its enormous power, breaking through any wall. The boom equipment, in combination with the oscillating shovel arm, develops strong breakout forces and best possible production capabilities.

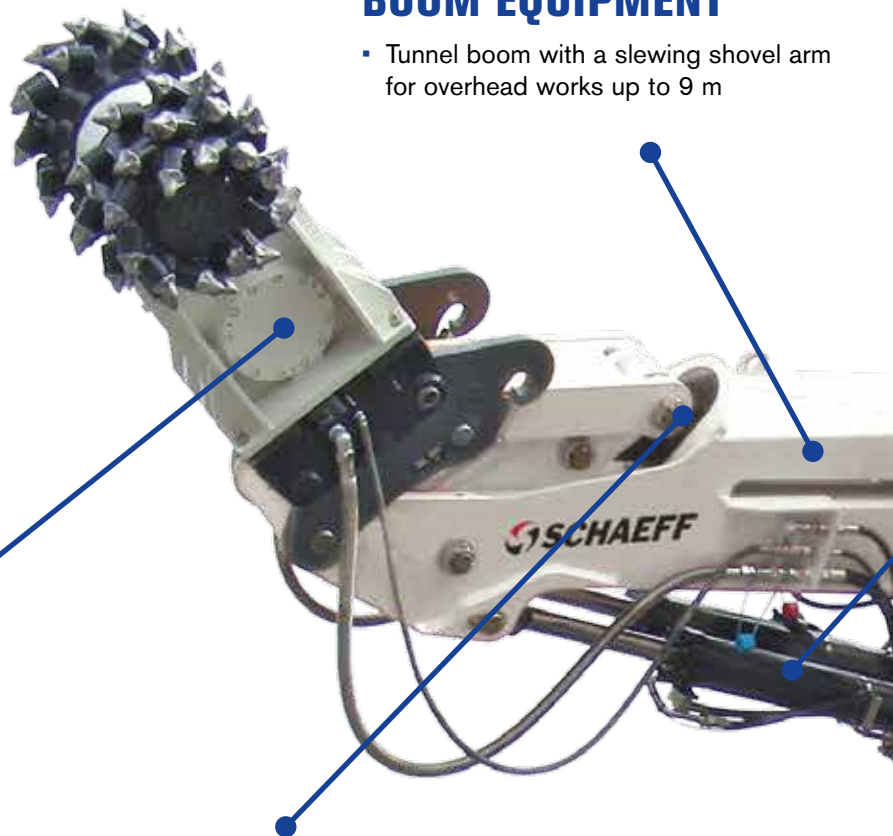
Numerous work attachments enable the TE210 to be extremely versatile but yet strong tool for the job.

HEAVY METAL!

So many benefits - that sounds good.
The benefits turn TE210 to a successful model.

ATTACHMENTS

- With regard to the hydraulics, the factory settings are preset for the application of rotary cutters up to 90kW, hammers up to 1.5 tonnes, and demolition shears / pulverisers up to 2.5 t class.
- Mechanical or hydraulic quick attachments are also available.



BOOM EQUIPMENT

- Tunnel boom with a slewing shovel arm for overhead works up to 9 m

SHOVEL CYLINDER

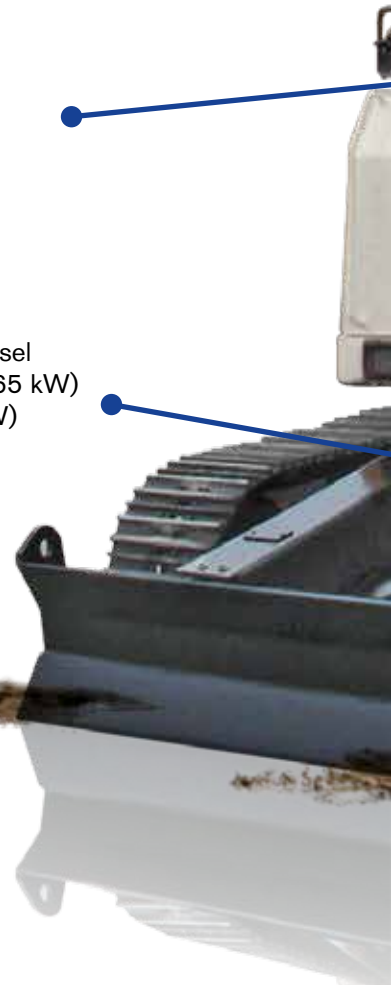
- Shovel cylinder with an extremely large cylinder tube and a special guide link

HYDRAULICS

- Load sensing hydraulic for proper and cost-effective excavator operation

UNDERCARRIAGE

- High-performance drive, either via a diesel engine with a diesel particulate filter (165 kW) or emission-free electric motor (132 kW)
- Enormous gradability for applications with extreme inclinations



DOUBLE LIFTING CYLINDER

- Robust double lifting cylinder for tunnel construction

DRIVER'S PLATFORM

- Two cameras for optimum overview to the right side and backward

ADDITIONAL WEIGHT

- Two tonnes additional extra weight as adjustable ballast for special applications

REVERSIBLE FAN

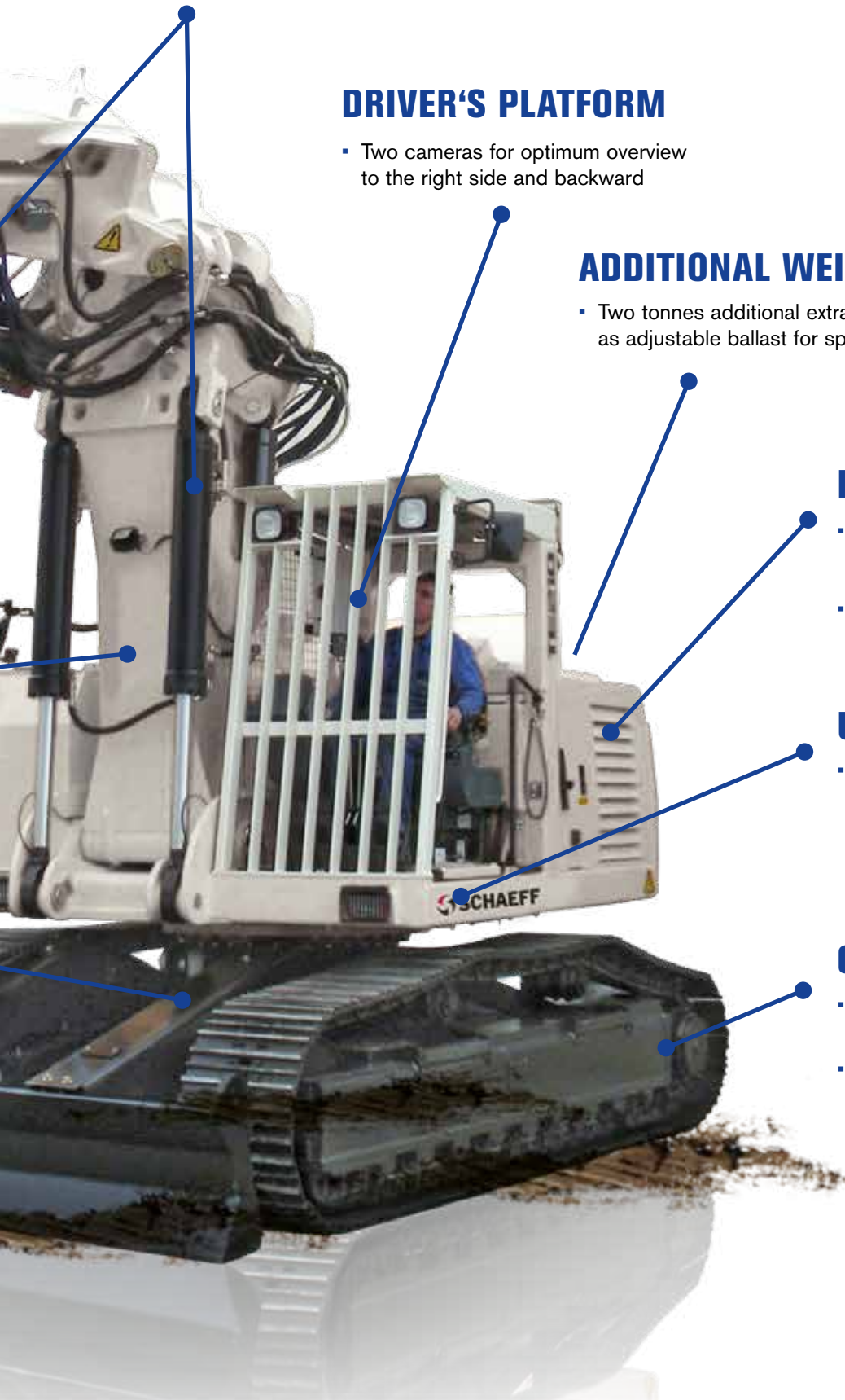
- The hydraulic reversible fan is temperature-controlled and starts automatically if required.
- Manual reverse function

UPPERCARRIAGE

- Robust box-type design for high loading capacity

CHAIN TRACK

- Chain track with 2., 3. or 4. bar plate is also possible
- Maintenance-free tractor running gear



IDEALLY SITUATED FOR TRAVELLING

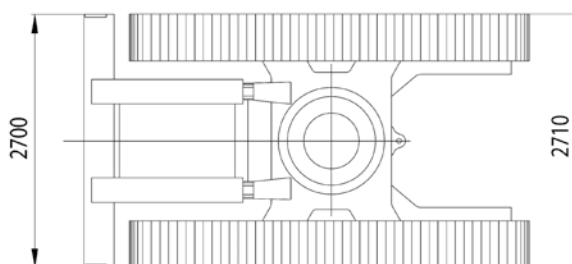
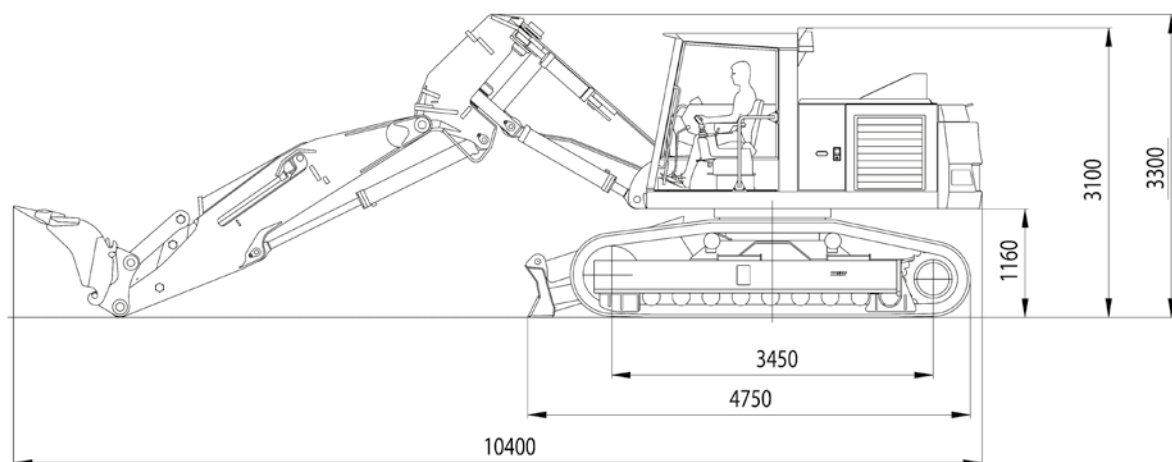


Cost-effective transport

TE210 permits cost-effective transportation on a flatbed truck, including the boom equipment. For the purposes of underground works the machine can be disassembled and on site re-assembled.

Easy refuelling

...in the tunnel, by means of a refuelling pump - as standard for diesel, optionally for hydraulic oil.



FUNCTIONAL RANGE:

Operating parameters

- Max. vertical reach: 8.500 mm
- Max. digging depth: 3.900 mm
- Min. working height: 4.700 mm
- Min. overhead clearance: 3.300 mm
- Machine width - undercarriage: 2.500 mm
- Machine width - uppercarriage: 2.700 mm
- Machine height (over cab protective roof): 3.100 mm
- Machine height for transportation: 3.300 mm
- Rear slewing radius: 2.250 mm
- Min. slewing radius: 3.670 mm
- Operating weight (depending on the equipment): approx. 28 t

Diesel drive

Water-cooled turbocharged diesel engine

Deutz TCD 2013 L06 2V

- Power rating at 2'000 UPM 165 kW
- The diesel engine complies with the exhaust emission standard EEC Euro St. 3a Optionally - diesel engine according to Euro St. 3b, Deutz TCD 7.8
- Fuel tank capacity: 410 l
- Optionally: tunnel excavator TE 210 with the reliable and emission-free electric drive with 132 kW electric motor.

Certification for tunnel construction

The machine meets the current CE-requirements and is certified for tunnel construction according to EN 12111, Dec. 2002.

Hydraulic system

- Hydraulic facility: Output controlled dual axial piston pump with „load-sense“ control
- Pump capacity: 520 + 90 l/min
- Hammer/Rotary cutter control circuit 280 l/min
- Hydraulic operating pressure: max. 350 bar
- Hydraulic oil filling quantity (incl. the facility): approx. 450 l
- Hydraulic oil tank capacity: approx. 370 l
- Hydraulic oil filter: full-flow return filter with a contamination indicator
- Filter finesses: 10 µm



Crawler-type undercarriage

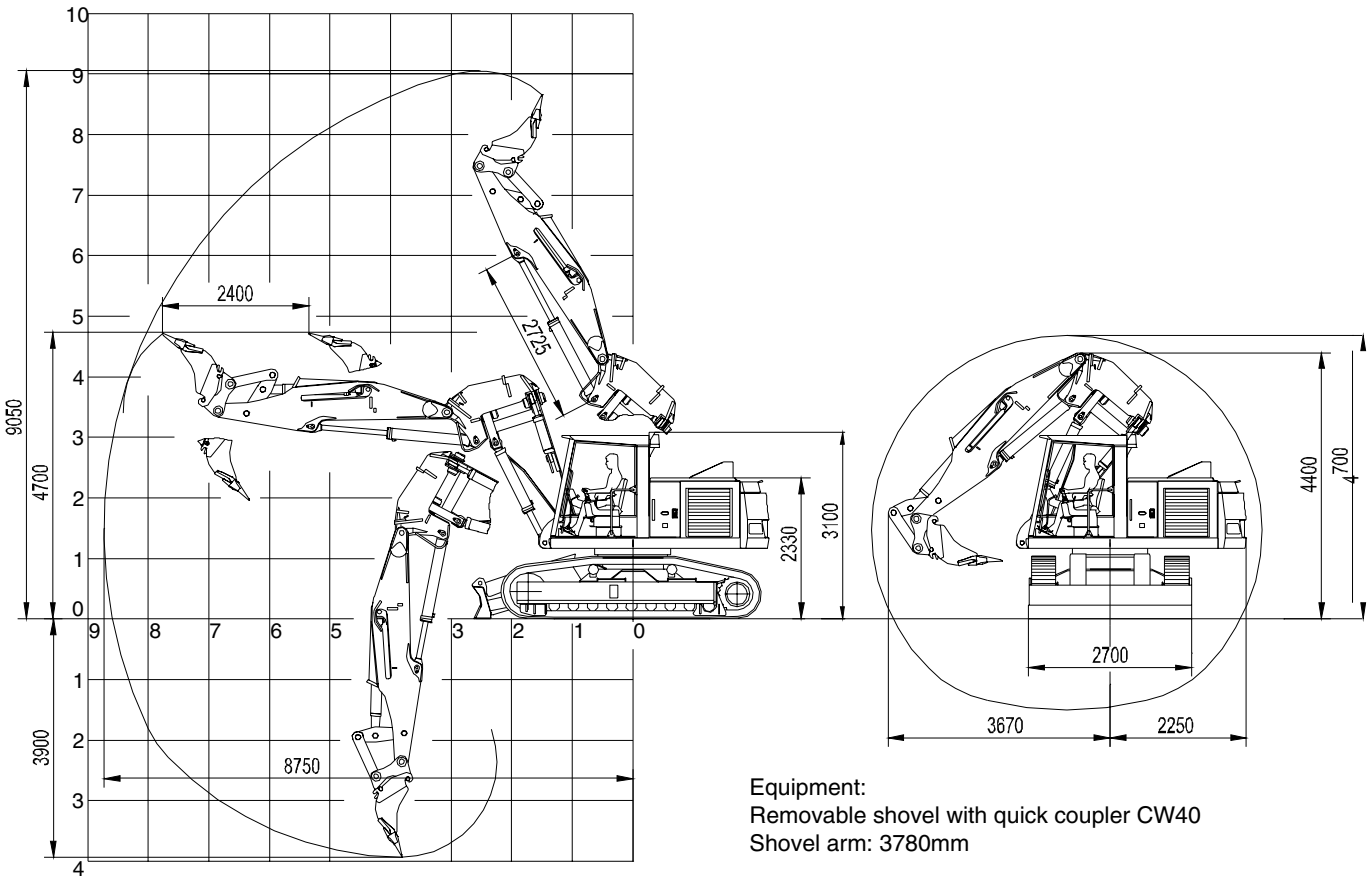
- Crawler chain type: Maintenance-free tractor running gear type D 6
- Chassis width: 2.700 mm
- Chassis length: 3.450 mm
- Standard floor plate width: 400 mm (optionally 500 mm)
- Hydrostatic travel drive via of 3-stage planetary gear with a hydraulic parking brake, as well as driving engines with integrated brake valves.
- Travel speed: 0 - 1.7 / 4.5 km/h
- Crawler tractive power: 280 kN
- Gradability: max. 100%

Boom equipment

- Type: special tunnel boom
- Main boom: with a double lifting cylinder and slewing gear 2x45°
- Shovel arm with a double lifting cylinder and an integrated shovel cylinder
- Shovel arm length: 3.780 mm
- Shovel arm feed motion (in 4.7 height): 2.400 mm
- Standard ripper bucket: 660 mm wide with 2 teeth Esco V51
- Shovel radius: 1.175 mm
- Ripping force: 100 kN
- Breakout force: 140 kN



WITH A SHOVEL:



WITH A ROTARY CUTTER:

