

# HENCON SLAG POT TRANSPORTER AND TILTING VEHICLE (SPTTV)

**HENCON**



VEHICLE FOR LIFTING, TRANSPORTING AND  
TILTING OF POTS CONTAINING  
FERRO-CHROMIUM SLAG

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## SLAG POT TRANSPORTER AND TILTING VEHICLE (SPTTV)

**The Hencon Slag Pot Transporter and Tilting Vehicle (SPTTV)** has been designed with various specialised features enabling it to pick up, transport and tilt pots filled with high temperature (1 750 - 1 850°C) ferro-chromium slag or waste matter between furnaces and dumping sites.

The vehicle is equipped to transport approximately 10 000kg (5m<sup>3</sup>) of ferro-chromium slag per duty cycle.

It's configured as an articulated and oscillated power unit with a cabin at the front, and a U-frame trailer at the back featuring a single axis design for optimal manoeuvrability and tyre lifetime. A slag pot locking and tilting mechanism is mounted at the end of the

transporter, which has a hydraulic tilting device for handling slag pots with a total weight of 30 000kg. The tilting angle is 120 degrees.

The Hencon Slag Pot Carrier is intended for use in dusty, corrosive atmospheres typically associated with the ferro-chromium industry. Special focus was placed on ensuring visibility and safety when reversing during pick-up and placing.

Due to Hencon's continuous improvement drive, this vehicle boasts improved efficiency, resulting in a 27% OPEX reduction (resulting from hydrostatics drive line, versus hydrodynamics, on this kind of high utilisation equipment).

Functional details and full specifications are available on request.

## ENGINE

- Diesel engine Deutz TCD 6.1 Stage 5, water-cooled with turbocharger
- Max power output: 150 kW
- Fuel tank made of 4mm steel plates with inspection cover – 300-litre capacity
- AdBlue tank capacity: 32 liters

## HYDROSTATIC DRIVE SYSTEM

- Hydrostatic transmission
- The hydrostatic drive system consists of a Linde hydraulic axial piston pump and Rexroth motor
- Wheel drive: heavy duty industrial axle Kessler D81

## HYDRAULIC SYSTEM

- Parker hydraulic work pump
- Danfoss PVG series directional valves
- Tank made of 4mm steel plates with inspection cover – 250-litre capacity, Parker filters

- Hydraulic oil cooler with thermostatic control (50°C)
- Hydraulic cylinders have hard chromium plated rods and thermal insulation cover

## BRAKE SYSTEM

- Multi disc wet service brake on front axle, hydraulic activated
- Park brake: spring-loaded, disengaged fail-safe brake on front axle
- Hydraulic caliper brakes on rear wheel bearings

## STEERING/FRONT AXLE

- Hydraulic steering (Orbitrol OSP-series)
- Steer angle: +90°/-90° deflection lock-to-lock

## ELECTRICAL EQUIPMENT

- 24 Volt system
- Battery: 2 x 105 Ah no-maintenance, permanently sealed
- Alternator: 28V – 80A

- Lighting: Headlights, reverse lights, direction indicators, rotating flashing light, work light directed at pot area, 2 extra work lights on trailer locking area

## SPECIALISED EQUIPMENT

Features enabling the vehicle to withstand high temperatures and slag splashes include:

- High temperature sensors
- High temperature bearings, high tensile bronze with graphite inserts
- High temperature grease for bearings
- Hydraulic cylinders with special stainless steel scraper to remove slag splashes from rod
- Protection covers for tyres, hydraulic cylinders and sensors
- Additional window on cabin from ladle side for safety and cheaper replacement in case of splashes

Set up to apply two types of discharge modes via remote control:

- 1-Normal discharge mode
- 2-Granulation discharge mode

## OPERATOR'S CABIN

- The vehicle has a closed, comfortable cabin featuring a strong steel construction and insulation against sound and heat
- Big window panes on all sides with 8mm safety glass allow for optimal visibility of operations
- Optional extra 6mm tempered glass in front of window facing pot
- Two access doors on right and left sides, ergonomic staircase and handrail to cabin
- The driver's seat can be manually adjusted forwards, backwards and rotated 180° for optimal visibility
- Wide angle rear view mirrors, adjustable and in both driving directions
- Driving instruments/controls ergonomically mounted in both forward/reverse driving directions
- Cab-tilting for better service access to engine bay
- Easily removable doors on engine hood for better access to components and easy maintenance
- Air-conditioning
- Fire extinguisher and emergency kit



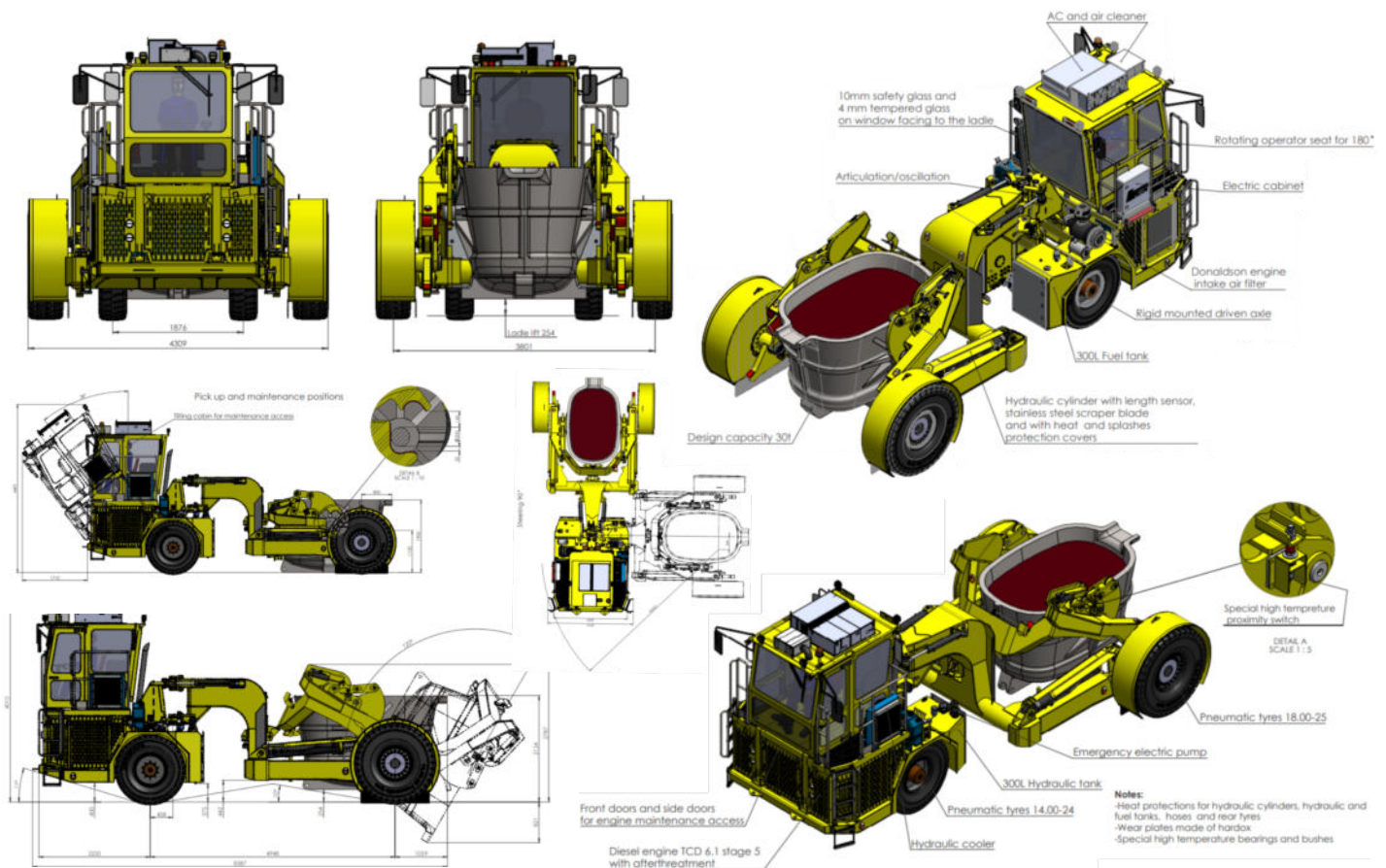
## SOUND INSULATION

- Meets ISO standards
- Vehicle is equipped with dampening and absorption materials
- **Noise level:**
  - Inside cabin – Laf max 80 dB(A) according to ISO/DIN 5128
  - Outside cabin – Laf max 85 dB(A) according to ISO 362



## DIMENSIONS AND MANOEUVRABILITY

Length incl. pot	8 400mm	Weight vehicle, empty (excl. pot)	21 000kg
Width total trailer	4 350mm	Weight vehicle, loaded (incl. pot)	51 000kg
Height transporter	4 050mm	Max axle load, front	24 000kg
Height trailer	2 800mm	Max axle load, rear	36 000kg
Turning radius, outer	6 300mm	Max drive speed	15km/h
Ground clearance	250mm	Max incline	4%
Lifting height pot	250mm	Max designed carrying capacity, for structural components	30 000kg



**Hencon Mining BV**

De Stenenmaat 15, 7071 ED Uift  
The Netherlands

**Hencon Mining SA**

Unit A2 1510 Zeiss Road Laserpar,  
Honeydew, Johannesburg,  
South Africa, 2170

info@henconmining.co.za | www.henconmining.com



Hencon follows a continuous improvement policy and reserves the right to make changes to the vehicle design with no prior notice – without impairing performance.

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