# 1.1 Configuration of the Integrated Equipment

### (1) Engine

Manufacturer DEUTZ

Type BF4M1013C

Max power 104KW/2300rpm

Air intake system Dry air filter

Exhaust system Silencer/exhaust gas catalyst

(2) Torque converter

Manufacturer Dana

Type C273

Design single-stage industrial type with auxiliary

drives for steering and dump/hoist

hydraulic systems

(3) Power shift transmission

Manufacturer Dana

Type R28000

Design power shift transmission with 4 forward

and 4 reverse gears each

(4) Axles

Manufacturer XUZHOU • CHINA

Type SOMA C103

Design rigid planetary axles with differential gear

Rear axle swing angle  $\pm 8^{\circ}$ 

(5) Design of brake system

Design of service brake multi-disk brake, externally cooled

Design of parking brake spring brake operated disk brake,

Hydraulically released

(6) Hydraulic system

## **Dump/hoist hydraulic system**

Pump delivery flow rate  $(32+24) \,\mathrm{m}1/\mathrm{r}$ 

Number of hoist cylinders 2

Boom raising 14 sec

Bucket raising, from dumping position 10 sec

### Steering hydraulic system

Pump delivery flow rate 8m1/r

Number of steering cylinders 2

#### (7) Wheels and tires

Rim 14.00/2.5—24

Tires 14.00—24

Tire filling pressure 7.0 bar

# 1.2 Performance of the Integrated Equipment

#### (1) Main dimensions

Length 7760±50 mm

Width 1780±50 mm

Height 2284±50 mm

Bucket capacity (SAE, heaped) 5.5 m<sup>3</sup>

Max hoist height 3910±100 mm

Unlading angle  $70^{\circ}\pm1^{\circ}$ 

Inner clearance circle 4820±250 mm

Outer clearance circle 7290±250 mm

Steering angle  $40^{\circ}\pm2^{\circ}$ 

#### (2) Weights

Operating weight 11000 kg

Payload 10000 kg

## (3) Driving capacities

Maximum driving speed, laden forward/reverse, on a level roadway

1st gear  $0\sim3.5$  km/h

2nd gear  $0\sim7.0$  km/h

3rd gear  $0\sim13.0$  km/h

4th gear  $0\sim23.0$  km/h

Maximum admissible gradient 25%

Maximum tractive force 197 kN

# (4) Electrical equipment

Operating voltage 24 V

Alternator 28 V/35 A

Battery  $2 \times 12 \text{ V}/165 \text{ Ah}$ 

Main/reversing headlights 50 W

# (5) Filling volumes

Fuel tank 1341

Hydraulic tank 275 1

Front axle differential gear 45 1

Rear axle differential gear 45 1