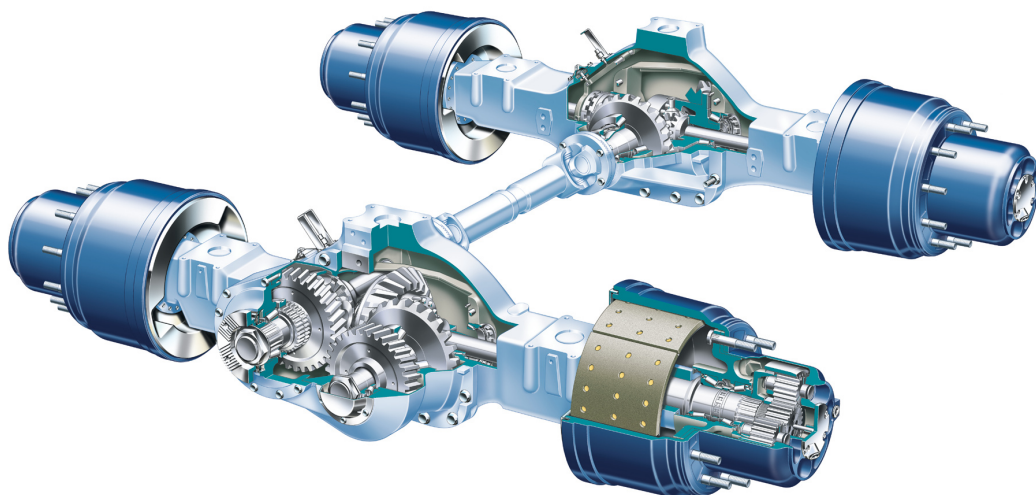


FACT SHEET

REAR AXLE

RTH2610F Rear hub reduction tandem axle - bogie load 26 tonnes, GCW 100 tonnes



RTH2610F is a tandem axle with hub reduction, dimensioned for an engine torque of 3550 Nm. The maximum axle load is 26 tonnes and the maximum gross combination weight is 100 tonnes.

RTH2610F consists of two spiral bevel single-gear units, with a distribution gearbox in the forward rear axle. The axle casings are cast in nodular iron, giving a compact design with high ground clearance.

Most of the torque conversion takes place in the reduction gears in the wheel hubs. This design, which takes the form of a cylindrical planetary gear with straight-cut gears on needle bearings, is reliable and gives low drive losses.

RTH2610F is designed for heavy, demanding haulage and train weights of up to 100 tonnes. The two-axle drive means that the tractive effort can be transferred to the ground without wheel slip, giving excellent grip and very low tyre wear.

RTH2610F has three differential locks — one for the forward gear unit, one for the rear gear unit and one for the distribution gearbox. This guarantees very good grip when the surface is slippery, which results in higher truck productivity.

The differential locks are controlled by a knob on the dashboard. When the first stage of the knob is selected, the differential lock on the distribution gearbox is engaged, coupling the two rear axles together. When the second stage of the knob is selected, the drive shafts of the two rear axles are coupled together. There is a symbol shown in the instrument cluster

to indicate when the differential locks are engaged.

A combination of production methods and special oil results in longer oil change intervals. This means lower operational expenditures and reduced environmental impact.

With an approved synthetic oil, the oil must be changed after at most 450 000 km or every three years.



UPTIME

- Spiral bevel single-gear units with high efficiency and low servicing requirements.
- Sturdily dimensioned and hardened shafts and gears.
- Hub reduction gears reduce the loads on the drive-line.
- Wheel bearings in the form of maintenance-free unit bearings give longer life and easier servicing.



PRODUCTIVITY

- Three reliable differential locks give high vehicle availability.
- High ground clearance.

FACT SHEET

REAR AXLE

RTH2610F Rear hub reduction tandem axle - bogie load 26 tonnes, GCW 100 tonnes

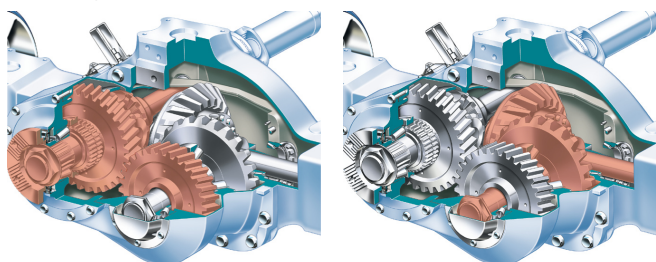
Tandem gear producing much force and allowing good access in all terrain

RTH2610F consists of two single-gears of spiral bevel type and one distribution gear that is built onto the front final drive.

The distribution gear is designed to distribute the driving force evenly between both final drives.

The driving force from the gearbox goes via the input shaft of the distribution gear to the differential. From the differential, the driving force is transferred via a cylindrical gear wheel to the final drive of the front rear axle and to the output shaft of the distribution gear, which drives the final drive of the rear axle via a driveshaft.

With this type of rear axle combination with tandem driving, a large propelling force can be transferred to the ground without slipping as the total axle pressure is high. This means it is easy to get around and there is less tyre wear.



The distribution gear in the front final drive.

The single-gear in the front final drive.

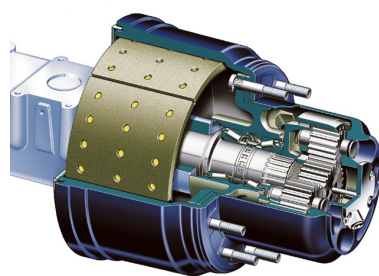
Hub reduction with high reliability

RTH2610F is fitted with reduction gears in each hub. The hub reduction gearing consists of a cylindrical planetary gear with straight-cut gears on needle bearings, giving low drive losses.

The sun wheel is mounted on the driveshaft. From the sun wheel, the power is transferred to three planetary gears connected to the wheel hub.

When the planetary gears are forced to rotate against the ring gear, which is rigidly fixed to the rear axle casing, the rotation speed is geared down.

The wheel bearings are in the form of maintenance-free unit bearings. The entire hub with bearings can be removed and installed simply and safely without affecting the bearing clearance.

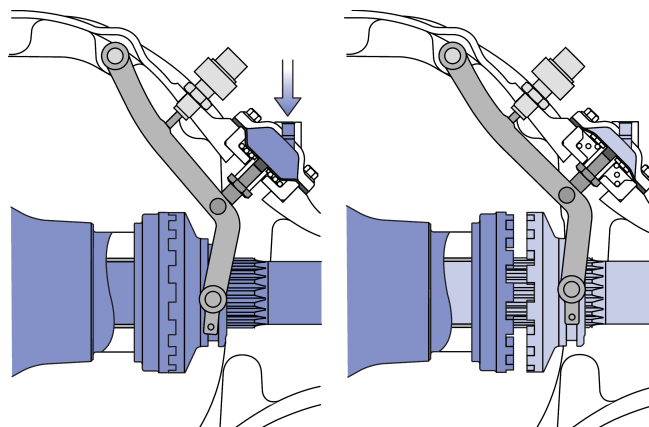


Hub reduction gearing.

Three differential locks give high availability

RTH2610F is fitted with three differential locks, one for each rear axle and one for the distribution gearbox. The differential lock for the distribution gearbox couples together the drives of the two rear axles, whilst the differential locks on the rear axles couple the driveshafts to the differential casing. When all three differential locks are engaged, all drive wheels are forced to rotate at the same speed.

The differential locks are in the form of hardened steel dog-clutches, operated by compressed air. There are two lamps on the instrument panel to indicate when the differential locks are engaged. One lamp is for the differential lock of the distribution gearbox and the other is for the differential locks of the two rear axles. The function of the differential lock guarantees very good grip when the surface is slippery, which results in higher truck availability.



Differential lock engaged.

Differential lock disengaged.

FACT SHEET

REAR AXLE

RTH2610F Rear hub reduction tandem axle - bogie load 26 tonnes, GCW 100 tonnes

SPECIFICATION

Type designation..... RTH2610F
 Gear..... Single-gear, spiral bevel with hub reduction
 Distribution gearbox..... Cylindrical spur gear
 Hub reduction..... Cylindrical planetary gear
 Maximum engine torque..... 3550 Nm
 Maximum bogie load..... 26 tonnes
 Maximum combination weight..... 100 tonnes
 Crown wheel diameter..... 295 mm
 Driveshaft diameter..... 45 mm

Weight including driveshafts, hubs and drum brakes/disc brakes

Forward axle..... 848/803 kg
 Rearward axle..... 747/719 kg

Ratio with hub reduction

..... 3.33:1
 3.46:1
 3.61:1
 3.76:1
 3.97:1
 4.12:1
 4.55:1
 5.41:1
 6.18:1

Oil change quantity

Forward axle..... 26.5 l
 Rearward axle (air suspension/leaf suspension)..... 23/24 l