KAMAZ Trucks
Extra Heavy Duty

65115 (6x4) | 6520 (6x4) | 65222 (6x6) | 65201 (8x4)
BELL and KAMAZ

Tough and reliable machinery distributed and supported by an organisation with an undeniable industry track record.

This is the solid undertaking that Bell customers can expect with the Bell and KAMAZ relationship across Southern Africa.

Established in 1969 - and with more than 2 million trucks having been built since - KAMAZ focuses on understanding applications, designing competitive products and exceeding quality benchmarks.

The company is a 15 time winner of the Dakar Rally, has products operating in more than 80 countries and accounts for half of the trucks sold in Russia. With this proven pedigree customers can rest assured that these vehicles have what it takes to operate when the going gets tough.

Bell has been listening to, and serving customers in Southern Africa for just as long. With unmatched distribution and support coverage Bell is ideally positioned to represent the KAMAZ range of tipper trucks that complements the existing construction, mining and agricultural product line of over 150 models.

Bell and KAMAZ - Strong Reliable Machines, Strong Reliable Support.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>65115 (6x4)</th>
<th>6520 (6x4)</th>
<th>65222 (6x6)</th>
<th>65201 (8x4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated Power</td>
<td>207 kW (280 hp)</td>
<td>294 kW (400 hp)</td>
<td>294 kW (400 hp)</td>
<td>294 kW (400 hp)</td>
</tr>
<tr>
<td>Maximum Torque</td>
<td>895 Nm</td>
<td>1 766 Nm</td>
<td>1 766 Nm</td>
<td>1 766 Nm</td>
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<tr>
<td>Gross Weight</td>
<td>25 200 kg</td>
<td>33 100 kg</td>
<td>34 000 kg</td>
<td>41 000 kg</td>
</tr>
<tr>
<td>Turning Circle</td>
<td>9.7 m</td>
<td>9 m</td>
<td>11.5 m</td>
<td>11 m</td>
</tr>
<tr>
<td>Chassis Capacity</td>
<td>17 850 kg</td>
<td>23 825 kg</td>
<td>23 145 kg</td>
<td>30 075 kg</td>
</tr>
<tr>
<td>Bin Volume</td>
<td>10 m³</td>
<td>12 m³</td>
<td>12 m³</td>
<td>16 m³</td>
</tr>
<tr>
<td>Bin Capacity</td>
<td>15 500 kg</td>
<td>20 400 kg</td>
<td>19 400 kg</td>
<td>25 940 kg</td>
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<tr>
<td>Tyre Size</td>
<td>12.00 R22.5</td>
<td>315/80 R22.5</td>
<td>16.00 R20</td>
<td>315/80 R22.5</td>
</tr>
</tbody>
</table>

- 15 time Dakar winner
- Supplier of choice for the Russian military
- Simple and robust trucks for harsh environments
- Air suspended cabs and seats for operator safety and comfort
- Production all year with proven operation in Africa’s +50°C and the Arctic’s -50°C
- 6x4, 6x6, 8x4 configurations to meet your site requirements
- ISO 9001-2000 International Standard compliant
With an annual capacity of 60,000 units per year and their position as a globally respected extra heavy duty truck design and manufacturing company, KAMAZ relies on strong strategic partnerships with premium original component manufacturers to ensure quality, and the ongoing success of their vehicles.

The air-suspended seats and cabs create industry-leading comfort that drives productivity, safety and ensures driver satisfaction.

Well matched engines and drivetrains bolster performance and the ability to deliver results while stronger fabricated structures promote durability.

Industry leading components

- Over 2 million engines built prove strength and reliability.
- Inter-wheel and inter-axle differential lock for increased traction.
- Durable ZF gearboxes deal with harsh environments.
- Air-conditioned ergonomic cabs with air-suspended seats for operator comfort.
When the going gets really tough...

As a crossover between an ADT and a conventional tipper, the 65222 provides strength, clearance and all-wheel drive ability that is well suited to a number of diverse applications.

The 65222 gets going... thanks to a 400hp, turbocharged V8 common rail diesel engine, powering six 16.00 R20 off-road wheels.

The standard fitment of both inter-axle and centre differential locks keeps the 65222 moving regardless of the underfoot conditions.

This configuration is designed to maximise production for 12 months of the year, and not only when nature allows.

The 65222 - the latest strong, reliable machine addition to the Bell stable.
KAMAZ versatility

KAMAZ trucks are acclaimed for their adaptability to meet our customers’ application requirements. A KAMAZ cab chassis can be modified by way of a wheelbase or chassis extension providing a platform for a variety of application specific bodies.

Bell has partnered with reputable body builders in South Africa. The knowledge gained from the expertise of KAMAZ and these body builders has equipped Bell with the ability to tailor-make solutions according to customer requirements.

The versatility of the KAMAZ cab chassis has enabled Bell to provide a one stop solution service ensuring that we are able to personalise our truck configurations to meet the needs of all industries and sectors.

Consider the options

### Application - On/Offroad, short to medium haul

<table>
<thead>
<tr>
<th>Model</th>
<th>Configuration</th>
<th>GVM (kg)</th>
<th>Power (hp)</th>
<th>Standard Description</th>
<th>Tipper</th>
<th>Mixer</th>
<th>Water tanker</th>
<th>Freight carrier</th>
<th>Truck tractor</th>
<th>Drill rig</th>
<th>Garbage compactor</th>
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<tbody>
<tr>
<td>65115</td>
<td>6x4</td>
<td>25 200</td>
<td>285</td>
<td>Chassis</td>
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</tr>
<tr>
<td>65222</td>
<td>6x6</td>
<td>34 000</td>
<td>400</td>
<td>Chassis</td>
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<table>
<thead>
<tr>
<th>Application</th>
<th>Construction</th>
<th>Mining &amp; quarries</th>
<th>Liquid transport</th>
<th>Dry bulk</th>
<th>Building materials</th>
<th>Waste</th>
<th>Rigging</th>
<th>Agriculture</th>
<th>Forestry</th>
<th>Towing</th>
<th>Plant hire</th>
<th>Abnormal transport</th>
<th>Military</th>
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<tr>
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<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6520 (6x4)</td>
<td>400 hp</td>
<td>33 100 kg</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>65222 (6x6)</td>
<td>400 hp</td>
<td>34 000 kg</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>65201 (8x4)</td>
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<td>X</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

- Tipper
- Fuel/Water tanker
- Concrete mixer
- Hooklift truck
- Garbage truck
- Crane log truck
- Cane, grain & log truck
- Refuelling truck
- Drop-side truck with loader crane
### Technical Data

#### ENGINE
- **Manufacturer:** Cummins
- **Model:** 6iSBe285
- **Configuration:** I6, turbocharged and intercooled
- **Gross Power:** 207 kW (280 hp) @ 2 600 rpm
- **Gross Torque:** 895 Nm (660 lbf.ft) @ 1 500 rpm
- **Displacement:** 6.7 litres (409 cu.in)
- **Fuel Injection System:** Bosch common rail
- **Auxiliary Brake:** Exhaust brake
- **Fuel Tank Capacity:** 350 litres (92.5 US gal)
- **Certification:** 6iSBe285 meets Euro 3 emissions regulations

#### TRANSMISSION
- **Manufacturer:** ZF
- **Model:** 9S1310
- **Configuration:** Synchromesh manual
- **Layout:** Engine mounted
- **Gears:** 9 forward 1 reverse
- **Clutch Make:** ZF & Sachs
- **Clutch Type:** Single-plate dry clutch with diaphragm spring, exhaust type.
- **Clutch Diameter:** 430 mm
- **Clutch Control:** Hydraulic air assisted

#### AXLES
- **Manufacturer:** KAMAZ
- **Model:** 6.2 t front; 2 x 9.5 t rear
- **Differential:** Central input with locking differential
- **Axle Ratio:** 5.94

#### BRAKING SYSTEM
- **Service Brakes:** Full air dual circuit brake system, air dryer,
- **Front Drum brakes Ø 400 mm, automatic gap control between brake pad and drum.
- **Rear Drum brakes Ø 400 mm, automatic gap control between brake pad and drum.
- **Brake Linings:** Asbestos-free brake linings
- **Standard:** Anti-lock braking system (ABS)
- **Park & Emergency:** “Spring-brake cylinder acting on both rear axles”.
- **Auxiliary Brake:** Engine exhaust brake

#### PTO
- **Type:** ZF NH/1C or OMFB
- **Output Speed:** 0.91/1.09
- **Rotation:** Anti-clockwise (same as engine)
- **Maximum Power Take Off:** 137 kW
- **Output Torque:** 1 000 Nm
- **Pump Connection:** Direct pump connection

#### FRONT SUSPENSION
- **Type:** Half elliptic spring

#### REAR SUSPENSION
- **Type:** Centerpoint, multileaf half-elliptic spring.

#### STEERING SYSTEM
- **Operation:** Power steering - pneumatic
- **Lock to lock turns:** 5.5-6 (depends on adjustment)
- **Turning Circle:** 9.7 m

#### DUMPING SYSTEM
- **Pump Type:** Meiller or Hyva
- **Flow:** 80 lt/min
- **Pressure:** 190 bar working 400 max
- **Filter:** Yes
- **Cylinder:** Palfinger or Hyva 4 stage telescopic
- **Raise Time:** 13 s
- **Lowering Time:** 26 s

#### PNEUMATIC SYSTEM
- **System Pressure:** 650 kPa - 800 kPa

#### ELECTRICAL SYSTEM
- **Voltage:** 24 V
- **Battery Type:** Lead acid
- **Battery Capacity:** 2 x 12 V / 190 Ah
- **Alternator Rating:** 28 V / 80 A

### Load Capacity
- Refer to full product brochure for available options.

#### MANUFACTURERS VEHICLE MASS
- **GVM:** manufacturers gross vehicle mass 25 200 kg
- **GCM:** manufacturers gross combination mass 38 800 kg
- **GA:** manufacturers front axle mass 6 200 kg
- **GA/GAU:** manufacturers rear axle bogie mass 19 000 kg

#### KAMAZ FACTORY CHASSIS MASS
- **UF:** unladen front axle mass 3 375 kg
- **UR:** unladen rear axle bogie mass 3 900 kg
- **UT:** total tare unladen mass 7 275 kg
- **Manufacturers chassis mass carrying capacity:** 17 925 kg
- **Road legal chassis mass carrying capacity:** 16 925 kg

#### ROAD LEGAL MASS (Permissible)
- **V:** permissible maximum vehicle mass 24 200 kg
- **D/T:** permissible maximum drawing vehicle mass 37 800 kg
- **AF:** permissible maximum front axle mass 6 200 kg
- **AR:** permissible maximum rear axle bogie mass 18 000 kg

#### KAMAZ FACTORY 10m³ TIPPER MASS
- **UF:** unladen front axle mass 3 975 kg
- **UR:** unladen rear axle bogie mass 5 725 kg
- **UT:** total tare unladen mass 9 700 kg
- **Manufacturers tipper payload mass carrying capacity:** 15 500 kg
- **Road legal tipper payload mass carrying capacity:** 14 500 kg
### Dimensions

The dimensions and exterior picture of the truck can differ depending on specification.

### Engine Characteristics

<table>
<thead>
<tr>
<th>Power (kW)</th>
<th>Torque (Nm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>780</td>
<td>210</td>
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<tr>
<td>970</td>
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<tr>
<td>886</td>
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<tr>
<td>801</td>
<td>210</td>
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<td>970</td>
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<tr>
<td>886</td>
<td>195</td>
</tr>
<tr>
<td>801</td>
<td>210</td>
</tr>
</tbody>
</table>

### Gradeability/Rimpull

1. Determine tractive resistance by finding the intersection of vehicle mass line and grade line. 
   NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across the charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

* The maximum gradeability is limited by the coupling weight.
I Technical Data

ENGINE
Manufacturer
KAMAZ
Model
740.63-400
Configuration
V8, turbocharged and intercooled
Gross Power
294 kW (400 hp) @ 1 900 rpm
Gross Torque
1 766 Nm (1,303 lbf.ft) @ 1 300 rpm
Displacement
11,76 litres (718 cu.in)
Fuel Injection System
Bosch common rail
Auxiliary Brake
Exhaust brake
Fuel Tank Capacity
350 litres (92.5 US gal)
Certification
740.63-400 meets Euro 3 emissions regulations

TRANSMISSION
Manufacturer
ZF
Model
16S1820
Configuration
Synchromesh manual
Layout
Engine mounted
Gears
16 forward 2 reverse
Clutch Make
ZF & Sachs
Clutch Type
Single-plate dry clutch with diaphragm spring, exhaust type.
Clutch Diameter
430 mm
Clutch Control
Hydraulic air assisted

PTO
ZF NH/1C or OMFB
Output Speed
0.91/1.09
Rotation
Anti-clockwise (same as engine)
Maximum Power Take Off
137 kW
Output Torque
1 000 Nm
Connection
Direct pump connection

AXLES
Manufacturer
KAMAZ
Model
7.5 t front; 2 x 13 t rear
Differential
Central input with locking differential
Final Drive
Outboard planetary on all drive axles.
Axle Ratio
5.11

WHEELS
Type
Radial
Tyre
315/80R22.5

FRONT SUSPENSION
Half elliptic spring

REAR SUSPENSION
Centerpoint, multileaf half-elliptic spring.

STEERING SYSTEM
Operation
Power steering - pneumatic adjustable steering wheel column - height and tilt angle.
Lock to lock turns
5-6 (depends on adjustment)
Turning Circle
9.0 m

PTO
ZF NH/1C or OMFB
Flow
80 lt/min
Pressure
190 bar working 250 max
Filter
Yes
Cylinder
Palfinger or Hyva 4 stage telescopic
Raise Time
19 s
Lowering Time
26 s

DUMPING SYSTEM
Pump Type
OMFB NPH-61
System Pressure
650 kPa - 800 kPa

PNEUMATIC SYSTEM
System Pressure
650 kPa - 800 kPa

ELECTRICAL SYSTEM
Voltage
24 V
Battery Type
Lead acid
Battery Capacity
2 x 12 V / 190 Ah
Alternator Rating
28 V / 80 A

MAX. VEHICLE SPEED
1st 6 km/h 3.8 mph
2nd 7 km/h 4.4 mph
3rd 8 km/h 5.0 mph
4th 10 km/h 6.2 mph
5th 12 km/h 7.5 mph
6th 14 km/h 8.7 mph
7th 17 km/h 10.6 mph
8th 20 km/h 12.5 mph
9th 25 km/h 15.6 mph
10th 30 km/h 18.7 mph
11th 36 km/h 22.5 mph
12th 44 km/h 27.4 mph
13th 53 km/h 33.1 mph
14th 64 km/h 40.0 mph
15th 76 km/h 47.4 mph
16th 90 km/h 56.2 mph
R1 6 km/h 3.8 mph
R2 8 km/h 5.0 mph

CAB
Front, above engine day cab, without sleeping birth, rear windows, 65˚ pneumatic tiltable cab with 81.2 Db internal sound level measured according to ISO 10844

KAMAZ FACTORY TIPPER BIN
General purpose, backward tipping, rectangular design.
Volume
12 m³
Tipping Angle
50˚
Structure
SS5 structural steel equivalent
Bottom:
8 mm
Side board:
5 mm
Head board:
5 mm
Tailgate:
4 mm

I Load Capacity
Refer to full product brochure for available options.

MANUFACTURERS VEHICLE MASS
GVM manufacturers gross vehicle mass
33 100 kg
GCM manufacturers gross combination mass
53 100 kg
GA manufacturers front axle mass
7 500 kg
GA/GAU manufacturers rear axle bogie mass
25 600 kg

KAMAZ FACTORY CHASSIS MASS
UF unladen front axle mass
4 375 kg
UR unladen rear axle bogie mass
4 900 kg
UT total tare unladen mass
9 275 kg
Manufacturers chassis mass carrying capacity
23 825 kg
Road legal chassis mass carrying capacity
16 225 kg

ROAD LEGAL MASS (Permissible)
V permissible maximum vehicle mass
25 500 kg
D/T permissible max drawing vehicle mass
45 500 kg
AF permissible maximum front axle mass
7 500 kg
AR permissible maximum rear axle bogie mass
18 000 kg

KAMAZ FACTORY 12m³ TIPPER MASS
UF unladen front axle mass
5 070 kg
UR unladen rear axle bogie mass
7 630 kg
UT total tare unladen mass
12 700 kg
Manufacturers tipper payload mass carrying capacity
20 400 kg
Road legal tipper payload mass carrying capacity
12 800 kg
I Engine Characteristics

KAMAZ 700.63-400 Engine Characteristics

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

* The maximum gradeability is limited by the coupling weight.
ENGINE
Manufacturer KAMAZ
Model 740.63-400
Configuration V8, turbocharged and intercooled
Gross Power 294 kW (400 hp) @ 1 900 rpm
Gross Torque 1 766 Nm (1,303 lb.ft) @ 1 300 rpm
Displacement 11.76 litres (718 cu.in)
Fuel Injection System Bosch common rail
Layout Synchromesh manual

V8, turbocharged and intercooled

16 forward 2 reverse

Engine Exhaust Brake
Auxiliary Brake

BRAKING SYSTEM
Service Brakes
Front Drum brakes Ø 420 mm, automatic gap control between brake pad and drum.
Rear Drum brakes Ø 420 mm, automatic gap control between brake pad and drum.
Brake Linings Asbestos-free brake linings
Standard Anti-lock braking system (ABS)
Park & Emergency "Spring-brake cylinder acting on both rear axles".
Auxiliary Brake

ENGINE
Manufacturer ZF
Model 16S1825
Configuration Synchronesh manual
Layout Engine mounted
Gears 16 forward 2 reverse
Clutch Make ZF & Sachs
Clutch Type Single-plate dry clutch with diaphragm spring, exhaust type.
Clutch Diameter 430 mm
Clutch Control Hydraulic air assisted

WHEELS
Type Radial
Tyre 16R20

PTO
ZF NH/1C or OMFB

Output Speed 0.91/1.09
Rotation Anti-clockwise (same as engine)
Maximum Power Take Off 137 kW

Output Torque 1 000 Nm

Final Drive Outboard planetary on all drive axles.

DUMPING SYSTEM
Pump Type OMFB NPH-61
Flow 80 l/min
Pressure 190 bar Working 250 max
Filter Yes

CAB
Front, above engine day cab, without sleeping birth, rear windows, 65˚ pneumatic tiltable cab with 85 dba internal sound level measured according to ISO 10844.

KAMAZ FACTORY TIPPER BIN
General purpose, backward tipping, rectangular design
Volume 12 m³
Tipping Angle 50˚
Structure S355 structural steel equivalent
Bottom: 8 mm
Side board: 5 mm
Head board: 5 mm
Tailgate: 4 mm

LOAD CAPACITY
Refer to full product brochure for available options.

MANUFACTURERS VEHICLE MASS
GVM manufacturers gross vehicle mass 34 000 kg
GCM manufacturers gross combination mass 54 000 kg
GA manufacturers front axle mass 8 000 kg
GA/GAU manufacturers rear axle bogie mass 26 000 kg

KAMAZ FACTORY CHASSIS MASS
UF unladen front axle mass 5 885 kg
UR unladen rear axle bogie mass 4 970 kg
UT total tare unladen mass 10 865 kg
Manufacturers chassis mass carrying capacity 23 145 kg
Road legal chassis mass carrying capacity 12 845 kg

ROAD LEGAL MASS (Permissible)
V permissible maximum vehicle mass 23 700 kg
D/T permissible max drawing vehicle mass 43 700 kg
AF permissible maximum front axle mass 7 700 kg
AR permissible maximum rear axle bogie mass 16 000 kg

KAMAZ FACTORY 12m³ TIPPER MASS
UF unladen front axle mass 6 290 kg
UR unladen rear axle bogie mass 8 310 kg
UT total tare unladen mass 14 600 kg
Manufacturers tipper payload mass carrying capacity 19 400 kg
Road legal tipper payload mass carrying capacity 9 100 kg
**Dimensions** The dimensions and exterior picture of the truck can differ depending on specification.

**Engine Characteristics**

**KAMAZ 700.63-400 Engine Characteristics**

<table>
<thead>
<tr>
<th>Engine Speed (rpm)</th>
<th>Power (kW)</th>
<th>Torque (Nm)</th>
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<tbody>
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</tr>
<tr>
<td>1900</td>
<td>60</td>
<td>65</td>
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**Gradeability/Rimpull**

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line.  
   NOTE: 2% typical rolling resistance is already assumed in chart and grade line.  
2. From this intersection, move straight right across charts until line intersects rimpull curve.  
3. Read down from this point to determine maximum speed attained at that tractive resistance.

* The maximum gradeability is limited by the coupling weight.

* The maximum gradeability is limited by the coupling weight.
**ENGINE**

Manufacturer: KAMAZ  
Model: KAMAZ 740.63-400  
Configuration: V8, turbocharged and intercooled  
Gross Power: 294 kW (400 hp) @ 1,900 rpm  
Gross Torque: 1,766 Nm (1,303 lbf.ft) @ 1,300 rpm  
Displacement: 11.76 litres (718 cu.in)  
Fuel Injection System: Bosch common rail  
Auxiliary Brake: Exhaust brake  
Fuel Tank Capacity: 350 litres (92.5 US gal)  
Certification: 740.63-400 meets Euro 3 emissions regulations.

**TRANSMISSION**

Manufacturer: ZF  
Model: 16S1820  
Configuration: Synchronesh Manual  
Layout: Engine mounted  
Gears: 16 forward, 2 reverse  
Clutch Make: ZF & Sachs  
Clutch Type: Single-plate dry clutch with diaphragm spring, exhaust type  
Clutch Diameter: 430 mm  
Clutch Control: Hydraulic air assisted  
PTO: ZF NH/1C or OMFB

**AXLES**

Manufacturer: KAMAZ  
Model: 2 x 7.5 t front; 2 x 13 t rear  
Differential: Central input with locking differential  
Final Drive: Outboard planetary on all drive axles  
Axle Ratio: 5.11  

**BRACING SYSTEM**

Service Brakes: Full air dual circuit brake system, air dryer  
Front: Drum brakes Ø 420 mm, automatic gap control between brake pad and drum  
Rear: Drum brakes Ø 420 mm, automatic gap control between brake pad and drum  
Brake Linings: Asbestos-free brake linings  
Standard: Anti-lock braking system (ABS) Park & Emergency  
Spring-brake cylinder acting on both rear axles*  
Auxiliary Brake: Engine exhaust brake

**WHEELS**

Type: Radial  
Tyre: 315/80R22.5

**FRONT SUSPENSION**

Half elliptic spring

**REAR SUSPENSION**

Centerpoint, multileaf half-elliptic spring  
Operation: Power steering - pneumatic adjustable steering wheel column - height and tilt angle.  
Lock to lock turns: 5-6 (depends on adjustment)  
Turning Circle: 11.0 m

**DUMPING SYSTEM**

Pump Type: OMFB NH-61  
Flow: 80 l/min  
Pressure: 190 bar working, 250 max  
Filter: Yes  
Cylinder: Hyva 5 stage telescopic  
Raise Time: 30 s  
Lowering Time: 25 s  

**PNEUMATIC SYSTEM**

System Pressure: 650 kPa - 800 kPa  
Filter: Yes  

**WHEELS**

Type: Radial  
Tyre: 315/80R22.5

**PTO**

Type: ZF NH/1C or OMFB  
Output Speed: 0.91/1.09  
Rotation: Anti-clockwise (same as engine)  
Maximum Power Take Off: 137 kW  
Output Torque: 1,000 Nm  
Direct pump connection

**ELECTRICAL SYSTEM**

Voltage: 24 V  
Battery Type: Lead acid  
Battery Capacity: 2 x 12 V / 190 Ah  
Alternator Rating: 28 V / 80 A

<table>
<thead>
<tr>
<th>Load Capacity</th>
<th>Refer to full product brochure for available options.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANUFACTURERS VEHICLE MASS</td>
<td>ROAD LEGAL MASS (Permissible)</td>
</tr>
<tr>
<td>GVM manufacturers gross vehicle mass</td>
<td>V permissible maximum vehicle mass 33 000 kg</td>
</tr>
<tr>
<td>GCM manufacturers gross combination mass</td>
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</tr>
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</tr>
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<td>Manufacturers chassis mass carrying capacity</td>
<td>30 075 kg</td>
</tr>
<tr>
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<td>22 075 kg</td>
</tr>
<tr>
<td>KAMAZ FACTORY CHASSIS MASS</td>
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</tr>
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**CAB**

Front, above engine day cab, without sleeping birth, rear windows, 65° pneumatic tiltable cab with 81.2 dba internal sound level measured according to ISO 10844.

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>MANUFACTURERS VEHICLE MASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGINE</td>
<td>TRANSMISSION</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>740.63-400</td>
</tr>
<tr>
<td>Model</td>
<td>Configuration</td>
</tr>
<tr>
<td>V8, turbocharged and intercooled</td>
<td>740.63-400 meets Euro 3 emissions regulations.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>ZF</td>
</tr>
<tr>
<td>Model</td>
<td>16S1820</td>
</tr>
<tr>
<td>Configuration</td>
<td>Synchronesh Manual</td>
</tr>
<tr>
<td>Layout</td>
<td>Engine mounted</td>
</tr>
<tr>
<td>Gears</td>
<td>16 forward, 2 reverse</td>
</tr>
<tr>
<td>Clutch Make</td>
<td>ZF &amp; Sachs</td>
</tr>
<tr>
<td>Clutch Type</td>
<td>Single-plate dry clutch with diaphragm spring, exhaust type</td>
</tr>
<tr>
<td>Clutch Diameter</td>
<td>430 mm</td>
</tr>
<tr>
<td>Clutch Control</td>
<td>Hydraulic air assisted</td>
</tr>
</tbody>
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### Dimensions

The dimensions and exterior picture of the truck can differ depending on specification.

![Dimensions Diagram]

### Engine Characteristics

- **Power (kW)**
- **Torque (Nm)**

![Engine Characteristics Graph]

### Gradeability/Rimpull

1. Determine tractive resistance by finding intersection of vehicle mass line and grade line. NOTE: 2% typical rolling resistance is already assumed in the chart and grade line.
2. From this intersection, move straight right across charts until line intersects rimpull curve.
3. Read down from this point to determine maximum speed attained at that tractive resistance.

![Gradeability/Rimpull Graph]

*The maximum gradeability is limited by the coupling weight.*
### Features and Options

#### STANDARD & OPTION

<table>
<thead>
<tr>
<th>Feature</th>
<th>65.115 (6x4)</th>
<th>65.20 (6x4)</th>
<th>65.222 (6x4)</th>
<th>65.201 (8x4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern steering wheel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three interior sunvisors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior sunvisor</td>
<td></td>
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<tr>
<td>Rubber floor mats</td>
<td></td>
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<tr>
<td>Full complement of instruments and warning lights</td>
<td></td>
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<tr>
<td>Digital truck operational information display, odometer, hour meter</td>
<td></td>
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<tr>
<td>Onboard diagnostics system - common rail injection engines</td>
<td></td>
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<tr>
<td>Grammar air suspension seats, driver and passenger</td>
<td></td>
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<tr>
<td>Grammar air suspension seats, driver and passenger fixed seat</td>
<td></td>
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<tr>
<td>Seat covers made of flat-woven fabric</td>
<td></td>
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<tr>
<td>Pneumatic adjustable steering wheel column - height and tilt angle</td>
<td></td>
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<tr>
<td>Center console with cup holders and tray</td>
<td></td>
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<tr>
<td>Documents holder in door trim</td>
<td></td>
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<tr>
<td>Interior dim and bright lights</td>
<td></td>
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<tr>
<td>Entrance grab handles for driver and passenger</td>
<td></td>
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<tr>
<td>Stowage facility above windscreen, 2 compartments</td>
<td></td>
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<tr>
<td>Exterior rear view mirrors left and right - manually adjustable</td>
<td></td>
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<tr>
<td>Ramp mirrors (passenger horizontal mirror)</td>
<td></td>
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<tr>
<td>Front bumper view mirror</td>
<td></td>
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<tr>
<td>Steel roof lid (air vent), manually operated</td>
<td></td>
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<tr>
<td>Air conditioning</td>
<td></td>
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</tr>
<tr>
<td><strong>OPTION</strong></td>
<td></td>
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<tr>
<td>Heavy duty roof mounted recirculation air conditioning</td>
<td></td>
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<tr>
<td>4-point cab air suspension</td>
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<tr>
<td>Safety standards to N/A</td>
<td></td>
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<tr>
<td>Transparent-glass headlights</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Foglamps front and rear</td>
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</tr>
<tr>
<td>Spot lights</td>
<td></td>
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<tr>
<td>Train lights on sides of truck</td>
<td></td>
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</tr>
<tr>
<td>Manually operated windows (driver &amp; co-driver)</td>
<td></td>
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<tr>
<td>Cruise control standard</td>
<td></td>
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</tr>
<tr>
<td>ABS - braking systems standard</td>
<td></td>
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<tr>
<td>ASR - anti skid system standard</td>
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<tr>
<td>Composite bumper with steel steps</td>
<td></td>
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<tr>
<td>Interior battery isolation switch</td>
<td></td>
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<tr>
<td><strong>FACTORY OEM BIN</strong></td>
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<td></td>
</tr>
<tr>
<td>General purpose</td>
<td></td>
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<tr>
<td>Backward tipping</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rectangular design</td>
<td></td>
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<tr>
<td>Half Pipe design</td>
<td></td>
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<tr>
<td>Sloped front hoist tippers - general purpose</td>
<td></td>
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<tr>
<td>PTO operated hydraulic system</td>
<td></td>
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<tr>
<td>Mechanical auto locking top hinged tailgates</td>
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</tr>
<tr>
<td>Stabilizer bar</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Extended front</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Bin heating</td>
<td></td>
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</tr>
<tr>
<td><strong>ACCESSORIES</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Reverse alarm</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Rotating beacon/Strobe light</td>
<td></td>
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Supporting you EVERY STEP of your Bell ownership experience

Bell is the brand of choice for a wide range of mining, construction, road building, material handling and agricultural equipment.

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Tel: +44 (0)1283-712862

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