

Kögel Mega

The well-balanced one



Special edition

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Unhitched for testing

The well-balanced one

Kögel has pursued a “slimmed down” strategy for many years in Burtenbach. This was not always met with approval by the TTI (Trailer-Test International) two years ago. Kögel has taken care of the details. Which is why today the technology from Burtenbach has a different competitive position. Further ahead.

The cause for the leap forward is the modularisation of the Kögel Cargo and its Mega volume counterpart. The company offers potential buyers lots of equipment versions, especially those which affect the rear portal. But not just there.

Rear doors

Like all the others, the Kögel Mega passed the wedge test with the adjusted rear portal in this round. Two years ago the vehicle from Burtenbach was the only one that didn't pass the test. If you look more closely at the hinges, the new bearing bushes are responsible for this. There is virtually no play in the hinges. Kögel then made an expensive investment decision. Because Thiriet Intégrale were used as the locks. Thiriet is well-known as the inventor of the door lock in which, when you open the lever, you also release the lock. In this way you can open the door leaves with both hands on the levers while at the same time staying safe for working and providing access with both levers. I have long wondered why the Employer's Liability Insurance Association for Road Use doesn't make this locking technology legally binding. But as a specialist journalist

you don't have to understand everything, especially not authorities.

At this point I can repeat the question from the KFZ-Anzeiger (15/2016) as to why the Humbaer Big One had this lock as early as 2009. It remains to be seen: With the door fittings Kögel only has one satisfactory competitor, that is from the colleagues in Hanzing, Austria. All other contact pressure lever button pressure models being used are the so-called two-handed locks.

The Kögel Cargo did not manage to excel with the existing hinge brackets. The Mega on test had the steel corner pillars with welded-on spacers. In any case, this is to be recommended when compared with the unprotected aluminium version. This was extensively reported in the KFZ-Anzeiger (9/2015). When delivered it was expected that the Kögel rear portal is now much improved, its locking technology is first class.

Kögel has installed four hinges, you can now pull out the door panels upwards and the arrangement of the seals is faultless, because it is now has no rivets.

For those who know what they want...

KÖGEL

... the Kögel Mega

- ✓ 3 m internal clearance height
- ✓ Can accommodate up to 3 stacked standard pallet cages
- ✓ Flexible loading options

Passion for commercial vehicles since 1934



Side tarpaulin

At the rear, the side tarpaulin is tensioned longitudinally with PWP tender and on the front wall with a special Kögel rotary lever. It is clumsily built around the front corner profile. This lever has the blessing of BG Verkehr. After they had an accident with a short rotary lever they requested and received the long version. Having said that, it stretches the side fender of the tractor unit to the rear. This is a drawback. Since the competition no longer worries about such old matters, it was recommended that the test team dismantle it for the competitive short version.

The side tarpaulin is easily pulled with 2 to 12 daN. Whereas, after several repetitions the required force becomes easier (single-digit). This obviously has to do with the fact that the Versus Omega top flange was fitted for the Trike trolley tarpaulin. So the tarpaulin - like a sliding roof - is guided horizontally and vertically in rollers. This certainly has an effect.

In matters of strap loops for the winding shafts, Kögel has a conveniently short 5 cm on the front, and on the rear unnecessarily far away, 12 cm. At the rear this makes things a bit difficult for inserting the shaft upwards. But this is not a huge minus point. Since the side tarpaulin also has strap loops on the winding shaft. In this respect the handiwork (as the textile producers call it) from Burtenbach is OK. Anyone who daily has to work with curtains learns to appreciate ease of movement, like with the rear docker of the integral locks.

Kögel also gets a plus point for the front corner of the side tarpaulin. Instead of restraining it against the airstream with elastic to the front wall, a lever clamp is placed right at the front. Complete with welded on strap and upper rollers. For this reason, this side tarpaulin remains permanently sealed at the front. The PWP tender gearbox is effectively protected from docking damage by the corner pillars on the rear. The tarpaulin customisation is almost perfect for this to protect the tensioning drive from ingress of dirt.

Roof tarpaulin

The Kögel end run beam can be set up with a very few decanewtons, namely two, while a competitor with the Versus-Omega roof technology later needed 22. It looks as if the end run set-up beam does not always match the set-up mechanisms. Pulling out the sliding roof requires up to 25 daN, in order to, setup by Kögel this time, pull out the locking package. The pull rod is a rigid version 320 cm long and is installed on the left above the impact protection cross beams in Burtenbach. That is a mediocre solution. As it is not telescopic, there are no problems with removal, the rod is protected against theft as it is stored in the loading area.

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Open: Sliding roof test



Kögel achieves 12642XL roof reinforcement using tarpaulin technology. There are stiffeners in the roof tarpaulin fabric, such as those we know from the side tarpaulin.

As easy as it is to open the sliding roof, so inconvenient is the closing process. Pulled from the side the bolt wire cable only locks on this side. This means: there is too much play in the end trolley roller system. The bolts are also locked on small wedge-shaped plates, which brings the service life of them in question, unless these plates are soon replaced in Opglabbeek by laser cut double wedges made from Weldox 1300 and with at least two 10 mm machine screws. OK the test team is negotiable regarding the limits of the types of steel and the thread thicknesses. Presumably, so can Kögel be as well. In this series no trailer has been presented which has a really solid wedge lock. In order to open the sliding roof from front to back, you have to book a second end trolley from Kögel. For safety reasons there is no auxiliary makeshift solution made from winding clamps and wire locking eyes.



Pressure testing without problems

Posts

Kögel bought the sliding posts from Autocar in Italy. Officially, the model is called the Maxi4 hp due to the height adjustment. The fact is that the locking mechanism is very smooth. Without any load you can lift it with 0.5 daN, which is the lower limit that a Bongshin load cell can register as tensile force. With the hydraulics actuated, at 10 bar you get 2 daN and at 20 bar 14 daN. But that does not mean that the driver should mess around with the posts for the loading pressure. Because it springs open to the side like all the other designs. Then you should not stand around. The technology is OK, you have to accept the lack of ability to repair, since most of the other models also don't offer it.

Floor

Two years ago, a lot of money was spent in Burtenbach to bring the floor screws up to a good technical level. The result is the advent of the Torx screw heads which are so even that you don't need post-sealing. Traditionally Kögel runs the longitudinal beam through full-length, or more precisely they lay two Omega profiles on it, which also serve as holders for the floor plates. Naturally this three-part floor is difficult to customise, but has the benefit that you only have to replace small segments.

Lighting system

The front wall cross beam by Kögel is one of the most generous models for height and width. This facilitates the coupling of light and air. The combined distributor replaces special plug connections in the event of a cable break or incorrect forced connection attempts (24-N against 24-S). The cable routing from the front wall in a cable duct on the right inside of the left-hand longitudinal beam cannot be objected to. The pre-assembled system from Aspöck leads to a tail light system in the rear, which is a folded steel structure. This is the "heavy-duty" version of the rear light holder in Burtenbach, which, as reported in the normal trailer test reports, was recommended about six years ago. The multi-chamber Ecoflex type tail lights can be equipped with LED Lights. The basic version is fitted with incandescent light bulbs.



Without front lashing point option

Braking system

The braking system is largely assembled from Wabco components. 2S/2M for a "Flachmann" (a trailer without a cover), like a Mega trailer, is absolutely fine. The wrong production date of 9/2014 is a small infraction. It simply means that the employees who installed the parameter set, could not access the parameter set. What is not OK is the lag of the trailer EBS over one hour via terminal 30. This was already complained about before. This just means that an employee should look after the data sets in Burtenbach. As before the test team was not impressed by Kögels pre-assembled braking device holder and the flanged-mounted modulator.



Plug-in pumps easy to operate

3x40 l air supply is too small. Especially as the braking device manufacturer recommends 20 l supply per air-suspended axle. What is praiseworthy is that Kögel decided, as higher volume competitors did long ago, to install the 24N stop light supply. You need this as driving evidence, as is well known, without plugged in or with defective ABS cable.

Load-securing

The Daimler 9.5 version of the Kögel Mega has numerous lashing points. In other words: whoever orders the vehicle with pallet linings, also get 78 slots in these strips with the 13 DIN/EN lashing rings per side. What is important to know is that you can thread in all hooks in the lashing rings, as there is a 2,000 daN class right through to heavy-duty versions. Kögel has not included the lateral bracing of the rear portal and the longitudinal bracing of the front wall in the programme.

Chassis

At Kögel the chassis construction is non-negotiable in the classical style with full width cross beams. Kögel will only vary the spacing, depending on whether you need 5,460 kg, or 7,200 kg as in the standard version. In principle there is nothing to complain about in this design. Additionally, Kögel is one of the few competitors, who carefully cover the rotation area of the tyres of the drive axles with plates. You could still complain about the fact the Kögel, in contrast to the competitors, has welded the cross beams of the rear underride guard, where all the others have bolted them.

However, the braking device and tank arrangement will soon be history. Kögel has developed a combined axle support C-holder for its own axle which also serves as an air tank. Maybe soon everything will soon be sorted out down in the beams.

Lifting roof

The lifting roof actuation takes place with single plug-in pumps. With the competitors the actuation force is about 5 daN. The locks for the roof height adjustments are easy to operate with bolts and sliders.

Conclusion

In the past two years Kögel has carried out product maintenance on the curtain-sider trucks. Today the Burtenbach vehicles score very highly for handling, and they always did for the finish. As regards the braking device unit, we'll have to wait and see how the innovations that we already know about are integrated into the range.

Folkher Braun



Without limitations: the load-securing from Kögel

Technical data: Kögel Mega, vehicle No. 198021



Folkher Braun

Dimensions

Total length	13.950 mm
Internal width	2.480 mm
Interior height, front	2.875 mm–3.000 mm
Interior height, rear	2.950 mm–3.000 mm
Total width	2.550 mm
Throat height	90 mm

Weights

Permissible total weight	35.000 kg
Tare weight (design)	6.300 kg
Tare weight test vehicle	6.679 kg
Interior height, rear	2.950 mm–3.000 mm (factory specifications up to here)

Chassis

Double longitudinal T holder and put-through transverse double T, Z and cap profiles in a regular arrangement. Fork-lift axle load 7.2 t surface technology with cathodic dip-paint coating in nano-ceramics. Powder coating

Body

Front wall with aluminium corner pillars, aluminium hollow profile assembled as front wall panel. Half-height plywood impact panel as fork- lift protection. Corner pillars on rear made from steel construction with welded on ramp guard plates for the lower hinges. Rear wall as aluminium hollow profile construction. Sliding roof Versus Omega with roof tarpaulin and welded on lashing straps as reinforcement for EN 12642 XL.

Axles

SAF-Holland Intradisc Integral, 19.5 brake disks ET 120, tyres 445/45 R 19.5 Conti HT3 .

Lighting system

Aspöck light bulb version of the rear lights, LED corner marker.

Braking system

Wabco TEBS-E in 2S/2M and RSS. Pneumatic/electronic lift axle regulated with off switch. Air suspension valve pneumatic. Raise-lower valve with Rtr. Tank supply 3 x 40 l.

Floor

30 mm plywood, laid lengthwise in three strips with aluminium cap profiles. Very precise screw fitting. Plastic sealing strips to the steel frames.

Load-securing

Combination of EN lashing rings and perforated battens (pallet edges). Extensive documentation of the loading in the right inner corner pillars.

Evaluation

- ⊕ Finish
- ⊕ Surface treatment
- ⊕ Door and roof pick-up plate handling
- ⊕ gliding plate
- ⊕ Connection of underride guard and lighting row
- ⊖ All-round LED lighting not as standard
- ⊖ No sufficient rear buffering as standard

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