## TECHNICAL DESCRIPTION



# 1. MULTI-TRAILER MPL-102-06(V)

Extendable powersteered semi lowbed with 6 pendulum axlelines.



## THE NEXT GENERATION IN SPECIAL TRANSPORTATION



(This picture is only an example. Your specification may be different.)

## 1.1. Weights MPL-102-06(V)

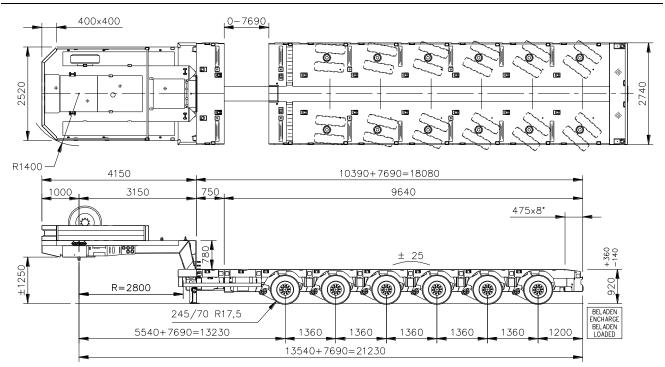
Max. Weights (t)					
	Fifth wheel	Rear axles	Total (GVW)	Deadweight	Payload
Design		6x		app.	app.
80 km/h	30.0	12.0	102.0	21.6	80.4
60 km/h	31.5	12.0	103.5	21.6	81.9
50 km/h	33.0	12.2	106.2	21.6	84.6
40 km/h	34.5	12.5	109.6	21.6	88.0
30 km/h	37.5	13.6	119.3	21.6	97.7
20 km/h	39.0	15.6	132.6	21.6	111.0
Regulations		6x		app.	app.
D (§70)	23.0	12.0	95.0	21.6	73.4
F (cat 3)	25.0	12.0	97.0	21.6	75.4
GB (cat 3)	39.0	15.6	132.6	21.6	111.0

(Indicative weights of basic execution, excl. options)





### 1.2. Dimensions MPL-102-06(V)



#### (Drawing 5403867 basic execution, excl. options)

#### Gooseneck H1 Fifth wheel height: In consultation L1 Length gooseneck overall: 4150 mm 1000 mm L2 Front overhang: R1 Front radius: 1400 mm R2 Tail swing space under gooseneck: 2800 mm Width gooseneck: W1 2520 mm Loading bed H2 Minimum height loaded + stroke: 780 mm + 500 mm L3 Length loading bed (closed / extended): 10390 mm / 18080 mm L4 Length foredeck: 750 mm L5 Length rear part loading bed: 9640 mm Е Extendability: 7690 mm S2 Loading bed rear slope: 475 mm x 8° W2 Width loading bed: 2740 mm Axle bogie 5540 mm / 13230 mm Kingpin - first axle (closed / extended): A1 A4 Axle distance rear bogie: 5x 1360 mm A5 Rear overhang: 1200 mm T1 Kingpin - rear (closed / extended): 13540 mm / 21230 mm

(Dimensions basic execution, excl. options)





## 1.3. Specification MPL-102-06(V)

### Gooseneck

- Suitable for 6x4 and 8x4 tractors.
- Hydraulically height-adjustable, total stroke app. 600mm.
- Raise/lower of the gooseneck and suspension by an integrated electric pump, controlled at the left side of the neck.
- 3 Gauges at the left side of the gooseneck, connected at the hydropneumatic suspension, indicating the fifth wheel load and the axle loads.
- Kingpin 3<sup>1</sup>/<sub>2</sub>" interchangeable, and 40° steering wedge with silentblocs.
- Chamfered front corners 400x400mm, to reduce the front radius.
- Detachable steel headboard 415mm high.
- 1 Spare wheel with carrier mounted on the gooseneck.
- 3 Aluminium boards on the front half of the gooseneck, 415mm high.
- 2 Landing legs at the front end of the bed with large footplates and pinthrough-hole lock. (Coupling/uncoupling done by raise/lower).
- 3 Pairs stake pockets 96x66x6mm in the side rave of the gooseneck.
- 3 Pairs TÜV-certified lashing eyes (LC 3.000 daN) in the side rave of the gooseneck.





#### Loading bed

- Uniquely solid design from high grade steel, with countersunk connection of the pendle legs, thus leaving the loading bed fully level.
- Telescopic central box-section mainmember with large dimensions. Thanks to this the trailer is extremely stiff and torsion-rigid, therefore superbly stable when loaded.
- The extension spines and the loading bed are precambered to reduce the deflection in extended position.
- Extension steps every app. 0,5m with pneumatic locking.
- EC Side guards underneath, in front of the foremost axle.
- Hook-on rail for heavy (alloy) ramps across the full width of the rear.
- 8 Pairs stake pockets 96x66x6mm in the side rave of the loading bed.
- 4 Pairs stake pockets 120x120x8mm left and right next to the central mainmember of the loading bed, suiting "clamping" securing of load.
- 8 Pairs Nooteboom TÜV-certified lashing eyes (LC 10.000 daN) in the side raves of the loading bed.
- 8 Pairs Nooteboom TÜV-certified lashing eyes (LC 10.000 daN) left and right next to the central mainmember of the loading bed.
- 1 Pair Nooteboom TÜV-certified lashing eyes (LC 10.000 daN) left and right next to the central mainmember at the rear.
- 2 Pairs hoisting rings RUD RBS-10 (8.000 daN): 1 pair full at front and 1 pair full at rear in the loading bed.







## Gets you there.

#### Axle bogie

- The unique design of the Nooteboom MANOOVR suspension enables an extremely low loading height of only 780mm at the lowest position in combination with powersteered pendulum axles.
- By using pendulum axles for the well-tried MANOOVR technology 12 t/axle line at 80 km/h is allowed in almost all European countries. (Technically suitable for 15.6 t/axle line at 20 km/h.)
- The huge **stroke of 500mm** of the MANOOVR suspension makes it possible to negotiate road obstacles with great ease and to load jacked-up loads without the need for a crane.
- Thanks to the MANOOVR pendulum axle suspension neither the chosen ride height nor driving over unevenesses affect the track width and alignment. This increases the **tyre life** greatly in comparison to other types of suspension.
- Hydro-pneumatic suspension incl. raise/lower.
- Accumulators of the suspension system can be turned off to further increase the stability (only allowed at low speeds).
- Each suspension cylinder (each pendulum axle) has a hose rupture safety valve.
- Each suspension cylinder (each pendulum axle) has a shut-off tap to enable lifting of the axle, for example for easy change of an inner wheel.
- The inner wheel can be changed very easily: By raising the suspension and adjusting the steering to create space for the inner wheel to be (de)mounted.
- Spray suppression with anti spray flaps and steel side plates behind each axle line.
- Pendulum axles make SAF, with modern compact hub design.
- Tyres 245/70R17,5 on steel rims, single mounted (4 wheels per axle line).





#### Steering

- 2-Circuits hydraulic steering system, with 2 double acting cylinders in the gooseneck and 2 in the axle bogie, with EC approval for 80 km/h.
- Tremendous manoeuvrability achieved through a max. steering angle of app. 60°.
- For optimum steering and a long tyre life, the steering angle of the foremost axle line of the rear bogie is easily adjustable depending on the extended length.
- Manual steering of the rear axles, with Automatic Straight ahead Alignment (Nooteboom ASA) and wander lead, which can be plugged-in at the front and rear of the trailer. Powered by an integrated electric pump.

#### Brakes

- 2 line Wabco EBS air/electronic brake system, with Automatic Load sensing Regulation (ALR), Anti-Skid (ABS), and Roll-over Stability Support (RSS).
- Drum brakes (300x150mm, 4 per axle line) with automatic slack adjusters (AGS).
- Parking brake by spring brake cylinders mounted on multiple axles.
- All components are positioned high to prevent damage when driving over obstruction.









## Gets you there.

#### Illumination

- Hella 24 Volt illumination system according to ISO, with 2 pieces 7-core sockets (ISO-N and ISO-S) on the front end.
- Wiring based on Hella EasyCon and complying with insulation norm IP69.
- White/red marker lights, orange side lamps and license plate lamps in LED version.
- Square taillights completely in LED with integrated triangular reflector, brand Hella, horizontally mounted. (According to EC guidelines, the truck must be able to check the (LED) indicator lights of the trailer.)
- Mounting tubes with 2-pole sockets for retrofit of 4 extendable warning signs (excl. signs theirselves).
- 2 Fixed beacon connections mounted at the rear, connected with a separate pushbutton (excl. beacon).
- Yellow reflective side- and rearmarking with ECE approval.

#### Preservation

- After construction the complete steel frame is shotblasted, hot zinc sprayed, painted with a 2-pack primer and a 2-pack top coat in 1 color of your choice. (Metalic paint at extra cost.) Afterwards the mounting of miscellaneous components and systems follows.
- The pendle legs are shotblasted, **hot zinc sprayed**, painted with a 2-pack primer and 2-pack top coat in anthracite grey RAL 7016.
- The wheels and the headboard are finished in powder coat silver grey RAL 9006.
- The control panel at the gooseneck in stainless steel with mid-gloss surface.
- Some components such as hydraulic cilinders, airtanks, axles, etc are finished by the suppliers and therefore not in the chassis colour.
- Some components such as the connection unit at front, as well as many options are galvanised.

#### Maintenance

If desired Nooteboom Trailer Service can do the regular maintenance for you.



(Specification basic execution, excl. options)

