SCHEUERLE

EuroCombi – FlatCombi – InterCombi

– heavy-load vehicle combinations for all transport applications

Turn mass into motion!

Track rods are protected between the main beams

Easy accessibility for adjustments

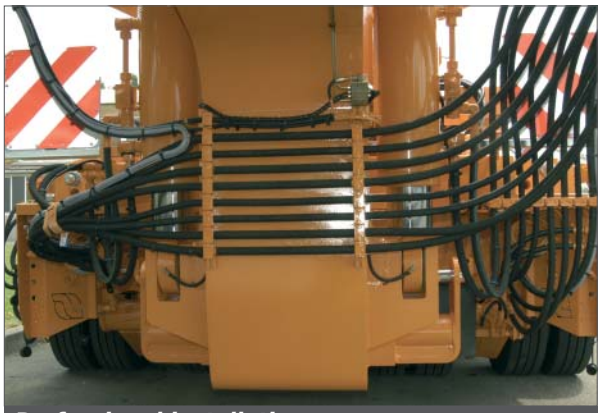
Side marker lights protected in the outer frame

Solid lashing points for load securing

SCHEUERLE "comfort coupling"

Platform construction over the gooseneck

Automatic turnable steering frame with steering transmission



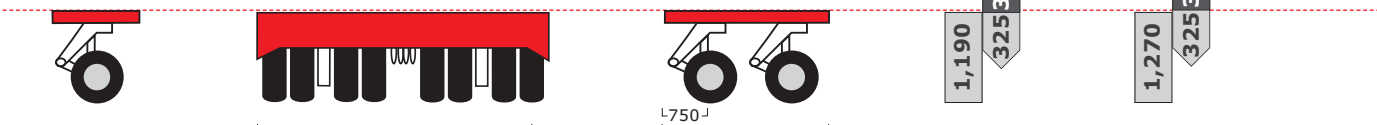
Professional installation

Adapter for mounting of drawbar

InterCombi

Axle load

36,000 kg



S 0 = 215/75 R 17.5
S 1 = 235/75 R 17.5

S 0 = 3,000 mm
S 1 = 3,100 mm

750
M 0 = 1,500 mm
M 1 = 1,500 mm

S 0

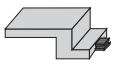
S 1

With a 36-ton technical axle load, the InterCombi has been designed for the safe transport of extremely heavy loads. All around the world, the InterCombi from SCHEUERLE is used day in, day out and reliably deals with challenging and difficult transportation tasks. In the heavy transport sector, the InterCombi name has become synonymous with the vehicle type itself and is an integral part of vehicle fleets for companies specializing in heavy transport operations.

e-Combi

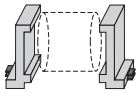
The InterCombi series is also available as a self-propelled heavy load combination. Power for the hydrostatic drive, the electronically controlled steering element and the hydraulic for lifting in the pendulum axles is supplied by a PPU (Power Pack Unit). The electronic steering system includes a selection of steering programs which provide the operator with a number of different driving manoeuvres.

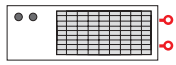
CombiEquipment

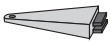

gooseneck

flat bed

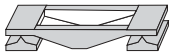
boiler deck

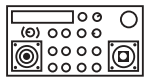

windmill


PPU


draw bar

excavator deck


side girder bridge


remote control

In close co-operation with our customers, we have developed a range of functional accessories for professional use. This means the most appropriate equipment is available for each transportation task. From a simple flat bed or boiler decks and side girder bridges in fixed or telescopic versions through to the adapter for windmill transport. The combi equipment programme from SCHEUERLE offers everything that heavy load professionals need for their demanding transportation assignments.

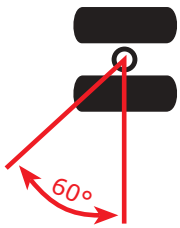
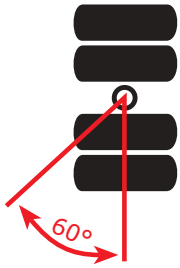
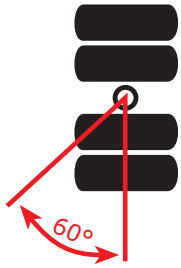
EuroCompact

Uncompromisingly compact

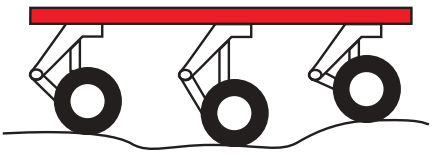
The new EuroCompact is a giant leap forward, a completely new dimension in the compact low loader semi-trailer class. Compact design from end-to-end, from the fifth wheel pick-up plate to the registration plate at the rear of the vehicle. The dolly and pendulum axle bogie, gooseneck and low bed construction – all units were thoroughly checked and modified on the test stand. The result: probably most powerful low bed vehicle with respect to the **shortest possible combination length, greatest possible loading length** and **best payload**. In addition, the recess offers even **more loading height**. And all this whilst taking into account current legal requirements.

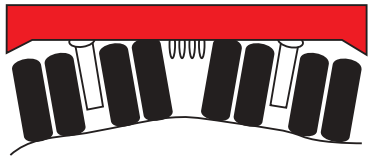
NB: Request our detailed brochure **"Uncompromisingly compact – Uncompromisingly economical"**. We would be pleased to show you advantages of this construction series.

TECHNICAL DATA

All comparative data refers to a pendulum axle bogie with 4 axle lines								
		EuroCombi		FlatCombi			InterCombi	
		L 6	L 2	M 0	M 1	M 3	S 0	S 1
Axle load	approx. kg	20,000	20,000	23,000	23,000	25,000	36,000	36,000
Tare weight	approx. kg	11,500	10,800	11,600	11,300	12,100	13,300	13,400
Total weight	approx. kg	80,000	80,000	92,000	92,000	100,000	144,000	144,000
Tyres		285/70 R 19.5		205/65 R 17.5			215/75 R 17.5	235/75 R 17.5
No. of wheels per axle line		4	4	8	8	8	8	8
Loading area height (lowered)	approx. mm	960	960	780	780	770	865	945
Loading area height in driving position	approx. mm	1,260	1,260	1,030	1,030	1,020	1,190	1,270
Axle load compensation	approx. mm	+/-300	+/-300	+/-250	+/-250	+350/-250	+/-325	+/-325
Total stroke	approx. mm	600	600	500	500	600	650	650
Total length	approx. mm	6,000	6,000	6,000	6,000	6,000	6,000	6,000
Total width	approx. mm	2,430	2,750	3,000	2,750	3,000	3,000	3,100
Wheelbase	approx. mm	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Steering angle		60°	60°	60°	60°	60°	60°	60°
Manoeuvrability								

Axle load compensation





Sales Handbook
Inter Combi S0

230.2.0.00.01 Modular Platform Trailer Transport System

Features and Highlights

The multifunctional Inter Combi platform trailer transportation system offers a wide range of transport solutions, based on platform trailers in 2-, 3-, 4-, 5-, 6-, 7- and 8-axle version, which can be coupled together in-line or parallel.

The use of most modern design methods, such as CAD (**C**omputer **A**ided **D**esign) with software CATIA / SOLIDWORKS 3D and FEM (**F**inite **E**lement **M**ethod) along with software COSMOSWORKS, allows to develop and realize completely new conceptions as far as steel structures and steering systems are concerned.

Fundamental Features are:

Platform frame

- Main beam of the platform is of box-type design and of high-strength, fine-grained steel StE 690 V (S690Q acc. to EN 10137)
- Platform frame steel construction shielded arc welded and with a positive bending moment of 6.673 kNm for high load reserves.
- Height of main beam is as max. possible, however with remaining ground clearance of 20 mm with platform totally lowered and available min. tire size.
- Lamellar bolt coupling at both ends of main beam with a hydraulically operated coupling bolt at one (1) end for in-line coupling.
- Coupling interface provisions on longitudinal sides arranged at each axle line, for parallel coupling.
- Open platform spaces are covered with removable aluminum plates.
- Payload supporting parts of the platform are heightened; therefore the aluminum cover plates are protected against damages.

Steering system

- Two-circuit hydraulic/mechanic steering with upper laterally arranged track rods achieving a max. steering angle of ± 60°.
- All-combination steering lever on the swivel bogies are arranged within tight tolerances, therefore in general no adjusting of track rod's length will be necessary for rearranging new combinations with different steering geometries.
- Track rods are easily accessible from top when removing the aluminum cover plates and are performed with left/right thread for easy adjusting the steering geometry if necessary.
- Two (2) installed double-acting steering cylinders for hydraulic steering induction in the 2- to 4-axle units. Four (4) installed double-acting steering cylinders in the 5- to 8-axle units for hydraulic steering induction, therefore a change of the steering geometry to the vehicle center is possible.
- The steering cylinders are performed with a venting system, facing to the outside and therefore easily accessible.
- The steering head's bearing of the bogies is free from play because of pre-stressed tapered roller bearings; therefore minor steering forces. Well-sealed, low-maintenance bearing with grease lubrication.
- Steering system enables the combinations to drive in both directions.

SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

Sales Handbook
Inter Combi S0

230.2.0.00.01 Modular Platform Trailer Transport System

Features and Highlights

Bogies / Axles

- Bogies with hydraulic axle compensation of ±325 mm (in total 650 mm), thus achieving a hydraulic lift system for the platform trailers.
- Axle load max. 36.000 kg (axle = 2 pendulum axles side by side), at reference speed of 1 km/h and the available tire sizes.
- Axle load max. 16.000 kg at the max. admissible speed of 80 km/h (admissible axle loads may be lower in several countries).
- Hydraulic support cylinders with heavy-duty hard-chromed piston rods. Moment-free articulated bearing at both cylinder ends, therefore no transverse forces acting on sealing rings and guide rings.
- Line fracture safety system (one-circuit design) in the axle hydraulic support system; thus preventing from tipping of the trailer combinations when hydraulic support line breakage occurs.
- Hydraulic accumulator for each axle bogie achieving suspension for driving in loaded or unloaded condition. The accumulators can be cut off for driving in loaded condition.
- Maintenance-free pendulum axle bearing by steel/rubber elements (Ultra bushing).
- Low-maintenance swing arm bearing by sealed spherical plain bearings with grease lubrication.

Brake system

- Standard air pressure vessels installed as separate components, therefore easily replaceable; pressure losses or corrosion problems can easily be recognized.
- Two-line air pressure brake system acting on all pendulum axles and spring loaded brake cylinders (Tristop Cilinder) for parking brake acting on min. 50 % of the axles.
- Brakes equipped with automatic slack adjusters (AGS); therefore always max. brake force available.
- Anti-lock braking system (ABS), 4-channel design; therefore higher lifetime of tires.
- Automatic load dependent brake force regulator (ALB) for additional safety against wheel locking.
- Each platform trailer is equipped with a trailer brake valve, therefore easy maneuvering is possible without coupled brake lines (with sufficient air supply in the trailer vessels).

Hydraulic system

- Corrosion-proof hydraulic piping by using yellow chromated steel pipes and fittings.
- Hydraulic oil reservoir provided as separate cost saving component. Available together with complete PPU (Power Pack Unit) or as a split unit; therefore no suction problems for the hydraulic pump. Hydraulic oil easily controllable and exchangeable.
- Easily accessible ball valves for control of the support and steering system, because of laterally outside installation.

Lighting / electric system

- Lighting system 24 V. Water-proof, through-going electric cable installation for all functions.

SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

Sales Handbook
Inter Combi S0

230.2.0.00.01 **Modular Platform Trailer Transport System**

Features and Highlights

Miscellaneous

- Platform trailers with two-side lateral parallel coupling possibility by means of coupling elements for several vehicle combination widths
- Bracing elements (tension bolts) for end to end coupling
- Interface and fixing holes for bolster fastening on the platform loading deck.
- Easy access to screw couplings of the hydraulic and pneumatic lines
- Heavy-duty lashing rings for load securing provided at the outer longitudinal beams, arranged between each axle line.
- Anti-corrosion treatment of steel surfaces by shot blasting acc. to Swedish standard SIS 05 5900-SA 2½ and three-layer painting with total thickness of 150 µm.

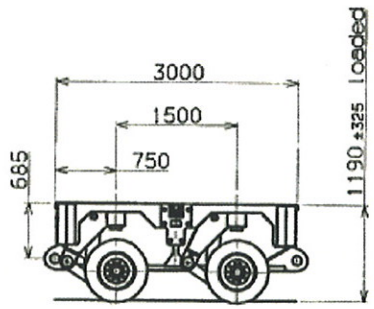
SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

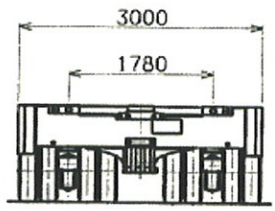
Sales Handbook
Inter Combi S0

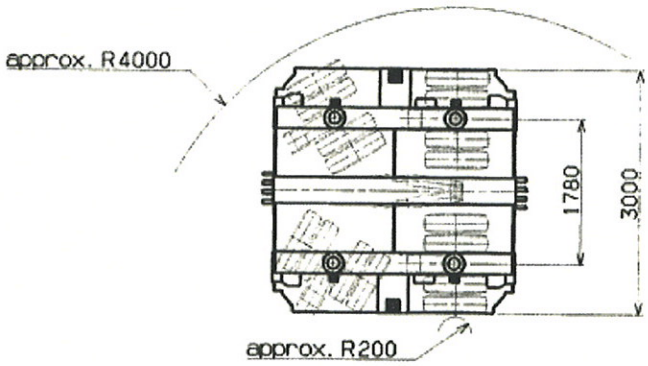
230.2.1.01.01 **2-axle Platform Trailer S0PE2M** **SN **********

Technical data **Offer drawing: 230.1.1.01.01**

Reference travel speed	StVZO 80 km/h	40 – 80 km/h	25 km/h	10 km/h	1 km/h
Payload, approx.	**16.800 kg**	**24.800 kg**	**39.800 kg**	**48.800 kg**	**64.800 kg**
Dead weight, approx.	7.200 kg	7.200 kg	7.200 kg	7.200 kg	7.200 kg
Admissible gross weight	24.000 kg	32.000 kg	47.000 kg	56.000 kg	72.000 kg
Admissible axle load	12.000 kg	16.000 kg	23.500 kg	28.000 kg	36.000 kg
Platform dimensions, L x W	approx. 3.000 x 3.000 mm				
Coupling length	approx. 3.000 mm				
Platform height, driving position	approx. 1.190 mm (laden)				
Compensation stroke	approx. ± 325 mm				
Platform height, lowered	approx. 865 mm (laden)				
Number of wheel bogies, total	4 units				
Number of wheel bogies, braked	4 units				
Brake performance	acc. to EC-Directive 71/320/EEC				
Tires	16 x 215/75 R17,5 TL				
Type of steering / steering angle	hydraulic-mechanically / max. ± 60°				
Ambient temperature	approx. – 20 °C up to + 45 °C				
Adm. bending moment for platform	approx. + 6.673 kNm				
Technical description					







The multifunctional transportation system for payloads up to 5 000 tons

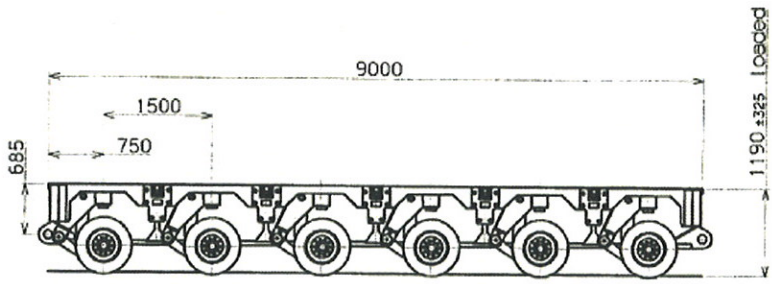
SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

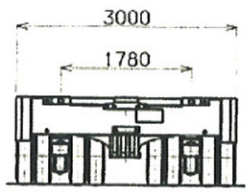
Sales Handbook
Inter Combi S0

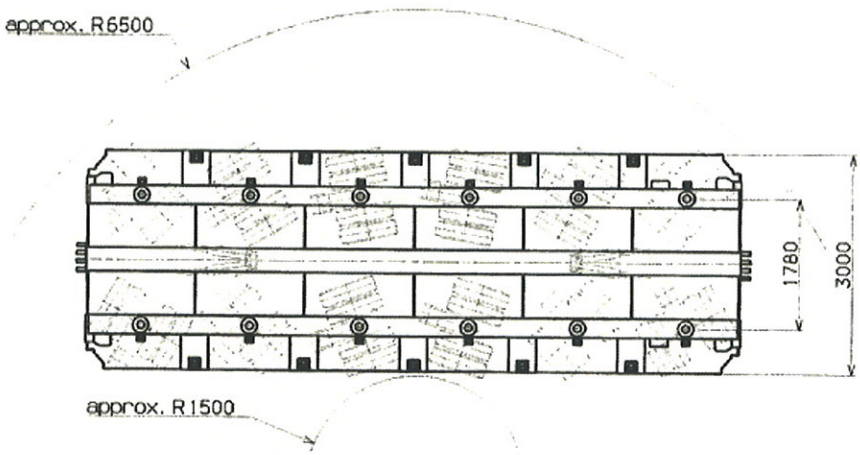
230.2.1.05.01 **6-axle Platform Trailer S0PE6M** **SN **********

Technical data **Offer drawing: 230.1.1.05.01**

Reference travel speed	StVZO 80 km/h	40 – 80 km/h	25 km/h	10 km/h	1 km/h
Payload, approx.	**52.300 kg**	**76.300 kg**	**121.300 kg**	**148.300 kg**	**196.300 kg**
Dead weight, approx.	19.700 kg	19.700 kg	19.700 kg	19.700 kg	19.700 kg
Admissible gross weight	72.000 kg	96.000 kg	141.000 kg	168.000 kg	216.000 kg
Admissible axle load	12.000 kg	16.000 kg	23.500 kg	28.000 kg	36.000 kg
Platform dimensions, L x W	approx. 9.000 x 3.000 mm				
Coupling length	approx. 9.000 mm				
Platform height, driving position	approx. 1.190 mm (laden)				
Compensation stroke	approx. ± 325 mm				
Platform height, lowered	approx. 865 mm (laden)				
Number of wheel bogies, total	12 units				
Number of wheel bogies, braked	12 units				
Brake performance	acc. to EC-Directive 71/320/EEC				
Tires	48 x 215/75 R17,5 TL				
Type of steering / steering angle	hydraulic-mechanically / max. ± 60°				
Ambient temperature	approx. – 20 °C up to + 45 °C				
Adm. bending moment for platform	approx. + 6.673 kNm				
Technical description					







The multifunctional transportation system for payloads up to 5 000 tons

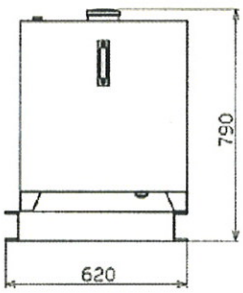
SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

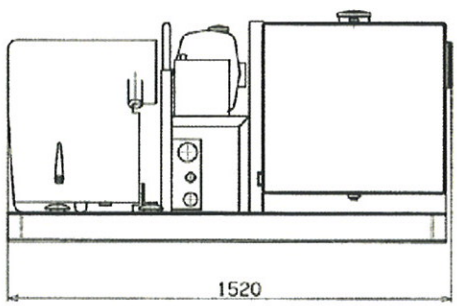
Sales Handbook
Inter Combi S0

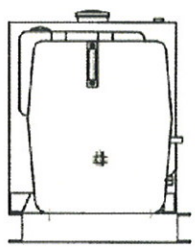
230.2.3.01.01 Power Pack Unit Z 10HA SN ********

Technical data and description Offer drawing: 230.1.3.01.01

Diesel engine – manufacturer / type	Hatz / 1D81 C (four stroke)
Performance	10 kW (13,6 PS) at 3.000 rpm
Exhaust emissions certification	EUROMOT II / EPA II
Number of cylinders / design / capacity	one / noise reduced / 667 cm³
Cooling system	air cooled
Generator – voltage / performance	12 V / 200 W
Battery – voltage / capacity	12 V / 55 Ah
Fuel tank	approx. 21 l filling capacity
Hydraulic oil tank (stainless steel)	approx.190 l filling capacity / 100 l usable capacity
Suitable for number of axle lines	approx. 12 nos. at total stroke
Hydraulic pump – type	axial piston pump / A2F 5R 6.0 C7
Max. oil flow / oil pressure	approx. 14,3 l/min. / 280 bar
Dimensions L x W x H	approx. 1.520 x 620 x 795 mm
Dead weight	approx. 500 kg
Ambient temperature	approx. – 20 °C up to + 40 °C







The **Power Pack Unit (PPU)** is provided for the auxiliary support of the functions of the complete Inter Combi trailer combination like auxiliary steering, lifting/lowering of platform, lifting/lowering of gooseneck or operating of coupling bolts. The diesel engine with flange-connected hydraulic pump, together with the diesel fuel and hydraulic oil tank, the battery and control elements are arranged on a steel frame structure, which is provided for placing the PPU on the gooseneck or platform trailers.

The diesel engine is an air-cooled 1-cylinder 4-stroke engine with sound-reducing encapsulation. An elastic coupling mounted to the flywheel, protects the axial piston pump from destructive torsional vibrations. The hydraulic oil tank is made of stainless steel with integrated suction filter, filler cap and oil level indicator. The diesel engine can be operated by a cable remote control which can be placed for instance, because of its magnetic base, to steel surfaces of the gooseneck or platform trailers. For the connection to the hydraulic systems of gooseneck or trailers, appropriate hydraulic lines with screw-couplings are provided.

The PPU is performed to be handled by lifting equipment (crane or fork lift truck).

SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

Sales Handbook
Inter Combi S0

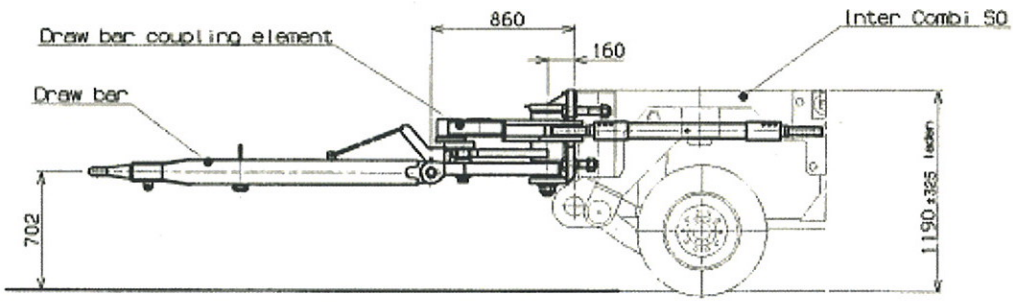
230.2.9.00.01 **Drawbar coupling element 2-file** **SN **********

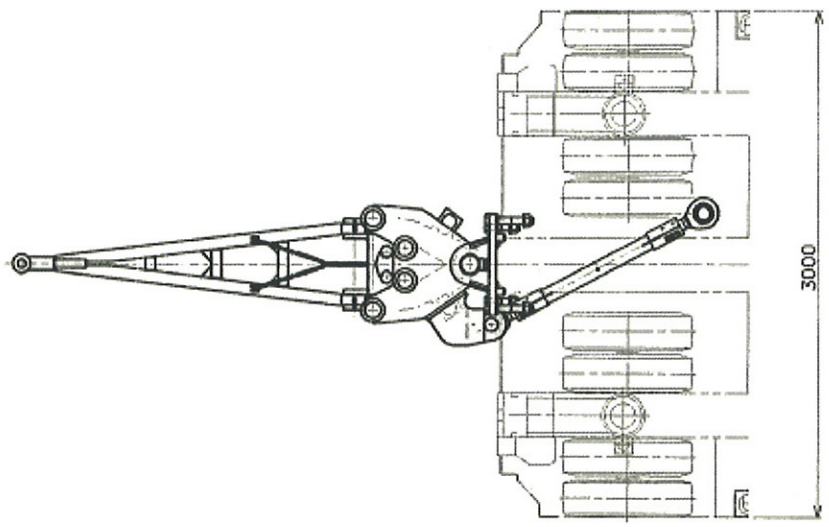
Technical data and description **Offer drawing: 230.1.9.00.01**

Platform trailer configuration	single-line, trailer width up to 3.100 mm
Admissible tractive force	approx. 530 kN
Coupling length	approx. 860 mm
Dead weight, without drawbar	approx. 620 kg
Connecting parts	4 nos. metric bolts M 42x3, nuts, washers, 1 no. steering rod

The **drawbar coupling element 2-file** is necessary as connecting part between the **Inter Combi** platform trailers in 2-file configuration and the different drawbars for hauling or pushing a complete trailer combination. For connecting the steering system of the platform trailers to the coupling element and drawbar, one steering rod is required which is included. The drawbar coupling element can be attached to both ends of the platform trailers and has to be fastened by the metric bolts M 42x3.

Drawbars of different length and towing eyes are available.





The multifunctional transportation system for payloads up to 5 000 tons

SCHEUERLE Fahrzeugfabrik GmbH P.O. Box 20 D-74629 Pfedelbach Phone ++49(0)7941/691-0 www.scheuerle.com

Weldex / Great Britain
Order Confirmation
November 13th, 2007

THREE (3) SCHEUERLE 6-axle Heavy-Duty Platform Trailer Units, designed as centre unit, system INTER COMBI S0; design similar to the enclosed drawing No. 66.300.88-A4, however without coupled drawbar coupling element and without drawbar

TECHNICAL DATA

		Road Traffic Registration Guidelines	Rated				
Speed:		80 - 62	80	40	20	5	1 km/h
Payload capacity:	approx.	52.300	76.300	76.300	135.100	184.300	196.300 kg
Total weight:		72.000	96.000	96.000	154.800	204.000	216.000 kg
Unit weight:	approx.	19.700	19.700	19.700	19.700	19.700	19.700 kg
Axle load:	6 x	12.000	16.000	16.000	25.800	34.000	36.000 kg

Tires: 48 nos., size 215/75 R 17,5 tubeless; twin tires mounted on tapered rims; proprietary make

Loading area: 9.000 x 3.000 mm open frame construction

Loading height: 1.190 ±325 mm

Total lift: 650 mm

Axle distance: 5 x 1.500 mm

Basic vehicle equipment as per enclosed "Technical Specification".

Weldex / Great Britain
Order Confirmation
November 13th, 2007

ONE (1) SCHEUERLE 2-axle Heavy-Duty Platform Trailer Units, designed as centre unit, system INTER COMBI S0; design similar to the enclosed drawing No. 66.300.88-A, however without coupled drawbar coupling element and without drawbar

TECHNICAL DATA

		Road Traffic Regis- tration Guidelines	Rated				
Speed:		80 - 62	80	40	20	5	1 km/h
Payload capacity:	approx.	16.800	24.800	24.800	44.400	60.800	64.800 kg
Total weight:		24.000	32.000	32.000	51.600	68.000	72.000 kg
Unit weight:	approx.	7.200	7.200	7.200	7.200	7.200	7.200 kg
Axle load:	2 x	12.000	16.000	16.000	25.800	34.000	36.000 kg

Tires: 16 nos., size 215/75 R 17,5 tubeless; twin tires mounted on tapered rims; proprietary make

Loading area: 3.000 x 3.000 mm open frame construction

Loading height: 1.190 ±325 mm

Total lift: 650 mm

Axle distance: 1 x 1.500 mm

Basic vehicle equipment as per enclosed "Technical Specification".

Weldex / Great Britain
Order Confirmation
November 13th, 2007

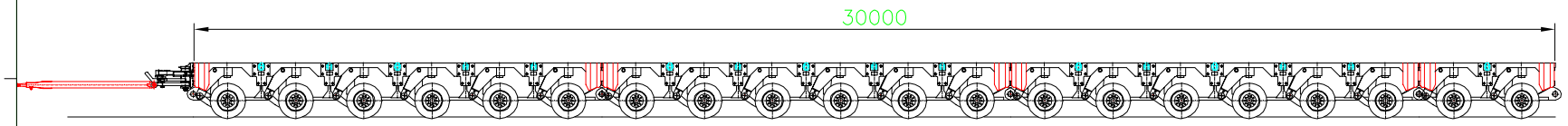
SCHEUERLE

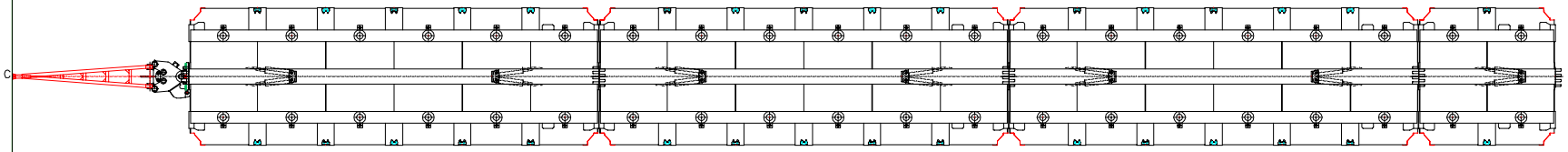
TWO (2) FLAT BALANCE BOLSTERS FOR LONG MATERIAL TRANSPORT
EACH BOLSTER HAVING A PAYLOAD OF APPROX. 250 TONS

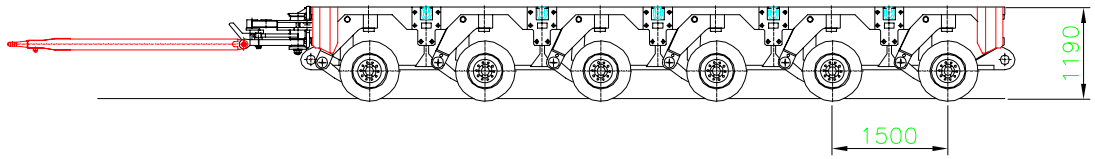
similar to enclosed drawing no. 82.250.2
Dimensions of the bolster base plate 2.100 x 3.000 mm, height approx. 350 mm, payload approx. 250 tons. Upper plate of the bolster designed for load accommodation, dimension 830 x 2.800 mm, the bolster upper plate is connected to the base plate by means of a huge articulated bearing. Lateral stabilization by two tapered rollers; these rollers can be removed (screwed), the tilting allowance comes up to 8° when the rollers are removed.
The bolsters are completely painted (single colour), colour at customer's preference.

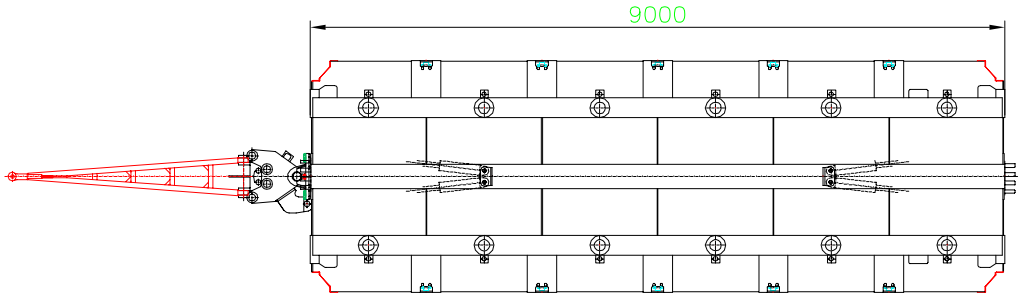
TRAILER SPECIFICATION

MAXIMUM PAYLOAD 32TE /AXLE
MAXIMUM AXLE LOAD 36TE / AXLE
20 AXLES AVAILABLE
TRAVEL HEIGHT 1190MM
MINIMUM HEIGHT 865MM
MAXIMUM HEIGHT 1515MM
APPROX SELF WEIGHT 4.0TE/AXLE
AXLE SPACING 1500MM
MAX. GROUND LOADING 8TE/M2









No.	BY	APPD	DATE	REVISION
P1	BH		17.04.08	ISSUED FOR COMMENT

	YES	NO
RISK ASSESSMENT REVIEW REQUIRED		
RISK ASSESSMENT REVIEW COMPLETED		

SIGNATURE

RISK ASSESSMENT REFERENCE No.

REFERENCE DRAWINGS

THIS DRAWING ISSUED FOR INFORMATION ONLY. UNDER THE LOLER REGS. WELDEX ARE NOT RESPONSIBLE FOR THE PLANNING AND EXECUTION OF ANY LIFTING OPERATION THAT MAY BE SHOWN ON THIS DRAWING, EXCEPT WHERE IT RELATES TO CRANE ERECTION WHICH IS UNDER WELDEX CONTROL.

TITLE
WELDEX
SCHEUERLE TRAILER DETAILS

WELDEX
WELDEX INTERNATIONAL OFFSHORE
18 – 20 HARBOUR ROAD, INVERNESS, IV1 1UA, SCOTLAND. TEL: 01463 220333 FAX: 01463 241616

DATE	DRAWN BY
17/04/08	BRIAN HYDE

APPROVED BY	CONTRACT	PROJECT	DRG. No,	REV.
	WELDEX_2008_109			P1

CLIENT