

O P E R A T I N G M A N U A L

- Original -



Product	Seacom Rolltrailer RT 50' 100t
Serial no.	A 5615-1 / 1-35
Customer	Grimaldi - Italy
Supplier	Transport Systems Seacom AG Berbiceweg 5 CH – 8212 Neuhausen Tel. +41 (0) 52 632 04 00
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1 PREFACE

Please read this documentation carefully in order to avoid accidents. This way you can make sure that all warranty conditions are complied with and the trailer will be working well at any time.

HOW TO USE THE TRAILER CORRECTLY

- The trailer is produced for internal transport only. Please do not exceed the max. capacity stated on the type plate. Damages caused by overloading are not covered by warranty.
- Please observe the following operating instructions carefully. The trailer may only be operated, maintained and repaired by trained persons.
- Unauthorized modifications of the trailer will lead to expiry of warranty.
- All rules and regulations for accident preventions have to be adhered to.

WARRANTY

• Any warranty claims can only be considered, if all service and maintenance works has been carried out on schedule. The operator has to keep records about all maintenance and repair works.



2 RESIDUAL RISK



Danger

of getting caught or crushed during the coupling by the trailer. Persons that are near the trailer during hitching and unhitching can get caught or run over.

• It needs to be ensured that no persons are in the danger area during the coupling operation.



Warning

Dangers from overloading.

An overload of the trailer can cause major damages to the trailer and endanger persons.

• The load limitations must be observed.



Warning

Dangers from collision.

Parts of the load that extend over the cargo bed can collide with the surroundings, cause damage and endanger persons.

• Before the transport, the driver must make sure that no collision is possible.



Warning

Danger of getting caught or crushed by the trailer. Danger when driving on inclines: The trailer or the cargo can slide away or tip, especially when:

- the trailer is loaded to maximum
- the load has a high centre of gravity
- the road surface is uneven or slippery (dirt, ice)
- the speed is too high
- braking or accelerating suddenly

The road surface should be paved well enough. Speed should be reduced on inclines and driven with greatest caution. The cargo's centre of gravity should lie in the middle of the loading area if possible. Adapt the speed to the conditions.





Danger

of getting caught by the trailer. Persons situated in front or close next to the moving trailer are in danger of being caught and crushed by it.

• As long as the trailer is moving, the driver must ensure that no persons are situated in the danger area of the trailer.



Warning

Danger during maintenance. Danger of injury from improper operation and maintenance. All specifications concerning operation, inspection and maintenance must be observed. In case of doubt, the supplier needs to be consulted.



Danger

during maintenance on a jacked up trailer.

The trailer needs to be sufficiently supported before maintenance and secured against rolling away.



3 SPECIFICATION

Load capacity Dead weight	approx.	100 t 10,5 t
Maximum speed	fully laden empty	6 km/h 16 km/h
Platform length Platform width Platform height front/rear Rear overhang	approx. approx. approx.	15.300 mm 2.800 mm 870 / 950 mm 4.500 mm
Axle load Fifth wheel load		4x 22 t 25 t
Axle Tyres	solid rubber number of tyres	2 pcs 22x16x16 8 pcs
Loading platform	tear plate	5/7 mm
Accessories	lashings D-Rings forklift pockets triangle marks (marking the cross beams)	14 (2+6+6+0) 20 (2+7+7+4) 2 white
Finish	brown red	RAL 3011

Measurements and weight may vary slightly.



4 OPERATING INSTRUCTIONS

Intended use

- The rolltrailer's intended use is for internal transport of any kind of general cargo.
- The driver of the tractor has to inspect the rolltrailer for detectable faults before the start of operation.

Hitching of a rolltailer with gooseneck

- Reverse the tractor with gooseneck coupled to the fifth wheel towards front side of rolltrailer.
- Adjust height of gooseneck to correct coupling height. Drive the toe of the gooseneck completely into the opening in the rolltrailer.
- Lift fifth wheel with engaged reverse gear until gooseneck is firmly coupled with rolltrailer.
- Disengage reverse gear and lift further until front leg of trailer has reached sufficient ground clearance (150 to 200 mm)

Driving

- The rolltrailer shall only be towed by suitable towing vehicles with a lifting capacity of at least 32 t and a lifting height of at least 800 mm.
- The transport of persons is not permitted.
- The road surface should be in reasonable condition, and without obstacles.
- In any case, the prescribed speeds and safety regulations must be observed. The maximum permitted speed, straight ahead with full load of 100 t is 6 km/h.
- In curves the speed should be reduced appropriately.
- When reversing, seek a guide, if visibility is insufficient.

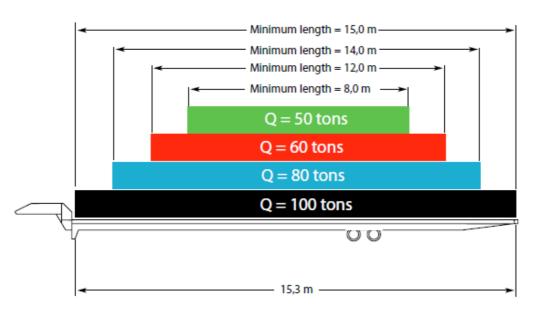


Loading

- Make sure that the rolltrailer is parked on horizontal ground.
- The weight of the cargo put on the rolltrailer shall not exceed the maximum capacity.

Distributed load

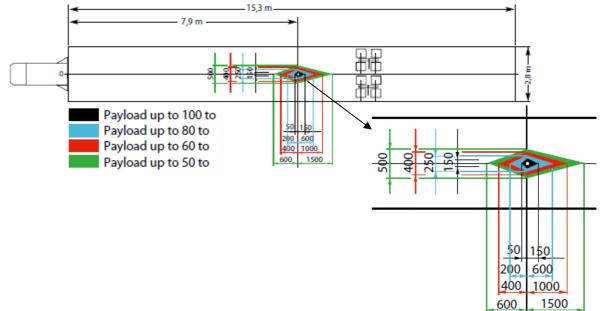
• To avoid overloading always ensure that the centre of gravity of the load is within the respective areas in the diagram (see the following loading scheme).



Distributed loads

Load center of gravity

Load center of gravity must be within the colored areas corresponding to the load

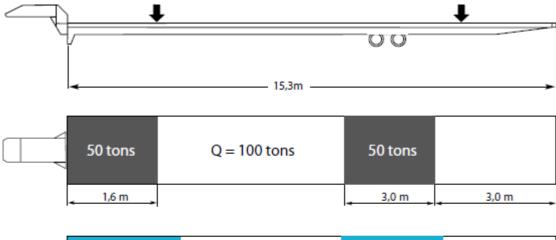




Point load

- For the distribution of the load see the following scheme.
- When point loads are applied to the platform make sure that each load is supported by the longitudinal beams of the trailer, e. g. use some support cross beams. Point loads can be applied only in the areas according to below diagram. The positions of cross beams are marked in the longitudinal beams with white triangles.

Point loads must be put on the platform within the marked areas



40 tons	Q = 80 tons	40 tons	
2,5 m		4,0 m	2,5 m

30 tons	Q = 60 tons	30 tons	
3,8 m		5,0 m	2,0 m

25 tons	Q = 50 tons	25 tons	
4,8 m		6,0 m	1,5 m



5 SERVICE MANUAL

General information

The trailer is a simple and solid construction. The following inspections and maintenance tasks should be done at regular intervals in order to ensure a trouble free and safe operation. Faulty parts need to be replaced in time. They need to meet the specified requirements of the supplier and the pertinent safety regulations.

Wheel set

Inspect the wheel sets regularly (in about 6-month intervals) for external damages.

Tyres

Inspect the tyres for mechanical damages (about once a month).

Wheels

Check the wheels regularly:

- 1. Does the wheel turn without noise and without axial movement?
- 2. If there is a noticeable noise, then dismount the wheel and check the taper roller bearings; if necessary replace them.
- 3. Check axial movement of wheel. In case of axial movement readjust taper roller bearing.

How to readjust wheel-bearing

- Make sure that trailer is in parking position.
- Lift rear side of trailer with a forklift or hydraulic jack so that wheels can be rotated by hand. Take into account that the hydraulic will lower the wheels.
- Put suitable supports under lifted trailer.
- Check wheel: In case of axial movement or not smooth rotation
 - Remove hub cap (warm cap up to approx. 60 °C)
 - Remove split pin from horned nut
 - Tighten horned nut until wheel is blocked
 - Untighten horned nut until wheel rotates free but without any axial movement
 - Refit split pin
 - Refit hub cap (warm cap up to approx. 60 °C)
 - No parts forgotten to refit?
- Lower rear side of trailer.



Frame

The frame and the welding points should be checked regularly. The frame construction consists of structural steel and can be repaired by qualified repair technicians in case of damages. In case of questions, call your supplier.

Lubrication

Greasing point	Greasing interval
Rocker arm bearing	3 month
Swivel axle bearing	3 month
Wheel set	3 month

The lubrication intervals depend on the operational conditions of the trailer: If the conditions are rough, then more frequent lubrication is needed.



Tightening torque for screws and nuts

Screws and nuts need to be inspected regularly (monthly) or retightened.

<u>Coefficient of friction</u>: µ tot.= 0.12 for screws and nuts <u>without</u> reworking, as well as <u>phosphated</u> nuts. <u>Tighten by hand</u>!

Tightening torques, if not specified otherwise, can be found in the following tables.

Metric ISO standard thread DIN 13, sheet 13

Size	8.8	10.9	12.9
M4	2,8	4,1	4,8
M5	5,5	8,1	9,5
M6	9,5	14	16,5
M7	9,5	23	28
M8		34	40
	23		
M10	46	68	79
M12	79	115	135
M14	125	185	215
M16	195	280	330
M18	280	390	460
M20	390	560	650
M22	530	750	880
M24	670	960	1100
M27	1000	1400	1650
M30	1350	1900	2250
M33	1850	2600	3000
M36	2350	3300	3900
M39	3000	4300	5100
	Metric ISO f	ine thread DIN 13, sheet 13	
Size	8.8	10.9	12.9
M 8 x 1	24	36	43
M 9 x 1	36	53	62
M 10 x 1	52	76	89
M 10 x 1.25	49	72	84
M 12 x 1.25	87	125	150
M 12 x 1.5	83	120	145
M 14 x 1.5	135	200	235
M 16 x 1.5	205	300	360
M 18 x 1.5	310	440	520
M 18 x 2	290	420	490
M 20 x 1.5	430	620	720
M 22 x 1.5	580	820	960
M 24 x 1.5	760	1100	1250
M 24 x 2	730	1050	1200
M 27 x 1.5	1100	1600	1850
M 27 x 2	1050	1500	1800
M 30 x 1.5	1550	2200	2550
M 30 x 2	1500	2100	2500
M33 x 1.5	2050	2900	3400
M 33 x 2	2000	2800	3300
M 36 x 1.5	2700	3800	4450
M 36 x 3	2500	3500	4100
M 39 x 1.5	3450	4900	5700
M 39 x 3			
IVI 39 X 3	3200	4600	5300



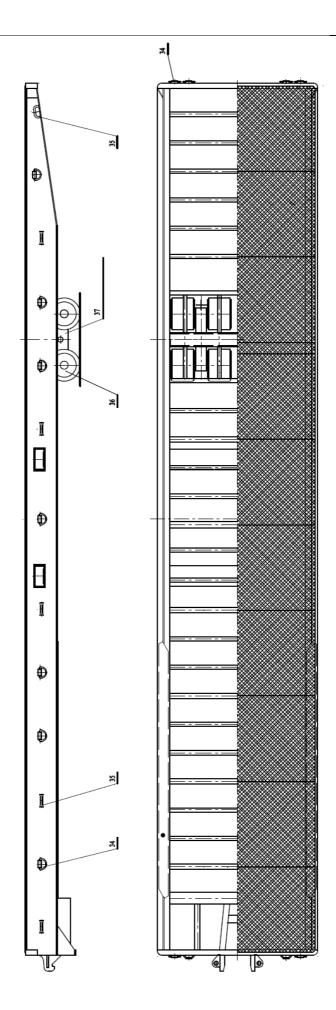
6 SPARE PARTS

6.1 GENERAL VIEW

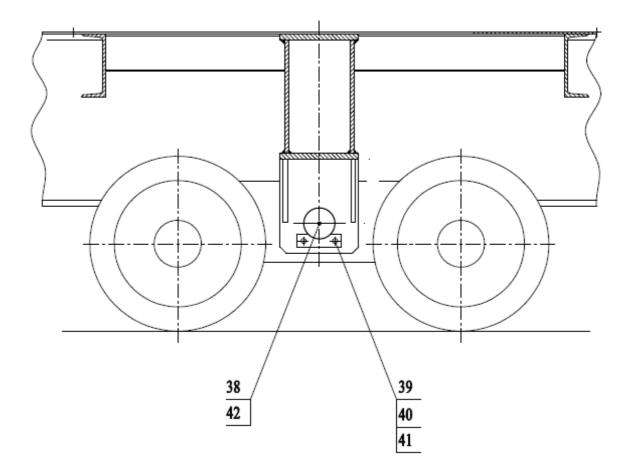
Dwg. No.	5526/3	
ltem	Description	Part. No
34	D-Ring	5526/3-34
35	Lashing	5526/3-35
36	Wheel set 22x16x16	5526/3-36 →6.2
37	Rocker beam	5526/3-37 →6.3
38	Bolt for rocker beam	5526/3-38
39	Axle guard	5526/3-39
40	Screw M16x35 DIN933	5526/3-40
41	Washer B16,5 DIN127	5526/3-41
42	Lubrication nipple AM 10x1 DIN71142	5526/3-42

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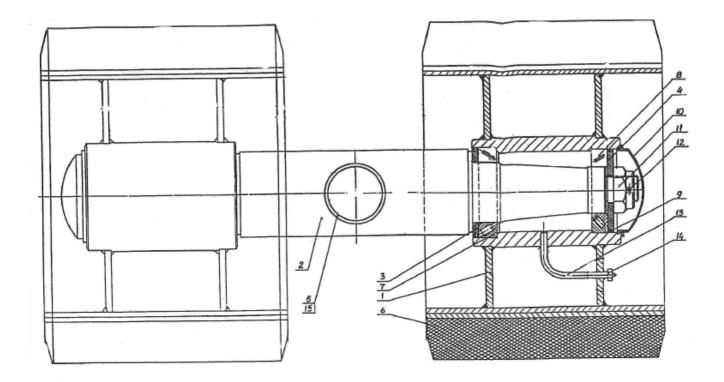






6.2 WHEEL SET 559/405-1040

Dwg. No.	5526/3-36	
Item	Description	Part. No
1	Wheel body	5526/3-36-1
2	Axle	5526/3-36-2
3	Sealing washer d=149/100	5526/3-36-3
4	Sealing washer d=139/48,5	5526/3-36-4
5	Plain bearing bush 95x90x40	1406.0008
6	Tyre 22x16x16	1605.1007
7	Taper roller bearing 32020	1410.0001
8	Taper roller bearing 30216	1410.0001
9.1	Fey ring FK6 d=140 ASD	1450.0201
9.2	Fey ring FK6 d=150 ASD	1450.0202
10	Hub cap d=140	1603.9902
11	Hornet nut M48x1,5 DIN937	1356.0048
12	Split pin 8x80 DIN94	5526/3-36-12
13	Lubrication tube	5526/3-36-13
14	Lubrication nipple AM10x1 DIN71412	5526/3-36-14
15	Distance tube	5526/3-36-15





6.3 ROCKER BEAM

Dwg. No.	5526/3-37	
Item	Description	Part. No
4	Bolt d=90	5526/3-37-4
6	Bolt d=100	5526/3-37-6
10	Bush 105/100x60	1406.0010
12	Washer	5526/3-37-12
13	Axle guard	5526/3-37-13
14	Screw M16x30 DIN933	5526/3-37-14
15	Washer B16,5 DIN127	5526/3-37-15
16	Lubrication nipple AM10x1 DIN71412	5526/3-37-16

