

Annex to Logistics manual

of

Wacker Neuson Produktion Deutschland Gmbh & Co. KG Reichertshofen



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1 Address

Wacker Neuson Produktion Deutschland Gmbh & Co. KG

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2 Contact persons

Position Contact person		e-Mail	Phone number
Logistics planning	Moritz Pamler	moritz.pamler @wackerneuson.com	+49 (0) 8453340-432
Logistics planning	Johannes Wagner	johannes.wagner@wack erneuson.com	+49 (0) 8453340-3279
Packaging planning	Packaging planning Moritz Pamler		+49 (0) 8453340-432
Scheduling	Franz-Josef Schweiger	franz-josef.schweiger @wackerneuson.com	+49 (0) 8453340-212
Goods control station	Christian Weinberger	christian.weinberger @wackerneuson.com	+49 (0) 8453340-145



3 Delivery times

Goods receiving times			
Opening hours	Monday to Thursday 07:00 – 15:15 Friday 07:00 – 11:45		

In exceptional cases, delivery may be agreed outside the above delivery times. This requires prior consultation with the goods control station.

If certain delivery days have been agreed, the plant reserves the right to reject deliveries outside the agreed times which have not been announced in advance.

4 Delivery logistics

The Reichertshofen plant offers two docking stations for rear unloading and a gate for side unloading for general cargo.

The maximum pallet weight is limited to 2.0 tons.

Before unloading, all papers must be submitted to the goods control station. Unloading may only take place after prior approval by the goods control station.

5 Packaging logistics

A container management system is currently not operated in Reichertshofen. Empties, which can be described as standard containers, can, however, be exchanged. The goods control station also maintains a compensation account for all suppliers in the event that not enough empties are available for exchange.

- a. Empties processing in exchange
 - Euro pallets
 - Euro lattice boxes
- b. Load carrier pick up
 - Supplier-specific load carriers, such as small load carriers, cable rollers, special load carriers, etc. are collected and returned by the goods control station.
 - The costs of the return are to be agreed upon in advance.
 - If the Wacker Neuson Group bears the costs, the return is generally carried out with the logistics partners of the Wacker Neuson Group (routing order).



General information – packaging logistics

- A binding Wacker Neuson packaging data sheet is created for each component.
- Wacker Neuson will specify container size, type and quantity in consultation with suppliers.
- The supplier must clarify deviations <u>independently</u> and <u>in advance</u> with the logistic planning.

Returnable load carrier

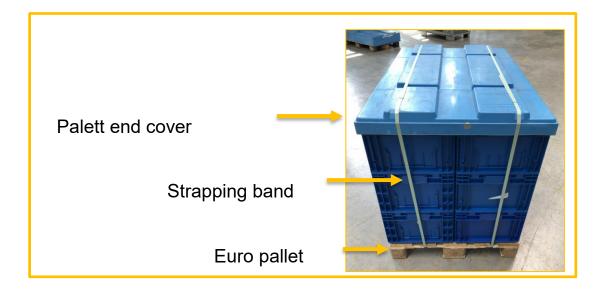
- Wacker Neuson has the ownership of the returnable load carriers.
- Wacker Neuson will provide the load carriers to suppliers after they have ordered them.

Disposable load carriers

- SLC disposable load carriers should be ordered from Antalis (or equivalent) at the following email address landshut@antalis-verpackungen.de
- Disposable LLC load carriers should be ordered from DB Schenker (or equivalent).
 - o Wood <u>https://dbschenkereuropac-shop.dbschenker.com/produkte/behaelter-boxen/cargo-boxen-mit-palettenunterbau/</u>
 - o Cardboard <u>https://dbschenkereuropac-shop.dbschenker.com/palettenkarton-</u> innenmass-1.180-x-780-x-550-mm

6 Returnable load carrier

- Only standard Euro pallets are to be used for SLC deliveries.
- Parts in small load carriers (SLC) must be shipped as a whole layer.





- The minimum number of SLCs per layer is 4 (one container per corner).
- The total shipping unit (including pallet and pallet end cover) must not exceed the height of 1000mm.
- Each shipping unit must be secured with a pallet end cover and 2x strapping bands.
- Pallet covers and Euro pallets must be ordered separately when empties are requested.
- Mixed pallets have to be agreed with Wacker Neuson.

SLC reusable containers according to VDA 4500

Load capacity: 15 kg

Container designation	Criteria	Characteristics	Picture
RL_SLC 3147	Outer dimension: Inner dimension: Container per layer: Pile factor:	300 x 200 x 150 mm 243 x 162 x 129,5 mm 16 pieces max. 96 per pallet	
RL_SLC 4147	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 150 mm 345 x 260 x 129,5 mm 8 pieces max. 48 per pallet	
RL_SLC 4280	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 280 mm 345 x 260 x 262 mm 8 pieces max. 24 per pallet	
RL_SLC 6147	Outer dimension: Inner dimension: Container per layer: Pile factor:	600 x 400 x 150 mm 544 x 359 x 129 mm 4 pieces max. 24 per pallet	
RL_SLC 6280	Outer dimension: Inner dimension: Container per layer: Pile factor:	600 x 400 x 280 mm 544 x 359 x 262 mm 4 pieces max. 12 per pallet	



ESD SLC reusable containers according to VDA 4504

Load capacity: 15 kg

Container designation	Criteria	Characteristics	Picture
SLC 3115 ESD	Outer dimension: Inner dimension: Container per layer: Pile factor:	300 x 200 x 150 mm 243 x 162 x 129,5 mm 16 pieces max. 96 per pallet	
RL_SLC 4047 ESD	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 150 mm 345 x 260 x 129,5 mm 8 pieces max. 48 per pallet	Ray Contraction
RL_SLC 4080 ESD	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 280 mm 345 x 260 x 262 mm 8 pieces max. 24 per pallet	
RL_SLC 600 ESD	Outer dimension: Inner dimension: Container per layer: Pile factor:	600 x 400 x 280 mm 544 x 359 x 262 mm 4 pieces max. 12 per pallet	ag

COVER ESD SLC returnable container according to VDA 4504

Container designation	Criteria	Characteristics	Picture
COVER SLC-D 31 ESD	Outer dimension: Compatible with containers:	300 x 200mm SLC 3115 ESD	
COVER SLC-D 41	Outer dimension: Compatible with containers:	400 x 300mm RL_SLC 4047 ESD, RL_SLC 4080 ESD	
COVER SLC-D 61 ESD	Outer dimension: Compatible with containers:	600 x 400 mm RL_SLC 6090 ESD	



Part protection ESD SLC reusable container according to VDA 4504

Permitted part protection

- Compulsory for all components with ESD protection in conjunction with black ESD containers & covers.
- Reusable foam inlay for protection against shocks and electrostatic charge or discharge.
- Development of inlays at supplier's cost and ownership.
- The inlays are retrieved following the control process on page 9.



Non-permitted part protection

- Components individually packed in plastic bag.
- Inlay (disposable) made of paper.

plastic bags



paper compartment



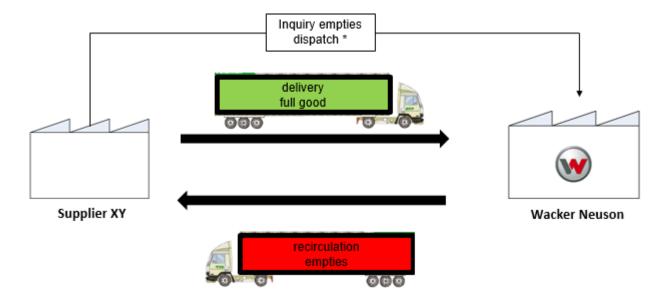


LLC returnable containers

Container designation	Criteria	Characteristics	Picture
KTP Vario Box	Outer dimensions: Load capacity: Pile factor:	800 x 600 x 750 mm 300 kg 4-fold	
Düsseldorfer pallet with 1 – 4 wooden frames	Outer dimensions: Load capacity: Pile factor:	800 x 600 x 750 mm Define individually 3-fold	
Euro grid box	Outer dimensions: Load capacity: Pile factor:	1200 x 800 x 1000/500 mm 1000 kg 4-fold/ 5-fold	
Euro pallet with 1 – 4 wooden frames	Outer dimensions: Load capacity: Pile factor::	1200 x 800 x 1000 mm Define individually 3-fold	



Empties request returnable containers



* To ensure a smooth supply of load carriers, it is essential to <u>order</u> them <u>from Wacker Neuson at an</u> <u>early stage</u>. Wacker Neuson requires an internal lead time of at least <u>7 working days</u> to meet the specified delivery deadline.

The request must be sent to the following email address: pgr_wls@wackerneuson.com



7 Disposable container

- In principle, the same palletizing requirements apply to SLC disposable containers as to SLC returnable containers (see page 4).
- Instead of or in addition to the strapping, each shipping unit must be wrapped with a stretch film to protect it against moisture.
- A pallet cover must also be used for non-returnable containers.



SLC disposale load carriers according to VDA 4530

Load capacity: 15 kg

Container disposable	Kriterien	Eigenschaften	Bild
Cardboard 3147 (M6) VDA Nr. 151840	Outer dimension: Inner dimension: Container per layer: Pile factor:	300 x 200 x 150 mm 250 x 155 x 140 mm 16 pieces max. 96 per pallet	
Cardboard 4147 (M4) VDA Nr. 151841	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 150 mm 350 x 255 x 140 mm 8 pieces max. 48 per pallet	
Cardboard 4280 (M5) VDA Nr. 151842	Outer dimension: Inner dimension: Container per layer: Pile factor:	400 x 300 x 280 mm 350 x 255 x 275 mm 8 pieces max. 24 per pallet	
Cardboard 6280 (M3) VDA Nr. 151843	Outer dimension: Inner dimension: Container per layer: Pile factor:	600 x 400 x 280mm 548 x 350 x 275 mm 4 pieces max. 12 per pallet	



LLC disposale load carriers Wacker Neuson Reichertshofen

Container designation	Criteria	Characteristics	Picture
Disposable cardboard	Outer dimension: Load capacity: Pile factor:	785 x 585 x 575 mm Define individually Define individually	
Disposable cardboard	Outer dimension: Load capacity: Pile factor:	1180 x 780 x 760 mm Define individually Define individually	
Cargo Box	Outer dimension: Load capacity: Pile factor:	790 x 590 x 590 mm Define individually Define individually	
Cargo Box	Outer dimension: Load capacity: Pile factor:	1180 x 780 x 790 mm Define individually Define individually	The Mark



8 Labelling

Labelling of load carrier according to VDA 4994

- Each load carrier must be labelled with a unique component identification label.
- The label according to VDA 4994 (NEW) must be used as standard.
- A distinction is made between the following variants:
 - Large load carrier label (LLC): 210 mm x 148 mm
 - Label small load carrier (SLC): 210 mm x 74 mm
- Any deviations from this standard must be agreed with Wacker Neuson



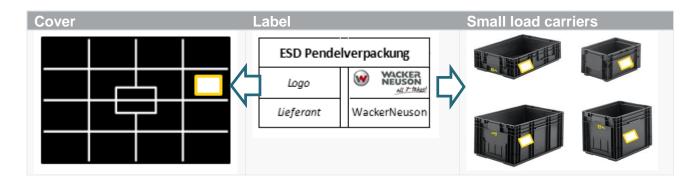
Requirement for global transport label according to VDA 4994

A3 – label type and 2D code
B2 – routing information of the customer
D1 – package – ID
D2 – customer reference 2
 Packaging material type
- Batch number
E1 – data at the discretion of the supplier E2 – customer reference 3
COMPULSORY field A1 011/ABLAD123 / LAGER7
COMPULSORY A1B2C3D4E5F6G7 COMPULSORY field B3
COMPULSORY tietd C
Income://www.income:///www.income:///www.income:///www.income:////////////////////////////////////
E2:COMPULSORY field D2:56
KUNDENDATEN ZEILE 1 CUSTOMER DATA LINE 2 KUNDENDATEN ZEILE 3 CUSTOMER DATA LINE 4 KUNDENDATEN ZEILE 5



Labelling ESD small load carriers

- ESD load carriers need to be labelled as exchangeable packaging between the supplier and Wacker Neuson additionally.
- The template for labelling will be made available to the supplier upon request from WN Logistics Planning.
- The label used for container identification has to be removeable.
- The lid and the small load carrier are to be labelled as follows.

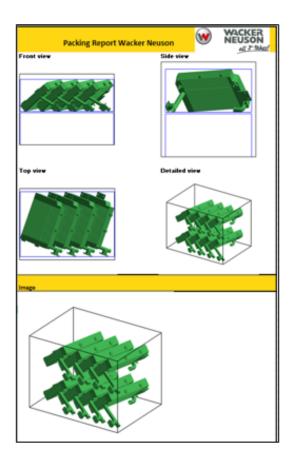




9 Packaging data sheet

Packaging data sheet Wacker Neuson Reichertshofen

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Packing R	eport Wa	icker Ne	uson			t fiker
Project					20	_ horse
Date	3/15/2019 2	:26:30 PM	Length Unit	Ime	4	
Planner	Moritz Parry	her	Weight Unit	Pal		
Division	Logistápla	nung PGR	Volume Unit	- 10		
Phone			Type of Packing	Flee	oble inter	medateLa
Fax			Thickness of Inte	-	10	
E-Mail	moritz.pami euson.com	ler@vackeen i	Component Distance		10	
Part						
Name	510000548	O LOUIS		_		
Filo		13 Kühler atp		_		
Length	482,138	onumer.op	Volume	11.0	67	
Vidth	321		Weight	8.7	01	
Height	267.329		a cogo	190.0		
	partijoaco					
Container						
Name		CHEN BOO X	Load Capacity	300		
Number	80		Tare	213	<u>.</u>	
Lenght	750	External D 800	left i sight	0		Distance
Vidth	530	600	fearst 7 sear	0		D
Height	590	720	top / bottom	0		þ þ
nega	530	120	top r bottom	10	_	0
Result						
Number of Components	8		Filling Weight	63.		
			Total Weight	91.1		
Anzahl of Layers / Stacks	2					
Number of Layer- / Stacking	1					
			Result Dimensions D Lenght 701.072			
	29.091	External D	LengM Width			
Components per m* Volume Utilization	0.322	23.948			,478 242	
Volume Usitzation	0,322	0,256	Height	540	292	
	_			-		_
Signature	Date	1.00				
Wasker Neuson	Clate	Name	Signal	ule .		
Customer				_	_	_
Childhee	_			_		
Image						
Layer- / Stacking Typ	e 1		fr	om:	1	
Number of Layers / Stack		1 1.	wer / Stack thicks		87.621	
Total components for layer		1 "	Compartment sh		1,00	
ponents per layer /stack typ			etry of compartme		-	
,	-		ingartment thickn		_	
		-			_	



- The packaging data sheet is binding for the supplier.
- If there is no objection, the packaging data sheet will be deemed accepted.
- Deviations from the packaging data sheet without prior objection will be claimed back to the supplier.
- The packing form specified in the packaging data sheet must be validated by a real packing test at the supplier.
- If necessary, changes and suggestions for improvement need to be agreed with Wacker Neuson Logistic Planning prior to delivery.
- The specification of the packaging data sheet does not release the supplier from his overall duty of care with regard to part protection and load securing.



10 Relevant VDA standards

SLC returnable containers (VDA 4500)

https://www.vda.de/en/services/Publications/small-load-carrier-%28slc%29-system-%28klt%29.html

ESD SLC returnable containers (VDA 4504)

https://www.vda.de/en/services/Publications/electrostatically-dissipative-small-load-container-%28slc%29-system-%28klt%29.html

SLC disposable container (VDA 4530)

https://www.vda.de/en/services/Publications/vda-disposable-small-load-carrier-slc-system.html

Global transport label (VDA 4994)

https://www.vda.de/de/services/Publikationen/vda-4994---global-transport-label---version-1.2-april-2020.html