



SHWire

Packaging Regulations –
Informationen on Returning Empties



General terms and conditions of delivery

General terms and conditions

This price list is valid until revoked. In case the requested delivery period exceeds two months, we reserve the right to change the processing prices. In all other cases our terms and conditions of delivery and payment apply.

Transactions inside Germany

Transactions with our customers residing in Germany are processed exclusively in accordance with our General Terms and Conditions of Sales. These Terms are available on our homepage www.sh-wire.de. You can download these Terms or we can send them to you on request free of charge. We are not obliged to accept your opposing or differing business conditions, even if we do not expressly confirm our refusal, even if we render our services/effect deliveries without reserve or accept services from your side.

Transactions outside Germany

For legal relations to customers residing outside Germany, our International Terms and Conditions of Sales apply. These Terms are available on our homepage www.sh-wire.de. You can download these Terms or we can send them to you on request free of charge. We are not obliged to accept your opposing or differing business conditions, even if we do not expressly confirm our refusal, even if we render our services/effect deliveries without reserve or accept services from your side.

Minimum quantity per order

The minimum standard quantity for deliveries ex works and per delivery date and item is one pallet. Per delivery 10 t copper, 4 t aluminium of assorted dimensions.

Based on experience and depending on the reel sizes the average weight per pallet is approx. 450 kg (copper)/150 kg (aluminium). Depending on reel-type and dimension it may differ.

Dimensions (mm)	Minimum quantity Cu	Minimum quantity Al
up to 0.060	250 kg	-
up to 0.140	900 kg	-
up to 0.400	1800 kg	-
up to 0.600	2400 kg	750 kg
up to 1.180	3600 kg	1200 kg
> 1.180	7200 kg	2400 kg
rectangular wire	3000 kg	on request

In case the above mentioned minimum order quantities cannot be taken, individual minimum quantities and a set-up/installation lump sum with a minimum of € 500.- per article for round wire and minimum of € 2,000.- per article for flat wire has to be agreed upon. The same applies to articles not included in our standard production program or dimensions not included in the norm.

Reel sizes

Standard reels are shown in the table below. Differing reel sizes on request.

Type of reel	Copper		Aluminium	
	from (mm)	to (mm)	from (mm)	to (mm)
HKV200	0.050	0.100		
K200	0.050	0.250		
K250	0.050	0.700		
K355	0.710	2.000		
K500	1.060	4.500	1.060	4.500
		rectangular wire		rectangular wire
K630	1.060	4.500	1.060	4.500
		rectangular wire		rectangular wire
K710	1.060	4.500	1.060	4.500
		rectangular wire		rectangular wire
A250	0.100	1.000		
A315	0.180	1.400	1.250	1.400
A400	0.250	2.000	1.250	4.000
A500	0.250	4.500	1.250	4.000
A630	0.710	4.500		
M800	1.800	4.500	1.800	4.500

Dimensions & Filling weights of reels

Cone-shaped reels (IEC 60264-5-1)

Type of reel	SHWire item no.	D1	H1	B/D3	Magnet wire nominal ϕ mm		Tare weight	Filling weight	Reels per pallet
		mm	mm	mm	min	max	kg	ca. kg	
HKV160	9950	160	160	22	0.050	0.100	0.32	5	48
HKV200	9951	200	200	22	0.050	0.100	0.58	11	30
HKV250	9910	250	250	22	0.080	0.100	2.65	22	11

D1=diameter, H1=height, B=diameter of hole

Cylindrical reels (IEC 60264-2-2)

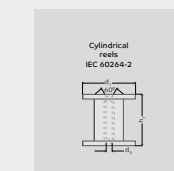
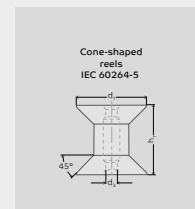
Type of reel	SHWire item no.	D1	H1	B/D3	Magnet wire nominal ϕ mm		Tare weight	Filling weight Cu	Filling weight Al	Reels per pallet
		mm	mm	mm	min	max	kg	ca. kg	ca. kg	
K160	9952	160	160	22	0.050	0.100	0.35	5		48
K200	9955	200	200	22	0.050	0.250	0.60	11		48
K250	9958	250	200	22	0.050	0.700	1.05	22		28
K355	9959	355	200	36	0.710	2.000	3.20	45		12
K500	9971	500	250	36	rectangular/round wire		7.65	90	30	6
K630	9928	630	230	40	rectangular/round wire		9.60	180	60	4
K710	9970	710	250	47	rectangular/round wire		18.40	200	65	4

D1=diameter, H1=height, B=diameter of hole

Oblong reels (IEC 60264-3) with cover (IEC 60264-3-5)

Type of reel	SHWire item no.	D1	H1	B/D3	Magnet wire nominal ϕ mm		Tare weight	Filling weight Cu	Filling weight Al	Reels per pallet
		mm	mm	mm	min	max	kg	ca. kg	ca. kg	
A200	9961	265	400	100	0.080	0.150	2.65	22		12
A250	9962	315	500	100	0.100	1.000	4.70	45		11
A315	9963	400	630	100	0.180	1.400	9.10	90	30	6
A400	9964	500	800	100	0.250	2.000	16.00	180	60	3

D1=diameter, H1=height, B=diameter of hole



Oblong reels (IEC 60264-3) without cover

Type of reel	SHWire item no.	D1	D2	H1	B/D3	Magnet wire nominal ϕ mm		Tare weight	Filling weight Cu	Filling weight Al	Reels per pallet
		mm	mm	mm	mm	min	max	kg	ca. kg	ca. kg	
A200 ¹	9966	190	200	315	100	0.080	0.150	1.25	22		12
A250	9967	236	250	400	100	0.100	1.000	2.25	45		11
A315	9968	300	315	500	100	0.180	1.400	4.35	90	30	6
A400	9969	375	400	630	100	0.250	2.000	7.30	180	60	5
A500	9979	475	500	800	100	0.250	4.000	23.70	360	120	2
A630	9985	630	630	900	100	0.710	4.000	92.00	720		1

D1=diameter top, D2=diameter bottom, H1=height, B=diameter of hole

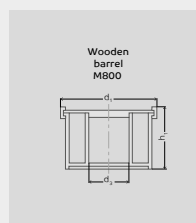
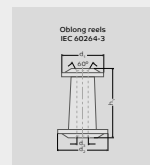
Cover (IEC 60264-3-5)

Type of reel	SHWire item no.	D1	H1	B/D3	Tare weight
		mm	mm	mm	kg
A200	9981	265	400	100	1.40
A250	9982	315	500	100	2.45
A315	9983	400	630	100	4.75
A400	9984	500	800	100	8.70

D1=diameter top, D2=diameter bottom, H1=height, B=diameter of hole
¹These reels can not be delivered without cover.

Wooden barrel M800

Type of reel	SHWire item no.	D1	H1	Magnet wire nominal ϕ mm		Tare weight	Filling weight Cu	Reels per pallet
		mm	mm	min	max	kg	ca. kg	
M800	9972	790	800	1.800	4.000	42.00	750	1



Deposits for reels, covers and packaging

Type of reel	SHWire item no.	Empties tare kg	Filling weight Copper ca. kg	Filling weight Aluminium ca. kg	quantity/pallet (layer)	Deposit €	Credit €
Cone-shaped reels acc. to IEC 60264-4-1 (dimensions see „Reel sizes“)							
HKV160 (plus 9333 2)	9950	0.32	5		48 (2)	2.80	2.52
HKV200	9951	0.60	11		30 (2)	5.20	4.68
HKV250 with cover	9910	2.65	22		11	32.00	28.80
Cylindrical reels acc. to IEC 60264-2-2 (dimensions see „Reel sizes“)							
K160 ¹	9952	0.35	5		48 (2)	2.50	2.25
K200 ¹	9955	0.60	11		48 (2)	5.90	5.31
K250 ¹	9958	1.05	22		28 (2)	9.10	8.19
K355 ¹	9959	3.20	45		12 (2)	22.80	20.52
K500	9971	7.65	90	30	6	54.50	49.05
K630	9928	9.60	180	60	4	96.00	86.40
K710	9970	18.60	200	65	4	200.00	180.00
Oblong reels acc. to IEC 60264-3 (dimensions see „Reel sizes“)							
A400 without cover plus 9927 plus 9353 4	9969	7.30	180	60	5	45.50	40.95
A500 without cover plus 9909	9976	23.70	360	120	2	350.00	315.00
A630 without cover plus 9979	9985	92.00	720		1	500.00	450.00
Wooden barrel (dimensions see „Reel sizes“)							
M800 plus 9979	9972	42.00	750		1	300.00	270.00
Oblong reels with cover acc. to IEC 60264-3-5							
A200 with cover	9961	2.63	22		12	21.20	19.08
A250 with cover	9962	4.70	45	15	11	28.50	25.65
A315 with cover	9963	9.15	90	30	6	56.90	51.21
A400 with cover	9964	16.00	180	60	3	95.60	86.04
Stacking frames for pallets (plastic transit support for reels without cover)							
Stacking frames for pallets 160K	9916	4.50			1 - 2	50.00	45.00
Stacking frames for pallets 200K	9916	4.50			1 - 2	50.00	45.00
Stacking frames for pallets 250K	9917	4.10			1 - 2	50.00	45.00
Stacking frames for pallets A400	9927	4.30			1	50.00	45.00
Pallet							
Euro pallet wood	9991	25.00				14.30	12.87
Euro pallet plastic	9908	29.30				72.00	64.80
Steel pallet (for A630/M800)	9979	25.00				120.00	108.00
Pallet covers with strapping							
Wooden lid	9353 4	5.00			1	13.00	11.70
Wooden lid A500	9909	8.00			1	13.00	11.70
Cardboard packaging							
Paper board cover euro-dim.						1.00	without
Box individual reels (HKV200/K200)	9332 7	0.20				1.00	without
Box four reels (HKV160/K160)	9333 0	1.05				1.00	without
Plastic insert HKV160	9333 2	0.2				3.10	2.79

¹rewinding costs

Recommendations for return of empties

Empties must be handed over to the carrier, packed and secured, in accordance with the current regulations on securing loads in accordance with VDI 2700. In this, you should follow our recommendations listed below.

Take care to ensure that:

- empties are stored clean and dry
- to place an intermediate layer of cardboard between each layer and one on top for better stability of reels K160 to A250.
- to finish, place an inverted Europallet onto the empties and secure using at least two straps.
- in the case of packaging for K reels K160 / K200, it is expedient to additionally secure these using plastic sheeting.
- if possible, no reels should protrude beyond the outer edge of the pallet, as they could be damaged on loading and unloading.
- reels delivered in cardboard boxes should be returned in their original packaging, with only one type per pallet.

Address for all returned empties:

KM-Logistik GmbH
Abt. Leergut SH
Brunnenstraße 15
D-32676 Lügde

Conditions for credit

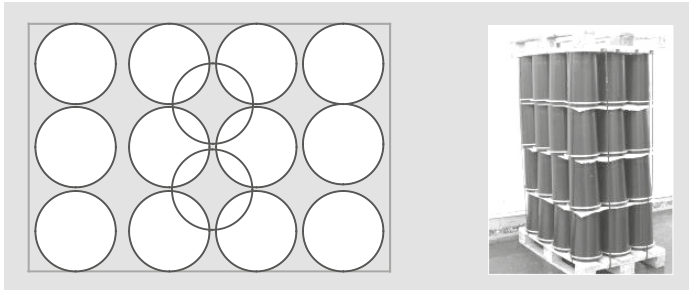
Take care to ensure that:

- only empties that can be identified by their label as SHWire EMPTIES will be credited.
- damaged reels will not be credited. Types damage may be:
 - reels / containers written on using a marker pen or felt pen
 - cuts to the reel core or reel edge that can easily occur when removing wire residue.
 - Adhesive tape used for securing the reel during transport and cannot be cleanly removed.
- Faulty deliveries (damage to empties) must be reported to SHWire immediately.

Recommendation for pallet stacking

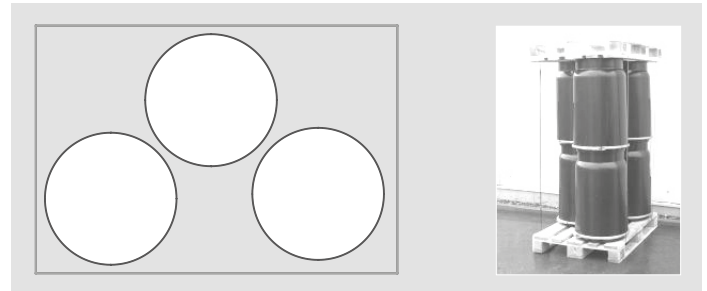
Pallet stacking for A200

- 1 layer = 14 items
- a total of 4 layers = 56 items
- 2 items turned round in center



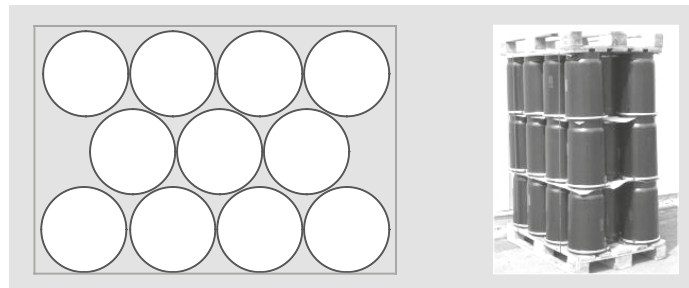
Pallet stacking for A400

- 1 layer = 3 items
- a total of 2 layers = 6 items



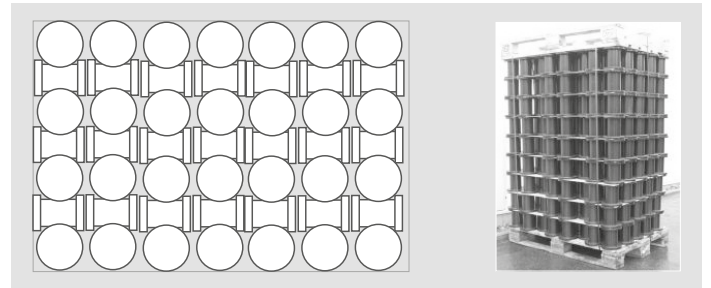
Pallet stacking for A250

- 1 layer = 11 items
- a total of 3 layers = 33 items
- central layer turned round, so A250s come closer together



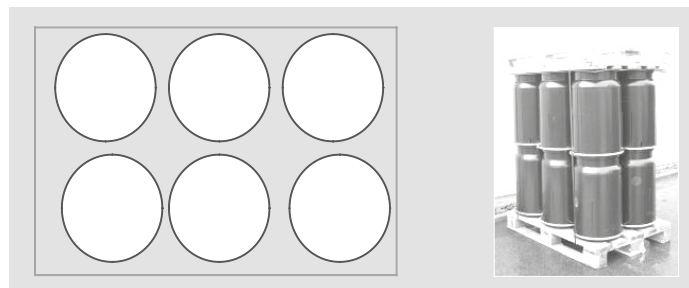
Pallet stacking for K160

- 1 layer = 49 items
- a total of 10 layers = 490 items



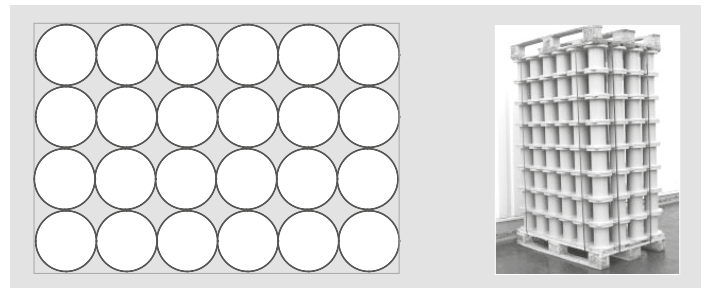
Pallet stacking for A315

- 1 layer = 6 items
- a total of 2 layers = 12 items



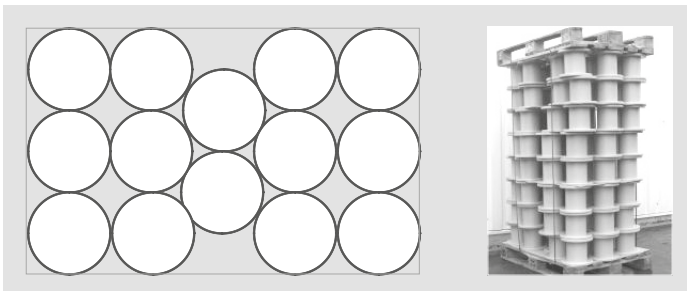
Pallet stacking for K200

- 1 layer = 24 items
- a total of 8 layers = 192 items



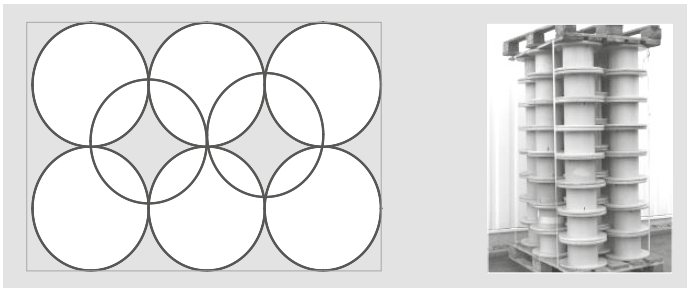
Pallet stacking for K250

- 1 layer = 14 items
- a total of 8 layers = 112 items



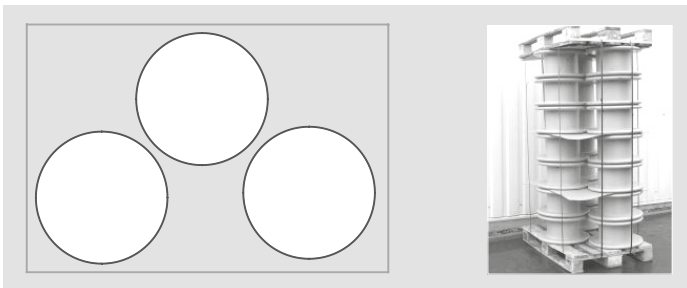
Pallet stacking for K355

- 1 layer = 6 items + 2 in the centre
- a total of 8 layers = 62 items
- central layer 7 high



Pallet stacking for K500

- 1 layer = 3 items
- a total of 7 layers = 21 items



At highest level.
The complete **SHWire** product range.

SHSold® Series

SHSold® V155
SHSold® V180
SHSold® V180 Glide

SHTherm® Series

SHTherm® V180
SHTherm® 200
SHTherm® 210
SHTherm® 210 Glide
SHTherm® 210 TE
SHTherm® 210 Alu
SHTherm® 220
SHTherm® 220 Glide
SHTherm® 210 Flat
SHTherm® 210 Flat Alu
SHTherm® 220 Flat

SHBond® Series

SHBond® WD 210
SHBond® WD 210 Glide
SHBond® WD 210 Alu

SHBare® Series

SHBare®
SHBare® Flat

SynFlex Group

SynLab®
Laboratory Services &
UL Services acc. to 1446

SynServ
Consulting & Services

SynFlex International
SynFlex Scandinavia
SynFlex Austria
SynFlex Poland
SynFlex Italy
SynFlex France
SynFlex Turkey
SynFlex China

Common Goal – Joint Progress:
The Resource of Power.



Insulation Systems, www.synflex.com



Magnet Wires, www.sh-wire.de



Electric Insulation, www.isotek-gmbh.de