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**Manufacturing Work
Instruction**

**801325 120kW 920V RAPID
CHARGER PACKING
INSTRUCTION**

Document Number: WI4-381

Process Owner: June Boylan

Revision Number: 01

1. Scope

This document applies to the packing of the EVCP (801325) 120kW 920V RAPID CHARGER and enables a consistent and efficient manufacturing standard.

2. Safety and General Process Requirements

Refer to Risk assessment RA-68 – packing and despatch.

Any use of the overhead crane must only be done by trained employees with a valid and in date license only – Refer to RA-74 & SWP-19 for safety information regarding the overhead crane.

3. Method

The following describes the packing of the EVCP (801325) 120kW 920V RAPID CHARGER.

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Shock, tilt and Centre of gravity labels

All packaging requires 2 off shock labels to be fitted externally on perpendicular sides (1 per side) of the packing crate. To select the appropriate shock label, refer to figure 1 - the Weight (Kg) and volume (m³) of the packing crate is required to calculate which shock label is required. The volume (m³) of the packing crate is calculated using the formula *Length x Width x Height*.

Figure 1:

ShockWatch 2	5 - 15 ft ³ .14 - .42 m ³	15 - 50 ft ³ .42 - 1.42 m ³	50 - 100 ft ³ 1.42 - 2.83 m ³	100 - 250 ft ³ 2.83 - 7.08 m ³	250 - 500 ft ³ 7.08 - 14.16 m ³	500 - 1,000 ft ³ 14.16 - 304.8 m ³	1,000+ ft ³ 304.8+ m ³
0 - 10 lbs 0 - 5 kg	75G	75G	50G	37G	---	---	---
10 - 25 lbs 5 - 11 kg	75G	50G	50G	37G	25G	---	---
25 - 50 lbs 11 - 23 kg	50G	50G	37G	25G	25G	15G	---
50 - 100 lbs 23 - 45 kg	50G	37G	37G	25G	15G	15G	10G
100 - 250 lbs 45 - 113 kg	37G	37G	25G	25G	15G	15G	10G
250 - 1,000 lbs 113 - 454 kg	37G	25G	25G	15G	15G	10G	10G
1,000 - 2,000 lbs 454 - 907 kg	25G	25G	25G	15G	15G	10G	5G
2,000 - 5,000 lbs 907 - 2,268 kg	25G	25G	15G	15G	10G	10G	5G
5,000 - 10,000 lbs 2,268 - 4,536 kg	25G	15G	15G	15G	10G	10G	5G
10,000 - 15,000 lbs 4,536 - 6,804 kg	---	15G	15G	10G	10G	5G	5G
15,000 - 20,000 lbs 6,804 - 9,072 kg	---	---	10G	10G	5G	5G	5G
20,000 - 30,000 lbs 9,072 - 13,608 kg	---	---	---	5G	5G	5G	5G
30,000+ lbs 13,608+ kg	---	---	---	---	5G	5G	5G

Once the required shock label has been identified, use figure 2 to find the associated TPS part number.

Figure 2:

TPS Part No.	Description	Sensitivity
908348-ROP	10 PACK OF 5G 6.35mm X 45.93mm SHOCK LABELS	5G
908349-ROP	10 PACK OF 10G 6.35mm X 45.93mm SHOCK LABELS	10G
908346-ROP	10 PACK OF 15G 6.35mm X 45.93mm SHOCK LABELS	15G
908345-ROP	10 PACK OF 25G 6.35mm X 45.93mm SHOCK LABELS	25G
908350-ROP	10 PACK OF 37G 6.35mm X 45.93mm SHOCK LABELS	37G
908351-ROP	10 PACK OF 50G 6.35mm X 45.93mm SHOCK LABELS	50G
908352-ROP	10 PACK OF 75G 6.35mm X 45.93mm SHOCK LABELS	75G

Additionally, all packaging requires 2 off tilt labels (908347-ROP) and 2 off centre of gravity labels (520924) to be fitted next to the shock labels. The centre of gravity labels must be placed centrally on the two sides of the packing crate.

3.1 Obtain the EV Charger packing kit (170078). The kit consists of the following parts:

- 1 off 909120 (Packing case – supplied flat pack along with foil bag and silica gel packets)
- 2 off 908347 (Tilt labels)
- 2 off 908345 (25G shock labels)
- 1 off 908886 (Carboard box)
- 1 off 520923 (Stop warning sign)
- 2 off 520924 (Centre of gravity labels)
- 2 off 909125 (Quick start Guide)
- 2 off 909126 (A5 plain document holder)





Separate the parts of the packing case so the base of the crate is ready to pack the EVCP on to.



3.2 Position the base of the foil bag on the crate & position the unit on the crate as shown using the overhead crane. Ensure the wood beams attached to the unit are secured to the charger feet and located on the inside of the 4 stoppers and the unit is centralised to provide sufficient clearance from all sides.

3.3 Check 2 off 520881 Warning tags are fitted to the bolts that secure the shipping supports to the base of the charger.



3.4	While in this position, take a photo of the rating plate for upload and traceability – Ensure the entire rating plate is visible and all information is readable.	
3.5	Remove both the connectors from the holsters and wrap in bubble wrap, secure with tape. Looking at the front of the charger, the Left-hand side connector can be placed straight under the back of the unit. The right-hand side connector needs to be routed around the post over the top of the unit and then placed under the back of the unit. To protect the Right-hand cable from rubbing against the bolt, a length of heatshrink (approx. 40mm) needs put over the protruding thread of the bolt. Secure the heatshrink with a cable tie.	<p data-bbox="587 555 981 638">Connector wrapped in bubble wrap and secured with tape</p>  <p data-bbox="1061 631 1455 714">Connectors placed under the back side of the charger</p>  <p data-bbox="587 1191 1077 1274">Right-hand cable routed around post over the top of the unit</p>  <p data-bbox="1117 1281 1471 1364">Heatshrink over bolt secured with a tie wrap</p> 

3.6 Obtain both top hat LED Modules along with the two resealable bags containing the 3 off fixings for each of the LEDs.

Wrap each of the LED modules along with their bag of fixings in bubble wrap, secure with tape.

Package both LED modules into the cardboard box (908886) and seal with tape.

Print out a label which contains the text '700055 X2 LED TOP LIGHTS' and attach it to the box.

Place the box under the front side of the unit as shown.

Both LED modules along with their bag of fixings prior to packaging



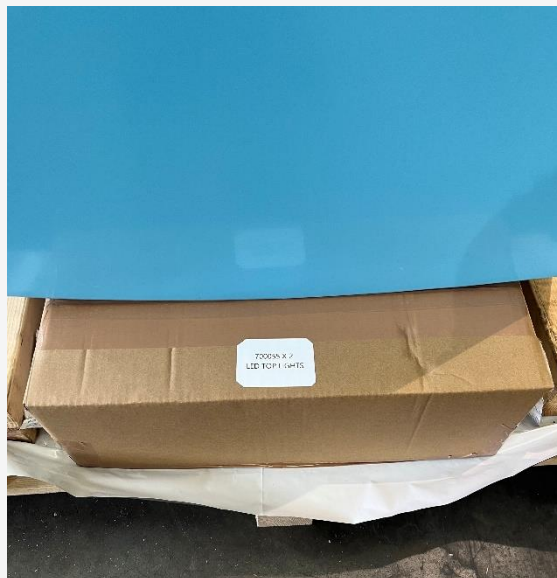
LED module along with the bag of fixings wrapped in bubble wrap and secured with tape

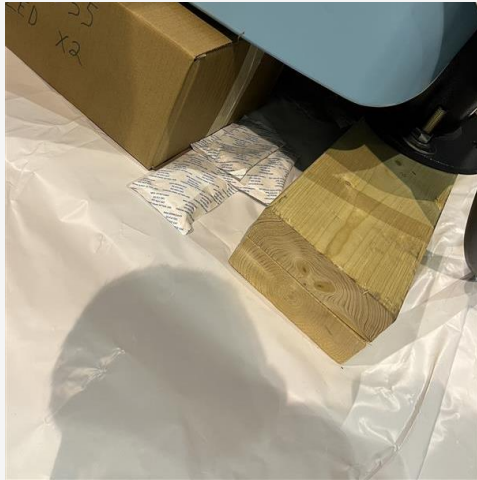
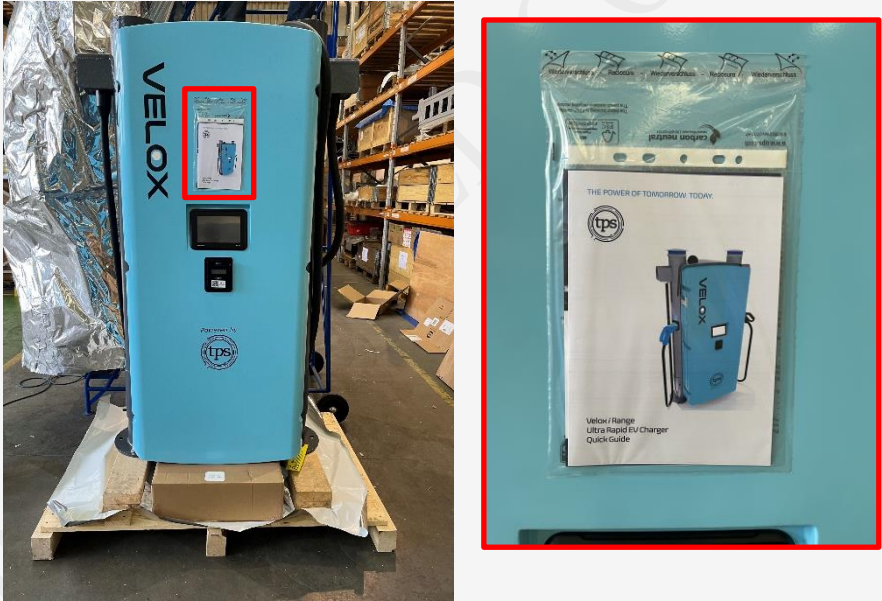



Printed label containing the text '700055 X2 LED TOP LIGHTS'



Label attached to box and box placed under the front of the charger



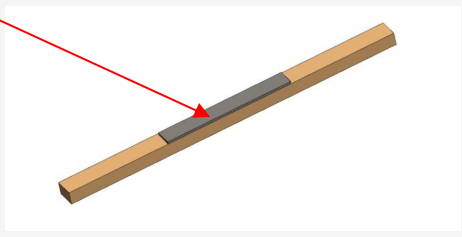
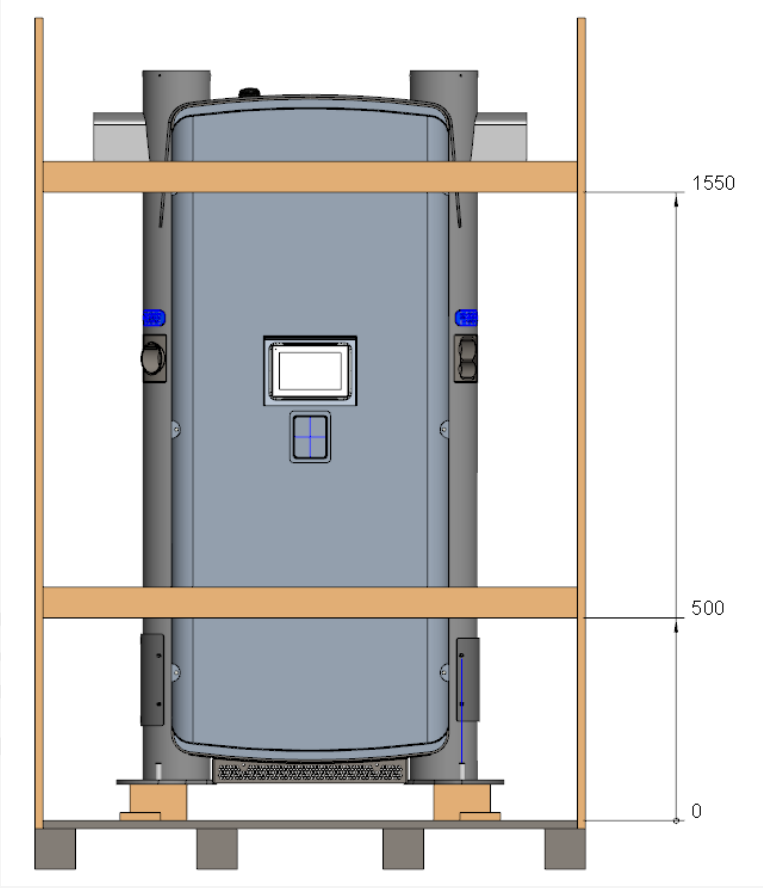
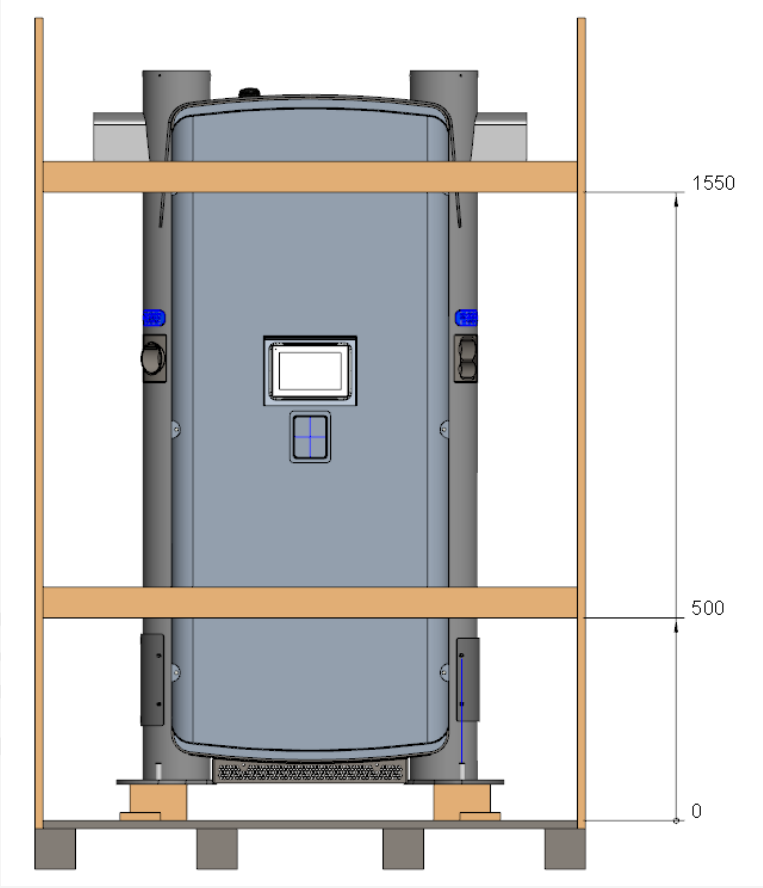
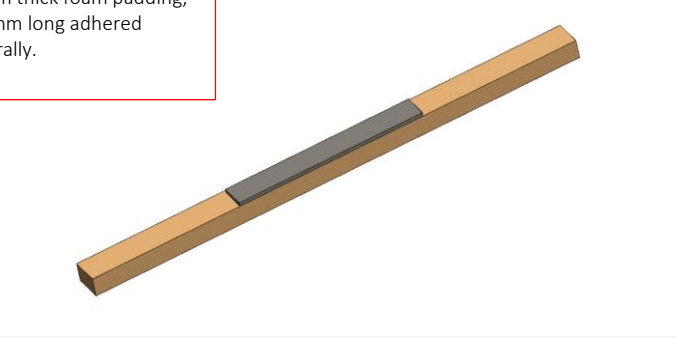
<p>3.7</p>	<p>Place a total of 4 silica gel bags at the base of the charger.</p>	
<p>3.8</p>	<p>Obtain the Certificate of conformity (Coc) and 1 off Velox i Range Ultra Rapid EV Charger Quick Guide (909125) and place in an A5 adhesive-backed transparent document holder (909126). Attach the bag to the front of the charger in the position shown.</p>	
<p>3.9</p>	<p>Place the top part of the foil bag over the unit</p>	

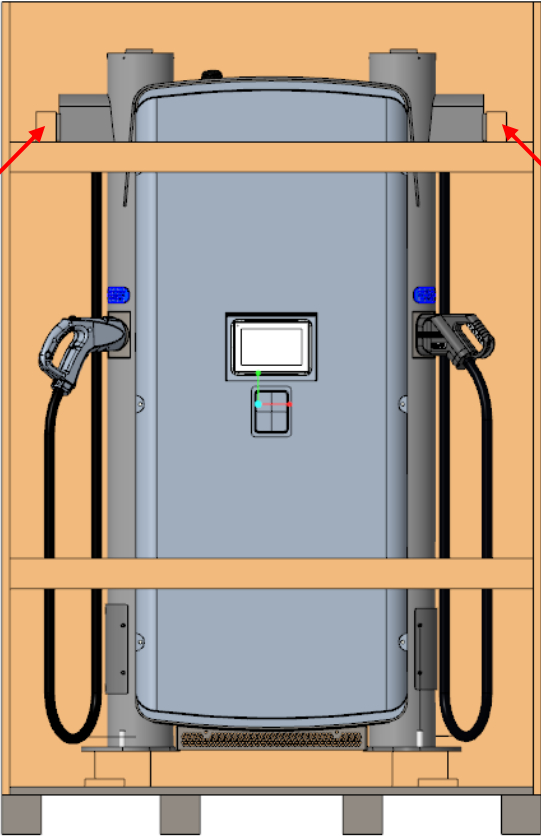

3.10 Align the lip of the foil bag with the foil base and crimp to seal it together – leave a gap in the bag for the Hoover nozzle.

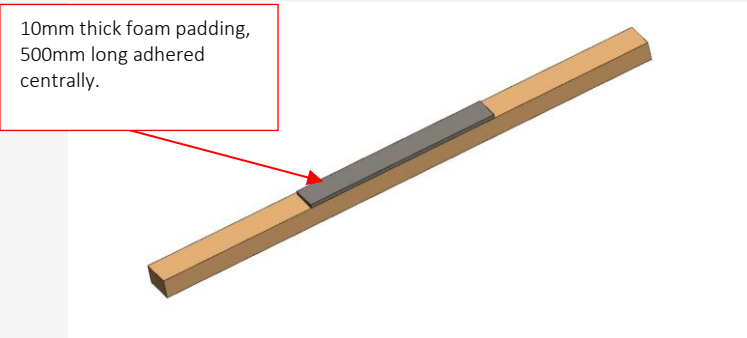

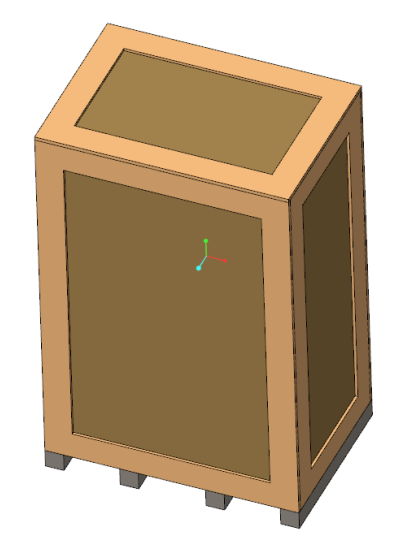


3.11 Using the vacuum cleaner, place the nozzle into the gap and remove the air from the bag enough to give a shrink wrap, wraparound look. Then seal the hole with the crimper.



<p>3.12</p>	<p>Apply 500mm length of foam padding to 4 x 1320mm runners in the position shown right.</p> <p>NOTE; Padding supplied with the packing crate.</p>	<p>10mm thick foam padding, 500mm long adhered centrally.</p> 
<p>3.13</p>	<p>Attach the two narrow sides of the crate and fix into place along the bottom edge using 50mm dry wall screws and a handheld drill – stagger the screws roughly every 100mm to create extra strength.</p>	
<p>3.14</p>	<p>Attach X2 1320mm wooden runners across the front of the unit and X2 1320mm wooden runners across the back of the unit fixed to the sides with 50mm drywall screws.</p> <p>Note; the approximate positions shown right.</p>	
<p>3.15</p>	<p>Apply foam padding to 2 x 900mm runners in the position shown right.</p> <p>NOTE; Padding supplied with the packing crate.</p>	<p>10mm thick foam padding, 500mm long adhered centrally.</p> 

<p>3.16</p>	<p>Attach the back side of the crate and fix with 50mm drywall screws along the bottom edge and up both sides. stagger the screws roughly every 100mm to create extra strength.</p>	
<p>3.17</p>	<p>Attach X2 900mm wooden runners in the position shown in the image and fix to the back with 50mm drywall screws.</p> <p>Note; the approximate positions shown right.</p>	
<p>3.18</p>	<p>Attach the front side of the crate and fix with 50mm drywall screws along the bottom edge and up both sides. stagger the screws roughly every 100mm to create extra strength. Additionally, use the same screws to attach to the wooden runners fitted in the previous step to the front side.</p>	

<p>3.19</p>	<p>Apply foam padding to 2 x 900mm runners in the position shown right.</p> <p>NOTE; Padding supplied with the packing crate.</p>	
<p>3.20</p>	<p>Attach X2 900mm wooden runners across the top of the unit located above the top of the cable post, fixed to the front and back with 50mm drywall screws.</p> <p>Note; the positions shown right.</p>	
<p>3.21</p>	<p>Put the lid of the crate into place and secure using the same method as attaching the sides with staggered 50mm dry wall screws.</p>	

3.22 Fold and staple whether sheet around the top edge of the crate.



3.23 To aid unpacking, identify all screws using a red pain marker (908862-ROP) with a circle. Example shown in the image.



3.24 Place 1 off A5 adhesive-backed transparent document holder (909126) on the front side of the case as shown. Populate the document holder with 1 off Velox *i* Range Ultra Rapid EV Charger Quick Guide (909125) and a A5 stop warning sign (520923). Ensure the stop sign is at the front the document holder.

Additionally, attach 2 off 25G shock labels (908345), 2 off Tilt labels (908347) and 2 off centre of gravity labels (520924) to the packing case. 1 off each are to be placed centrally on the left side of the case and 1 off each are to be placed centrally on the front side of the case.

Reference the images for additionally clarification on the label placement.



3.24	Ensure all required standard paperwork is available and included with each unit before dispatch.	
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Upon completion of the packing process, the overall size and weight of the overall unit is as follows:

Size – 1380mm (L) x 960mm (W) x 2130mm (H)

Weight – Approx. 516Kg (Subject to change depending on modifications made to the product)

4. Document History

Revision Number:	Revision Date:	Summary of Changes	Changed by
1	20/05/2024	New Document	D. Wood
2			
3			
4			

This document requires approvals from the following company positions:

- Process Owner
- Quality Manager