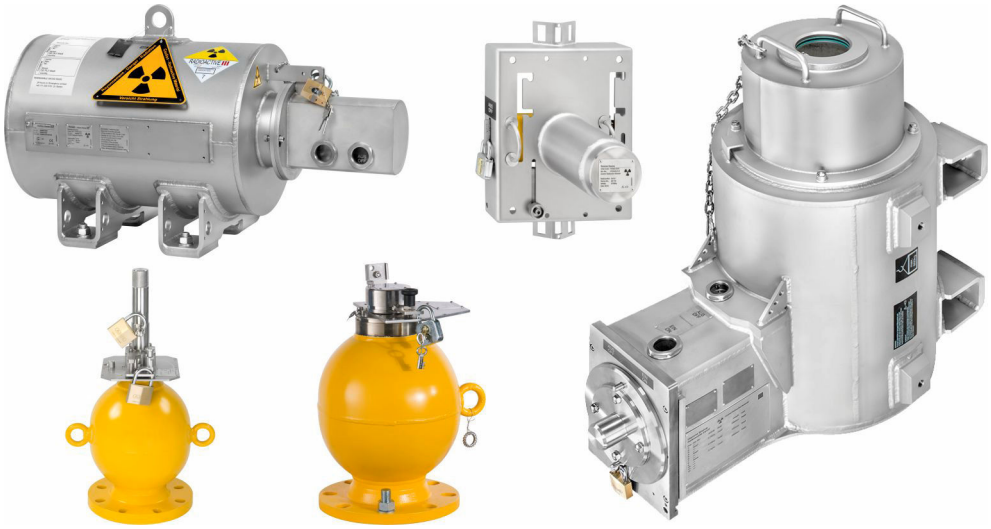
SD00309F/00/EN/16.25-00
71698576
2025-02-19

Special Documentation
QGx, FQGx, FSG6x

Returning: Source containers, radiation sources



Endress+Hauser
People for Process Automation

1 About this document

1.1 Document function

This document describes the return procedure for source containers and radiation sources.

1.2 Symbols used

1.2.1 Safety symbols

DANGER
This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.

WARNING
This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in serious or fatal injury.

CAUTION
This symbol alerts you to a potentially dangerous situation. Failure to avoid this situation can result in minor or medium injury.

NOTICE
This symbol alerts you to a potentially harmful situation. Failure to avoid this situation can result in damage to the product or something in its vicinity.

1.2.2 Radiation warning sign

Warning symbol for radioactive source according to ISO 7010

Warning sign for ionizing radiation
Identification of places and objects in and around which the presence of ionizing radiation is to be expected.

Warning symbol for highly radioactive source according to ISO21482

High radiation warning sign
- Warns of highly radioactive substances or ionizing radiation.
- Highly radioactive sources are marked separately on the source containers with the wording "highly radioactive source" and the supplemental warning symbol according to ISO21482.

1.2.3 Symbols for certain types of information and graphics

✓ **Permitted**
Procedures, processes or actions that are permitted

✗ **Forbidden**
Procedures, processes or actions that are forbidden

Tip
Indicates additional information

Reference to documentation

Reference to graphic

▶
Notice or individual step to be observed

1., 2., 3.
Series of steps

Result of a step

1, 2, 3, ...
Item numbers

A, B, C, ...
Views

⚠ → **Safety instructions**
Observe the safety instructions contained in the associated Operating Instructions

2 Basic safety instructions

DANGER

Danger from ionizing radiation in case of incorrect handling or a defective source container

Hazard for persons and the environment posed by ionizing radiation and contamination. Ionizing radiation and contamination could increase the risk of cancer and the risk of genetic birth defects. Depending on the dose received, ionizing radiation could lead to immediate physical harm, such as nausea, vomiting, hair loss, changes to blood count, serious tissue damage and even death.

- **The instructions and warning notes in this manual relating to dangers to health posed by ionizing radiation and contamination must be strictly observed. Disregard for these instructions and warning notes could lead to serious injuries or death and hazards for the environment.**
- Observe applicable national requirements for radioactive radiation sources. Observe requirements for fire protection measures in particular.
- Observe the conditions of use of radiation sources with respect to environmental conditions (e.g. vibration or operating temperature).
- In cases of doubt, contact the responsible radiation safety officer, the responsible national inspectorate or the manufacturer.

DANGER

Danger from ionizing radiation if radiation sources lost

If radiation sources are lost, there is a danger to the general public and the environment

- **The instructions and warning notes in this manual relating to dangers to health posed by ionizing radiation and contamination must be strictly observed. Disregard for these instructions and warning notes could lead to serious hazards for the environment and public safety.**
- Observe applicable national requirements for anti-theft measures for radioactive radiation sources throughout the entire life cycle (from delivery to disposal).
- There is a risk of radioactive material being used for criminal or premeditated unauthorized acts, which poses a threat to public safety.

2.1 Requirements for the personnel

WARNING

Danger from inadequately qualified personnel.

Physical damage and personal injury. Particularly as a consequence of incorrect handling.

- The requirements for personnel described below are mandatory for the plant operator.

Maintenance personnel - Radiation

Maintenance personnel (radiation) carry out any maintenance work affecting the radiation source, including disassembly and replacement.

Maintenance personnel (radiation) must comply with the following requirements:

- They must be authorized and monitored in relation to radiation exposure
- They must be trained specialists in radiation protection
- They must be authorized by the plant owner/operator.

Transport personnel

Transport personnel transport the product or parts thereof from the manufacturer or warehouse to the place of installation, for example. Transport personnel must comply with the following requirements:

They must be qualified to transport “Class 7 hazardous goods”.

Disposal personnel
Disposal personnel dispose of the product or parts thereof. Disposal personnel must comply with the following requirements:
- They must be authorized and monitored in relation to radiation exposure
- They must be trained specialists in radiation protection
- They must be authorized by the disposal company.

Radiation safety officer
The radiation safety officer is responsible for ensuring compliance with all applicable legal regulations. The company/operator must appoint a radiation safety officer in accordance with the relevant national law(s). The radiation safety officer is responsible for the following, among other tasks:
- Monitoring the source container at the place of installation
- Training of staff in radiation protection
- Developing and implementing measures in an emergency

. The radiation safety officer can therefore be reached at all times.

The radiation safety officer is:
- Trained for the role
- Someone who is recognized nationally for this role
- A specialist who is authorized by the plant operator.

3 Supplementary documentation

For an overview of the scope of the associated Technical Documentation, refer to the following:
- *Device Viewer* (www.endress.com/deviceviewer): Enter the serial number from the nameplate
- *Endress+Hauser Operations app*: Enter serial number from nameplate or scan matrix code on nameplate.

4 Returning: Source containers, radiation sources

4.1 Federal Republic of Germany

Contact the responsible Endress+Hauser sales center to organize a return for the purpose of testing for reuse or recycling by Endress+Hauser.

4.2 Other countries

Contact the responsible Endress+Hauser sales center or appropriate authority to find a way of returning the device within your country, if possible. If it is not possible to return the device in your country, the next steps to be taken must be agreed with the Endress+Hauser sales center/representative concerned. The destination airport for potential returns is Frankfurt, Germany (FRA).

4.3 Conditions

The following conditions must be met before returning the device:
- An inspection certificate no more than three months old and confirming the leak-tightness of the radiation source must be submitted to Endress+Hauser (wipe test certificate). The wipe test can be carried out on the radiation sources themselves or on replacement wipe areas as described in the "Maintenance" section.
- The serial numbers of the radiation sources, isotope type (^{137}Cs), nominal activity, and date of manufacture of the radiation sources must be specified in accordance with the radiation source certificate. This data is listed in the documents supplied with the radiation sources.
- The source container must not show any signs of severe corrosion that could jeopardize the safe storage of the radiation sources.
- The source container must not show signs of serious mechanical damage from fire, falls, or collisions.
- The "AN/ON" and "AUS/OFF" mechanism must be in correct working order, as described in the "Commissioning" section.
- The source container must be secured in the "AUS/OFF" position by means of a transport lock.
- If there are any doubts about the integrity of the source container, the radiation sources must be returned in a separate Type A transportation cask. Contact the responsible Endress+Hauser sales office for this purpose.
- The aforementioned checks must be confirmed in an inspection report. The inspection report must be enclosed when returning the product.
- The transport index must be determined according to the IAEA safety standards series no. SSR-6 (https://www.iaea.org/publications/12288/regulations-for-the-safe-transport-of-radioactive-material) or equivalent national standards. The source container and any overpack must be labeled accordingly.
- The leak test certificate, the manufacturer's certificate for the radiation sources and the duly completed pre-return inspection report must be sent to Endress+Hauser before returning the device.

Following successful testing, the FQG60, FQG61, FQG62, FQG63, FQG66, FQG74 source containers are suitable for shipment as a Type A package. The Type A labeling on the source container itself is, however, no longer valid for any subsequent device returns. Before the source container is returned, it must be relabeled according to international regulations concerning the transportation of hazardous materials (ADR/RID, DGR/IATA).

4.4 Returning source containers: FQG60, FQG61, FQG62, FQG63, FQG66, FQG74

These source containers meet the requirements of a Type A package and therefore do not require separate Type A packaging.

- Refer to the "Return" section in the Operating Instructions for the source container
- It is preferable to use the return packaging kits and labeling kits for return transportation.
- Prior to returning the source container as a Type A package, the checklist from the Operating Instructions for the source container must be completed and sent to Endress +Hauser.

4.4.1 Return packaging kit

Return packaging kit for source containers including labeling kit

- FQG60
  Order number: 71341814
- FQG61/62/63
  Order number: 71341832
- FQG66
  Order number: 71341833
- FQG74
  Order number: 71697741

Apply the labeling kit to the package in accordance with the applicable IATA requirements and national regulations.

4.4.2 Packaging instructions for FQG60 source container with packaging kit (71341814)

DANGER

Danger due to incorrect declaration of dangerous goods.
Legal consequences and dangers from errors in the handling and declaration of Class 7 dangerous goods.
- ▶ Follow the instructions of hazardous goods safety officers.

WARNING

Risk of injury from ionizing radiation.
Ionizing radiation can increase the risk of cancer and genetic defects in offspring.
- ▶ Only lift the source container when it is in the OFF position in the overpack.
- ▶ The source container must be secured against being opened inadvertently by means of a lock.
- ▶ Refer to the general instructions on radiation protection.

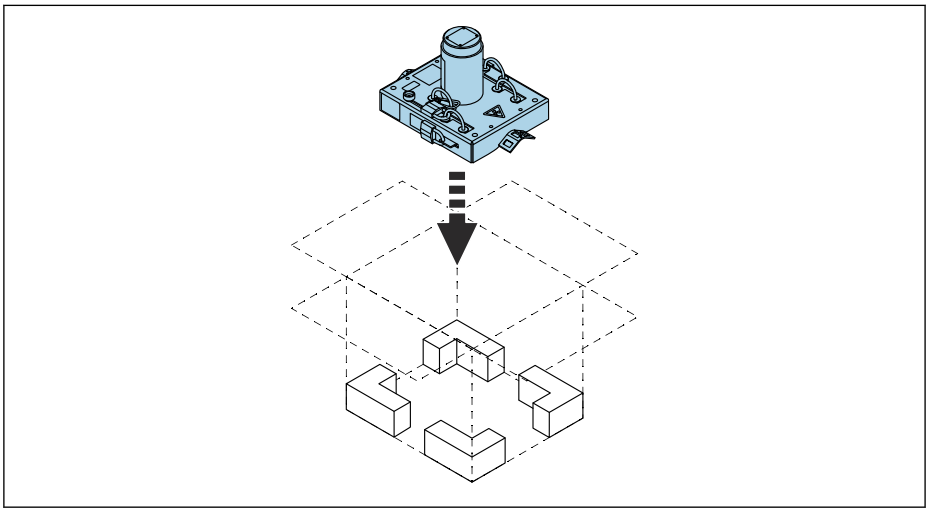
CAUTION

Sharp edges on the source container.
This could result in personal injury in the form of cuts and abrasions.
- ▶ Wear protective equipment.

CAUTION

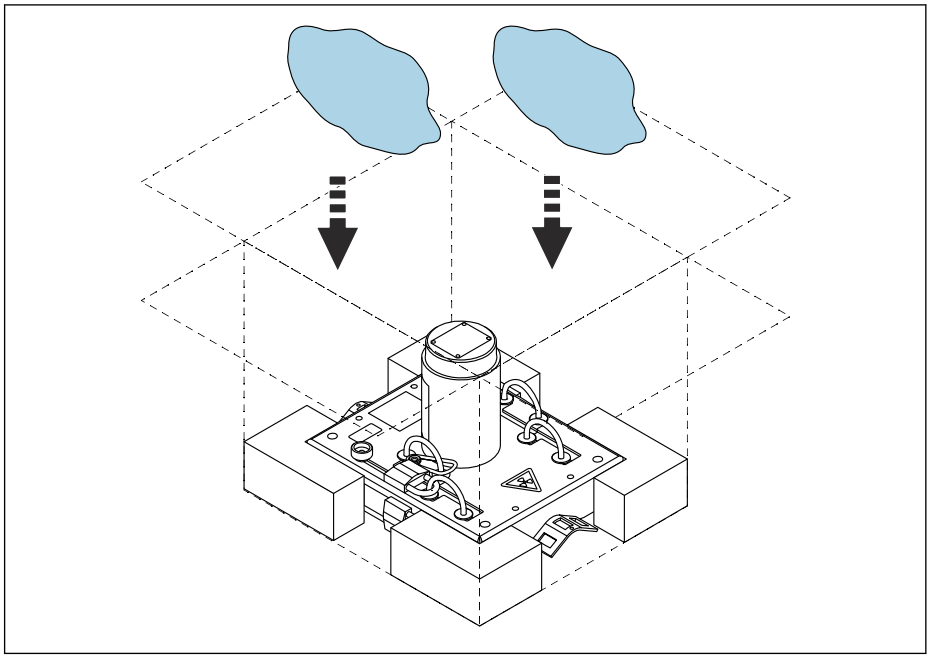
Sharp edges on secondary packaging.
This could result in personal injury in the form of cuts and abrasions.
- ▶ Wear protective equipment.

1. ⚠ WARNING: IONIZING RADIATION! Observe the safety instructions at the beginning of this section.
   ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Place the source container in the cardboard packaging.



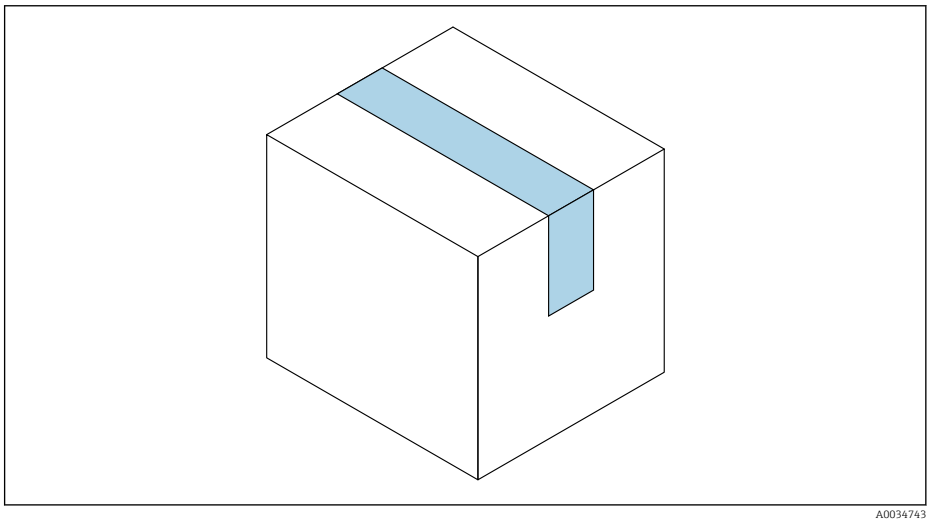
A0034741

2. Apply the labeling kit provided to the source container in accordance with the applicable IATA requirements and national regulations.
   Secure the source container using packaging foam pieces.
   ↳



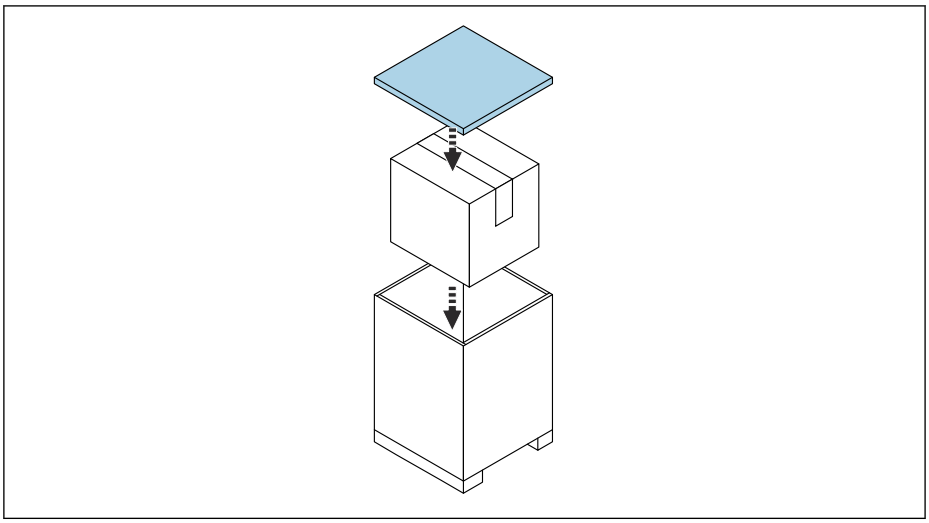
A0034742

3. Seal the cardboard box with adhesive tape.
   ↳



A0034743

4. ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Place the cardboard box in the wooden crate and close the crate.



5. ℹ Mark the seaworthy overpack as a Type A package. Mark the cardboard box as the overpack of a Type A package.
   ⚠ DANGER: HAZARD DUE TO INCORRECT DECLARATION! Observe the safety instructions at the beginning of this section.
   ↳ Label the package.
   Apply the labeling kit provided to the package in accordance with the applicable IATA requirements and national regulations.

4.4.3 Packaging instructions for FQG61, FQG62, FQG63 source containers with packaging kit (71341832)

⚠ DANGER

Danger due to incorrect declaration of dangerous goods.
Legal consequences and dangers from errors in the handling and declaration of Class 7 dangerous goods.
- ▶ Follow the instructions of hazardous goods safety officers.

⚠ WARNING

Risk of injury from ionizing radiation.
Ionizing radiation can increase the risk of cancer and genetic defects in offspring.
- ▶ Only lift the source container when it is in the OFF position in the overpack.
- ▶ The source container must be secured against being opened inadvertently by means of a lock.
- ▶ Refer to the general instructions on radiation protection.

⚠ WARNING

Source container not fitted to the crane correctly, leading to possible falling of the source container.
This could result in personal injury or even death as a consequence of impact.
- ▶ Wear protective equipment.
- ▶ Lifting accessories must be suitably rated for the gross weight.

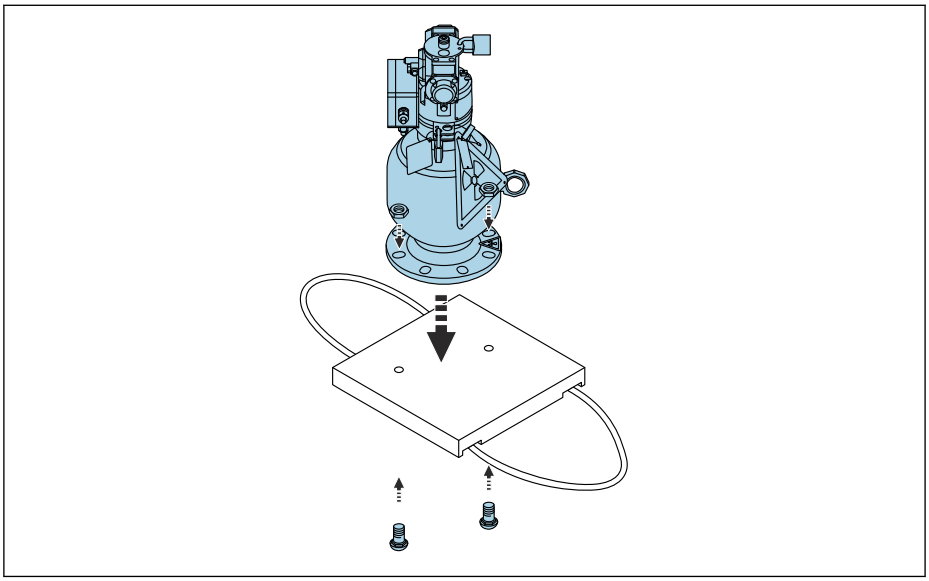
⚠ CAUTION

Sharp edges on the source container.
This could result in personal injury in the form of cuts and abrasions.
- ▶ Wear protective equipment.

⚠ CAUTION

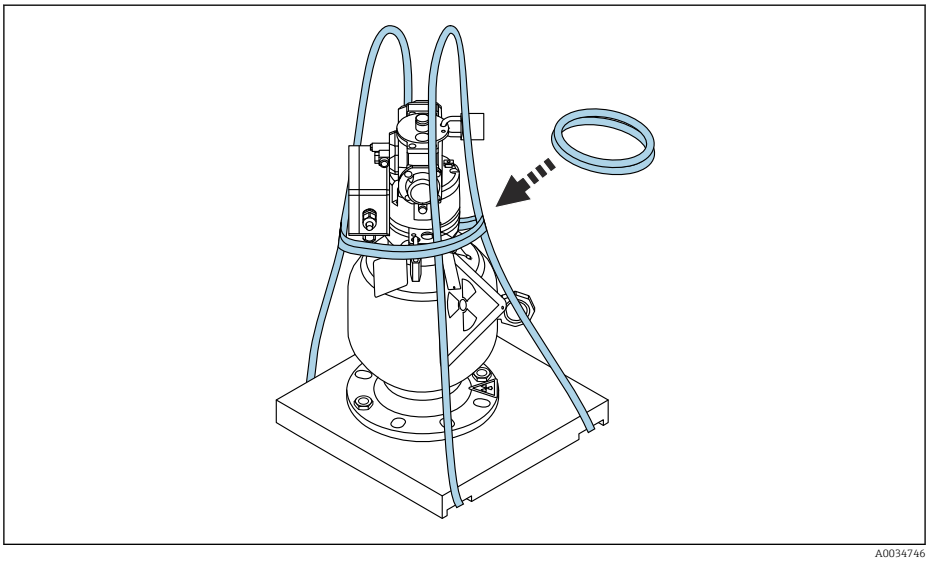
Sharp edges on secondary packaging.
This could result in personal injury in the form of cuts and abrasions.
- ▶ Wear protective equipment.

1. ⚠ WARNING: IONIZING RADIATION! Observe the safety instructions at the beginning of this section.
   ⚠ WARNING: FALL HAZARD! Observe the safety instructions at the beginning of this section.
   ↳ ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   Mount the source container on the baseplate using screws and nuts.



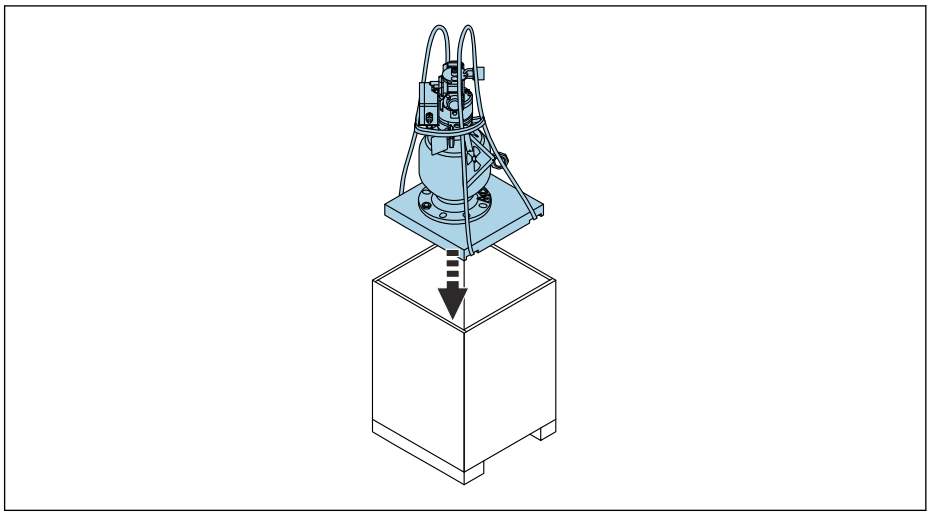
A0034745

2. Apply the labeling kit provided to the source container in accordance with the applicable IATA requirements and national regulations.
   Use the short harness to secure the top of the source container that is attached to the base plate in order to guard against tipping when lifted.
   ↳



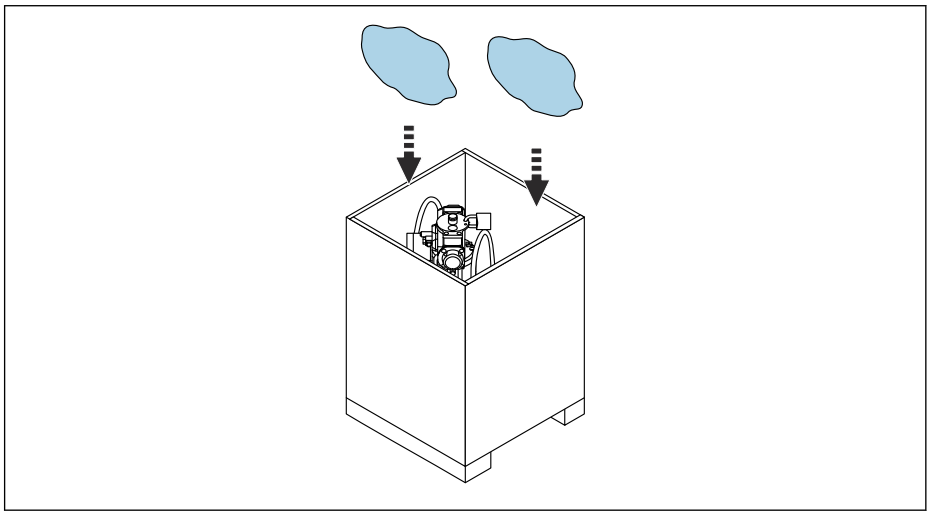
A0034746

3. ⚠ WARNING: FALL HAZARD! Observe the safety instructions at the beginning of this section.
   ↳ Place the source container in the wooden crate.



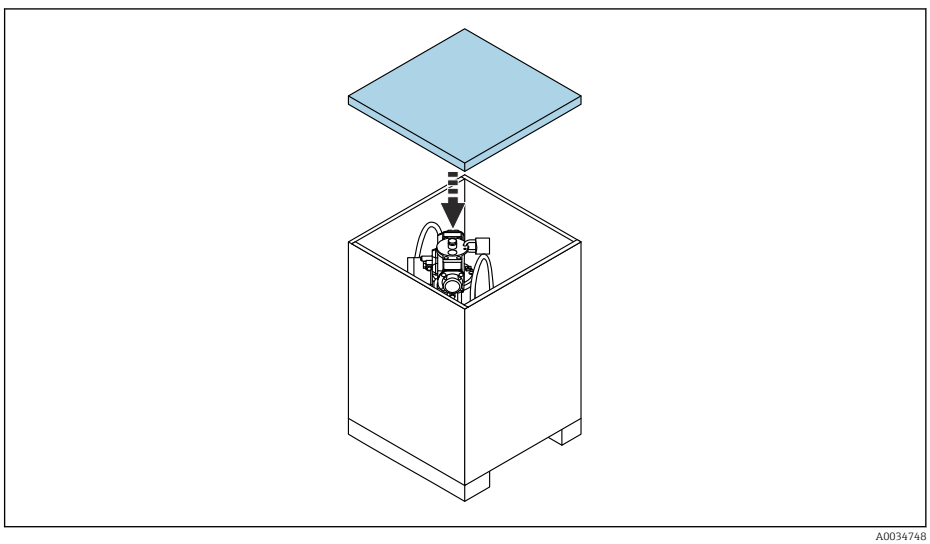
A0034747

4. Secure the source container using packaging foam pieces.
   ↳



A0034806

5. ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Close the wooden crate.



A0034748

6. Mark the seaworthy overpack as a Type A package.
   DANGER: HAZARD DUE TO INCORRECT DECLARATION! Observe the safety instructions at the beginning of this section.
   ↳ Label the package.
   Apply the labeling kit provided to the package in accordance with the applicable IATA requirements and national regulations.

4.4.4 Packaging instructions for FQG66 source container with packaging kit (71341833)

DANGER

Danger due to incorrect declaration of dangerous goods.

Legal consequences and dangers from errors in the handling and declaration of Class 7 dangerous goods.

- ▶ Follow the instructions of hazardous goods safety officers.

WARNING

Risk of injury from ionizing radiation.

Ionizing radiation can increase the risk of cancer and genetic defects in offspring.

- ▶ Only lift the source container when it is in the OFF position in the overpack.
- ▶ The source container must be secured against being opened inadvertently by means of a lock.
- ▶ Refer to the general instructions on radiation protection.

WARNING

Source container not fitted to the crane correctly, leading to possible falling of the source container.

This could result in personal injury or even death as a consequence of impact.

- ▶ Wear protective equipment.
- ▶ Lifting accessories must be suitably rated for the gross weight.

CAUTION

Sharp edges on the source container.

This could result in personal injury in the form of cuts and abrasions.

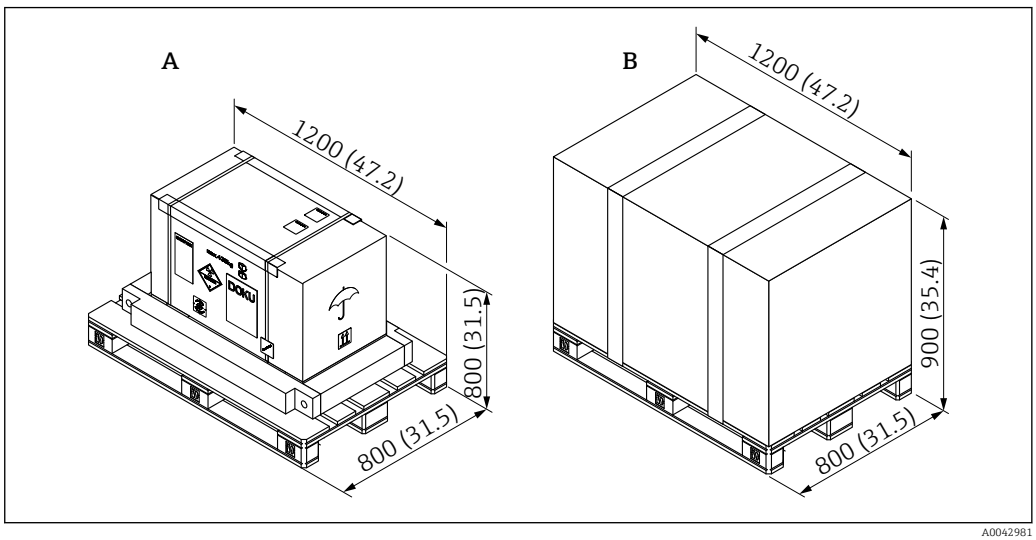
- ▶ Wear protective equipment.

CAUTION

Sharp edges on secondary packaging.

This could result in personal injury in the form of cuts and abrasions.

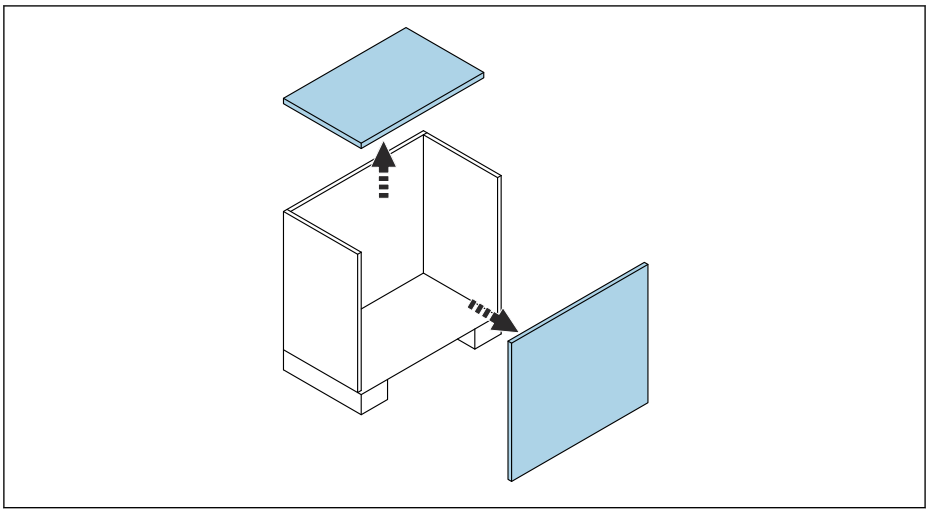
- ▶ Wear protective equipment.



1 *Dimensions of packaging kit (71341833). Unit of measurement mm (in)*

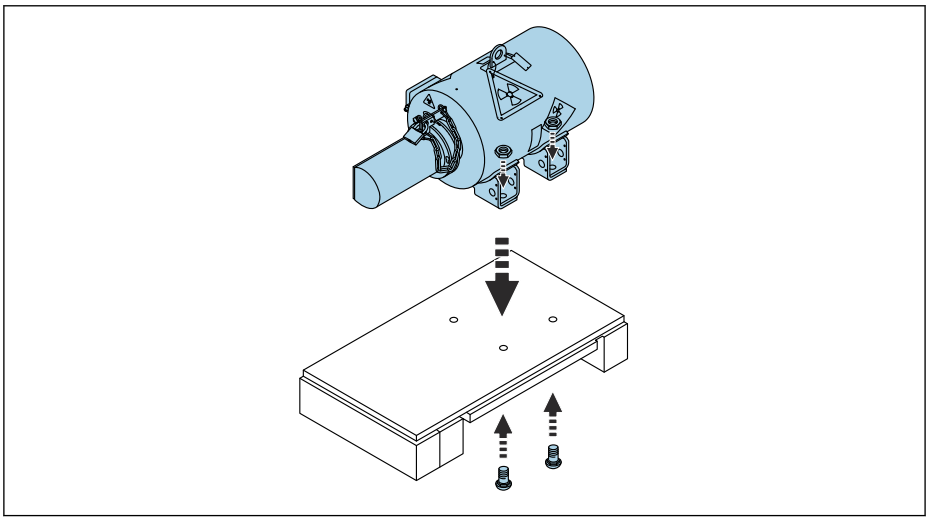
A Overpack for loaded or unloaded source containers
B Seaworthy overpack

1. ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Remove the cover and side part of the wooden crate.



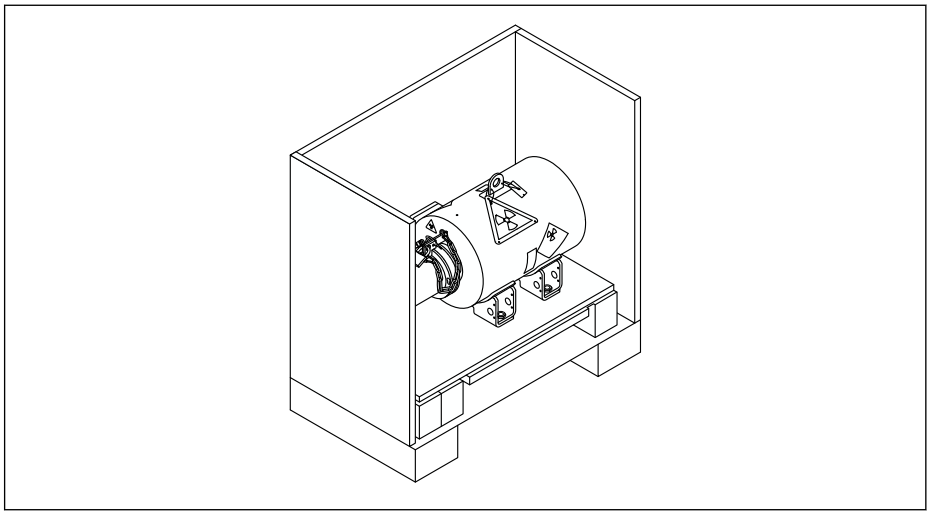
A0034749

2. ☢ WARNING: IONIZING RADIATION! Observe the safety instructions at the beginning of this section.
   ⚠ WARNING: FALL HAZARD! Observe the safety instructions at the beginning of this section.
   ↳ Securely mount the source container on the transport pallet using screws and nuts.



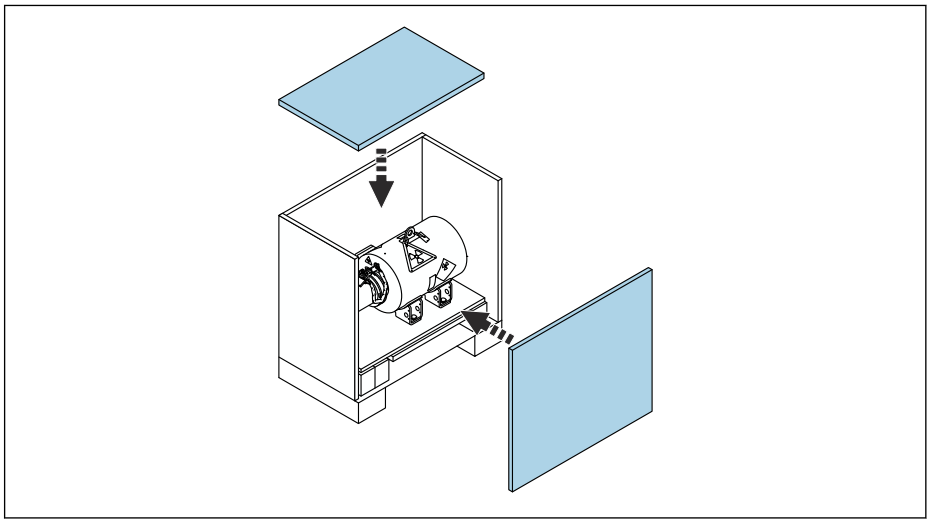
A0034750

3. Apply the labeling kit provided to the source container in accordance with the applicable IATA requirements and national regulations.
   ⚠ WARNING: FALL HAZARD! Observe the safety instructions at the beginning of this section.
   ↳ Place the source container with the pallet in the wooden crate.



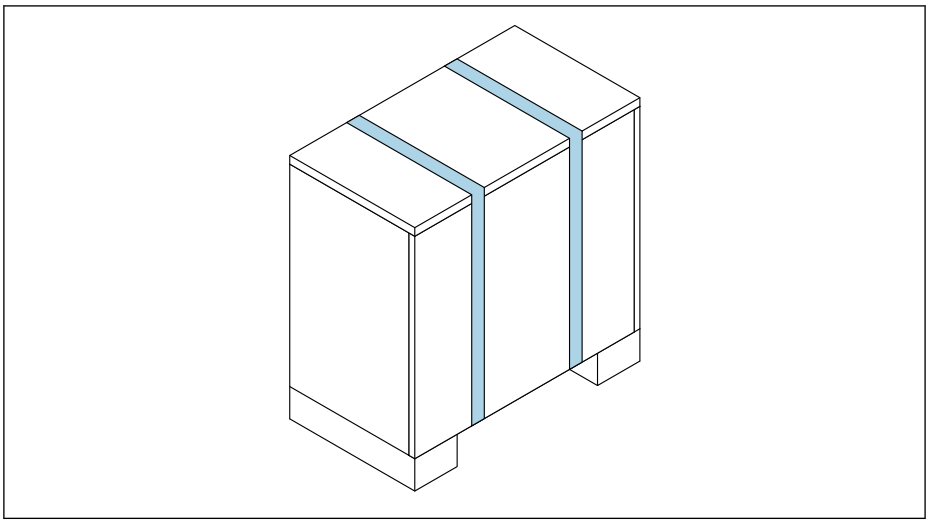
A0034751

4. ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Securely screw the cover and side part of the wooden crate with suitable screws.



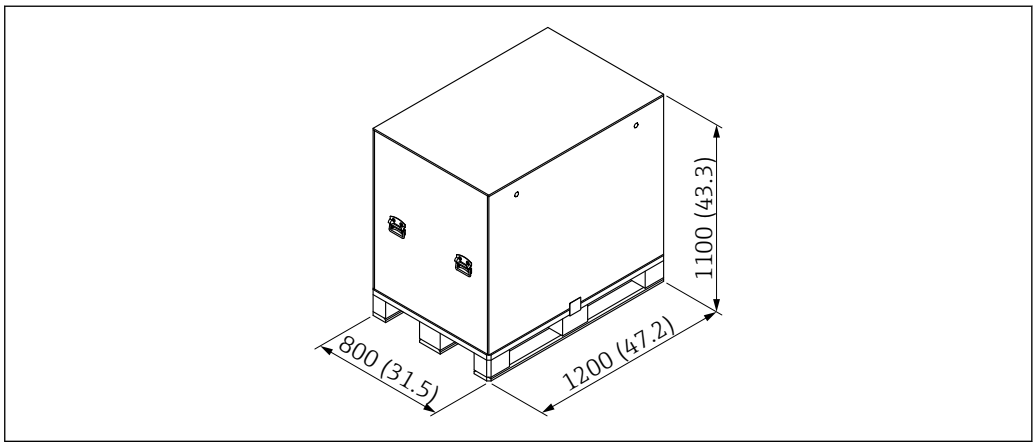
A0034752

5. ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
   ↳ Secure the wooden crate on the outside with strapping band.



6. ℹ Mark the seaworthy overpack as a Type A package.
   ⚠ DANGER: HAZARD DUE TO INCORRECT DECLARATION! Observe the safety instructions at the beginning of this section.
   ↳ Label the package.
   Apply the labeling kit provided to the package in accordance with the applicable IATA requirements and national regulations.

4.4.5 Packaging instructions for FQG74 source container with packaging kit (71697741)



2 *Overpack for loaded or unloaded source containers, dimensions of packaging kit (71697741). Unit of measurement mm (in)*

DANGER

Danger due to incorrect declaration of dangerous goods.
Legal consequences and dangers from errors in the handling and declaration of Class 7 dangerous goods.
- Follow the instructions of hazardous goods safety officers.

WARNING

Risk of injury from ionizing radiation.
Ionizing radiation can increase the risk of cancer and genetic defects in offspring.
- Only lift the source container when it is in the OFF position in the overpack.
- The source container must be secured against being opened inadvertently by means of a lock.
- Refer to the general instructions on radiation protection.

CAUTION

The heavy weight of the overpack could lead to handling errors when unpacking the source container.
This could result in personal injury as a consequence of the crush hazard for hands and feet.
- Wear protective equipment.
- Use suitable lifting accessories. In conformity with EN 1492 or EN 13414, for example.

CAUTION

Sharp edges on the source container.
This could result in personal injury in the form of cuts and abrasions.
- Wear protective equipment.

CAUTION

Sharp edges on secondary packaging.
This could result in personal injury in the form of cuts and abrasions.
- Wear protective equipment.

CAUTION

Overpack not fitted to the crane correctly, leading to possible falling of the overpack.
This could result in personal injury in the form of contusions and crushed body parts.
- Wear protective equipment.
- Observe the installation instructions.

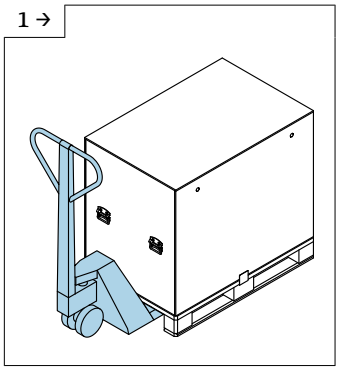
⚠ CAUTION

Risk of injury from the heavy weight of the overpack.

This could result in back injuries during heavy lifting.

- ▶ At least two persons are required when using the handles on the overpack.
- ▶ Use of the lifting points in the overpack with suitable lifting accessories. A crane or rope winch, for example.

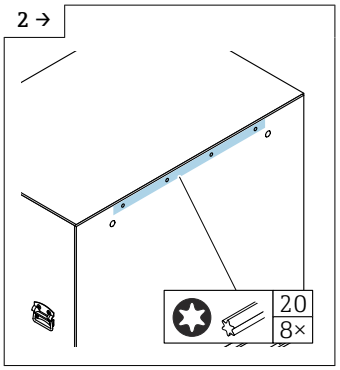
1 →



A0055002

- ▶ Use a pallet truck for transport.
- ▶ ℹ Observe the load capacity

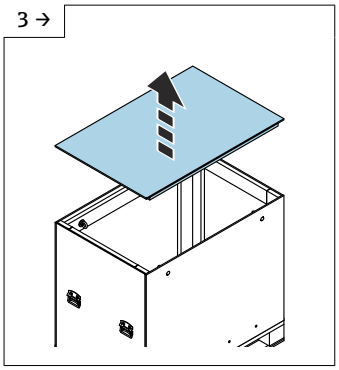
2 →



A0055897

- ▶ ⚠ CAUTION: SHARP EDGES! Observe the safety instructions at the beginning of this section.
- ▶ Unscrew the upper wood screws on the long sides from the wooden crate

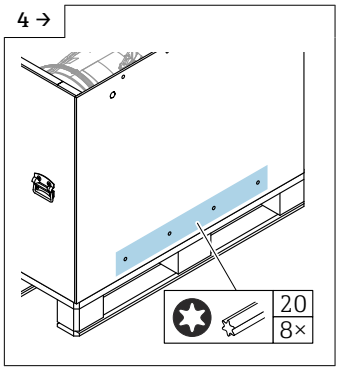
3 →



A0057413

- ▶ Remove the crate lid

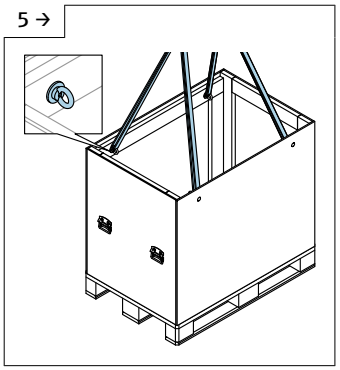
4 →



A0055898

- ▶ Unscrew the lower wood screws on the long sides from the wooden crate

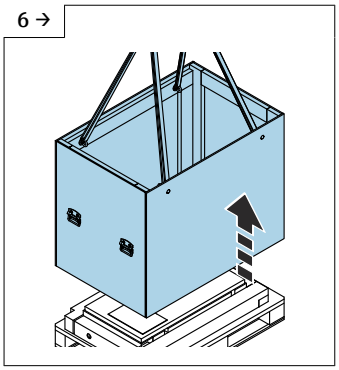
5 →



A0057414

- ▶ ⚠ CAUTION: RISK OF INJURY FROM HEAVY WEIGHT! Observe the safety instructions at the beginning of this section.
- ▶ ⚠ CAUTION: FALL HAZARD! Observe the safety instructions at the beginning of this section.
- ▶ Attach the transport slings to the lifting points on the wooden crate.

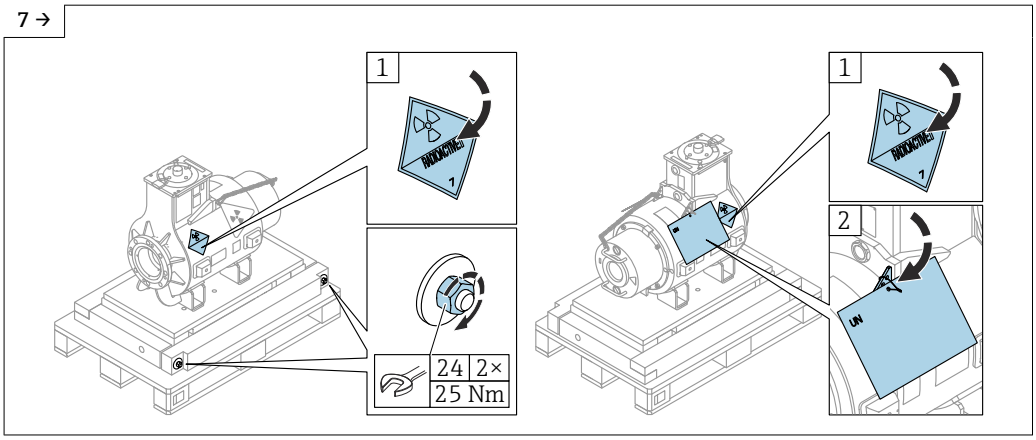
6 →



A0057415

- ▶ ⚠ CAUTION: RISK OF INJURY FROM HEAVY WEIGHT! Observe the safety instructions at the beginning of this section.
- ▶ ⚠ CAUTION: FALL HAZARD! Observe the safety instructions at the beginning of this section.
- ▶ Lift and remove the wooden crate with a crane.
- ▶ ℹ Crate weight: Approx. 50 kg (110 lb)

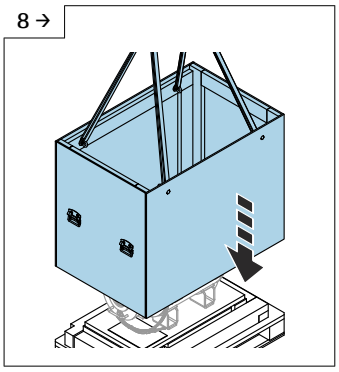
7 →



A0056794

- ⚠ WARNING: IONIZING RADIATION! Observe the safety instructions at the beginning of this section.
- ⚠ CAUTION: RISK OF INJURY FROM HEAVY WEIGHT! Observe the safety instructions at the beginning of this section.
- ⚠ CAUTION: FALL HAZARD! Observe the safety instructions at the beginning of this section.
- Set the source container on a transport pallet and tighten it
- Affix the labeling, which is required for shipping as "Type A hazardous goods", to the source container

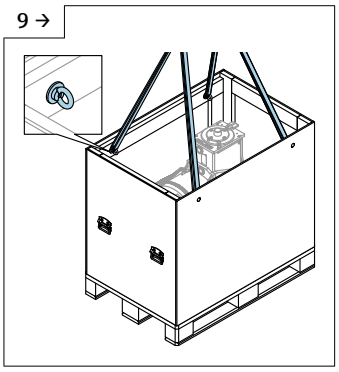
8 →



A0057416

- ⚠ CAUTION: RISK OF INJURY FROM HEAVY WEIGHT! Observe the safety instructions at the beginning of this section.
- ⚠ CAUTION: FALL HAZARD! Observe the safety instructions at the beginning of this section.
- Set the wooden crate on a transport pallet using a crane
- ℹ Crate weight: Approx. 50 kg (110 lb)

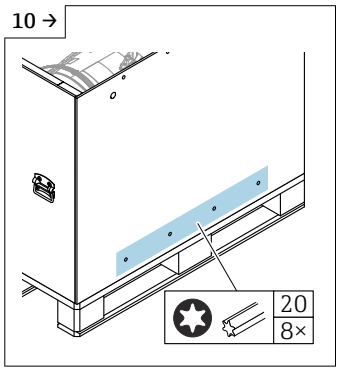
9 →



A0056178

- Remove the transport slings from the lifting points

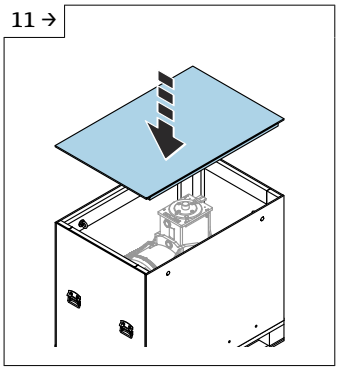
10 →



A0055898

- Screw the lower wood screws into the long sides in the wooden crate

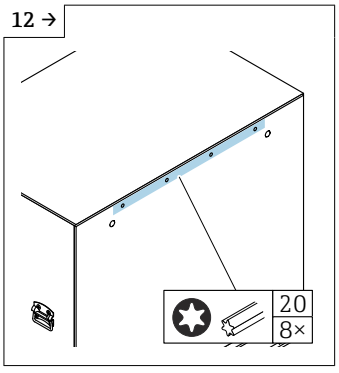
11 →



A0057417

- Fit the crate lid

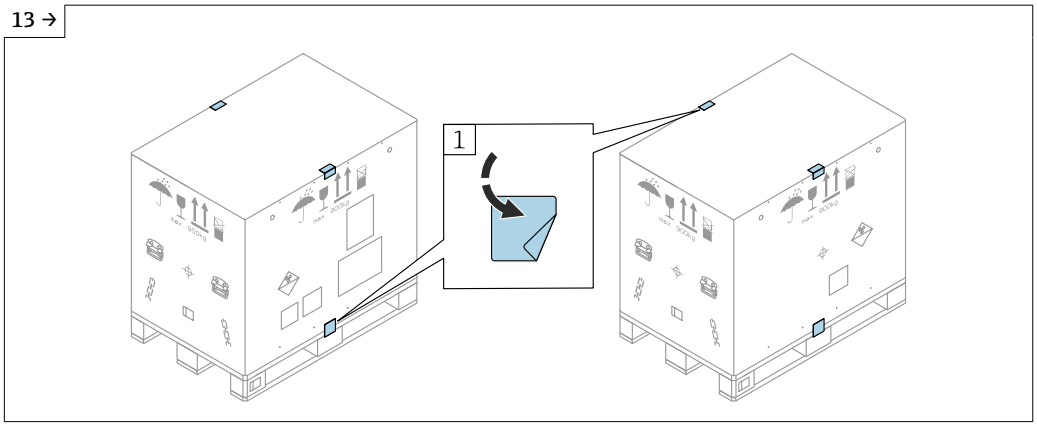
12 →



A0055897

- Screw the upper wood screws into the long sides in the wooden crate

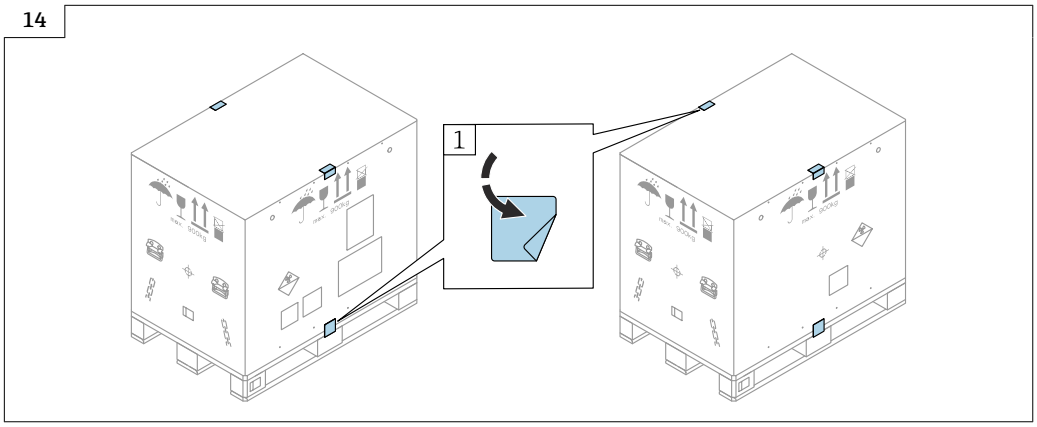
13 →



A0056796

- Attach the security seal to the wooden crate

14



A0056796

- DANGER: HAZARD DUE TO INCORRECT DECLARATION! Observe the safety instructions at the beginning of this section.
- Label the package.
- Apply the labeling kit provided to the package in accordance with the applicable IATA requirements and national regulations.
- Mark the seaworthy overpack as a Type A package.

4.4.6 Return procedure for FQGx source container loaded with radiation sources

Return packaging kit for source containers including labeling kit

- FQG60
  Order number: 71341814
- FQG61/62/63
  Order number: 71341832
- FQG66
  Order number: 71341833
- FQG74
  Order number: 71697741

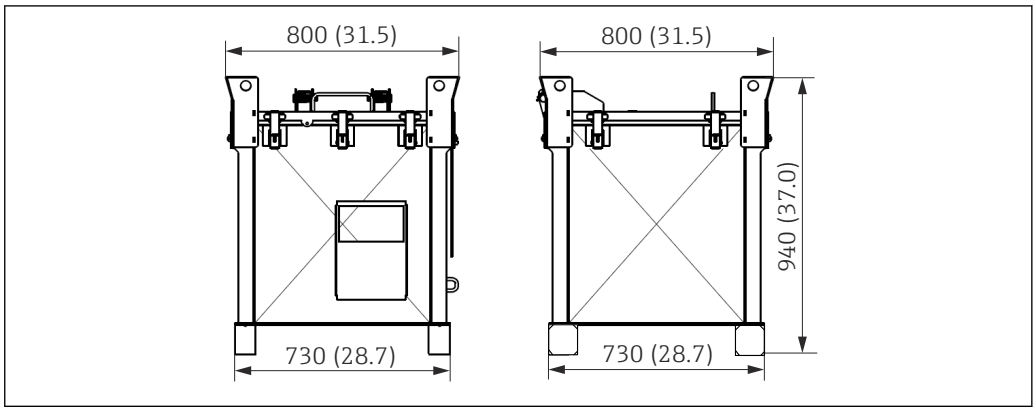
1. Using the appropriate packaging kit, package and label the source container.
2. Send to Endress+Hauser Maulburg.

4.5 Returning source containers in HQG61-S and HQG61-L transport containers

4.5.1 HQG61-S (Type A packaging) for QG020, QG100

SD01901F/00

The QG020, QG100 source containers are not Type A approved; HQG61 transport containers should therefore be used for transportation.



3 Type A packaging: HQG61-S (EB16-Q70)

Tare weight of transport container:

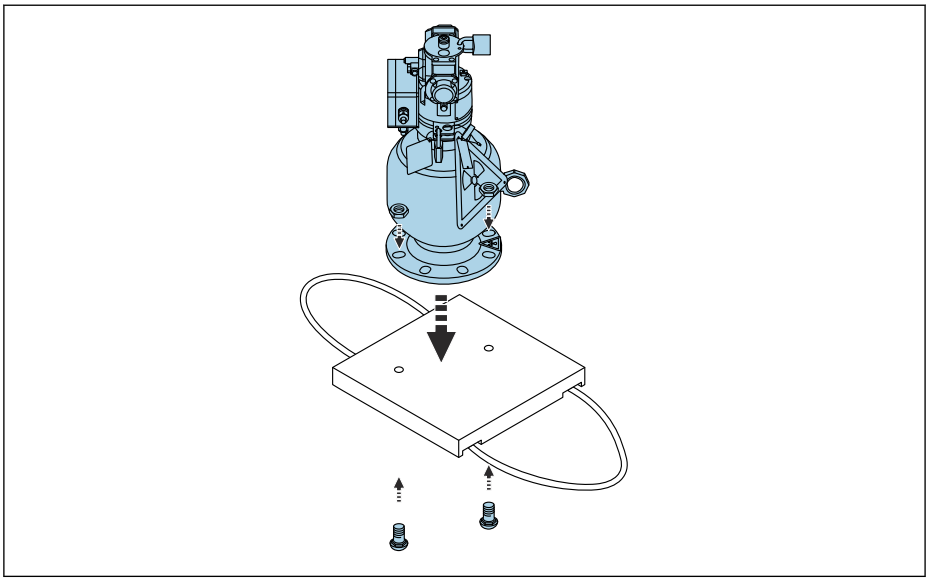
113.2 kg (249.3 lb)

Permitted total weight:

300 kg (660 lb)

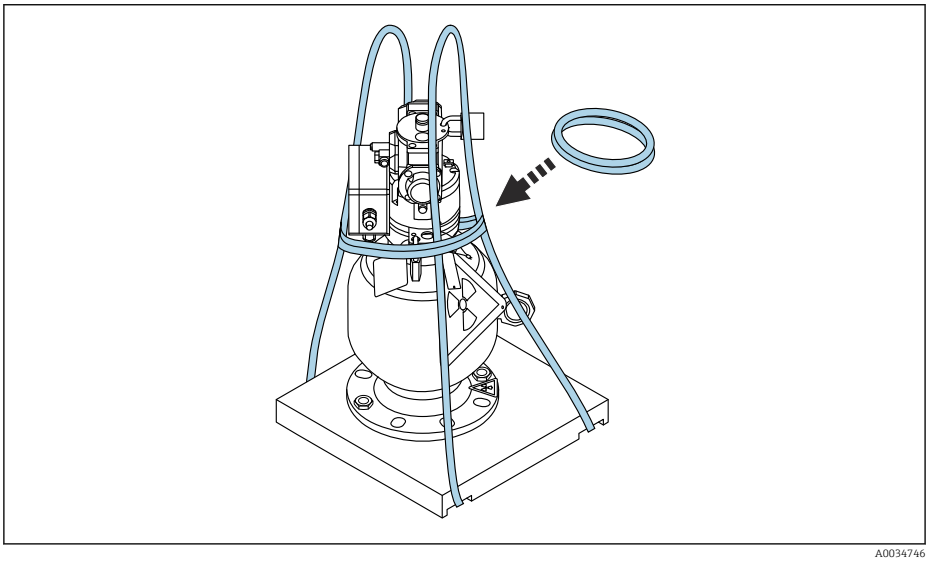
4.5.2 Loading the HQG61-S transport container

1. Mount the source container on the base plate using the screws and nuts provided.



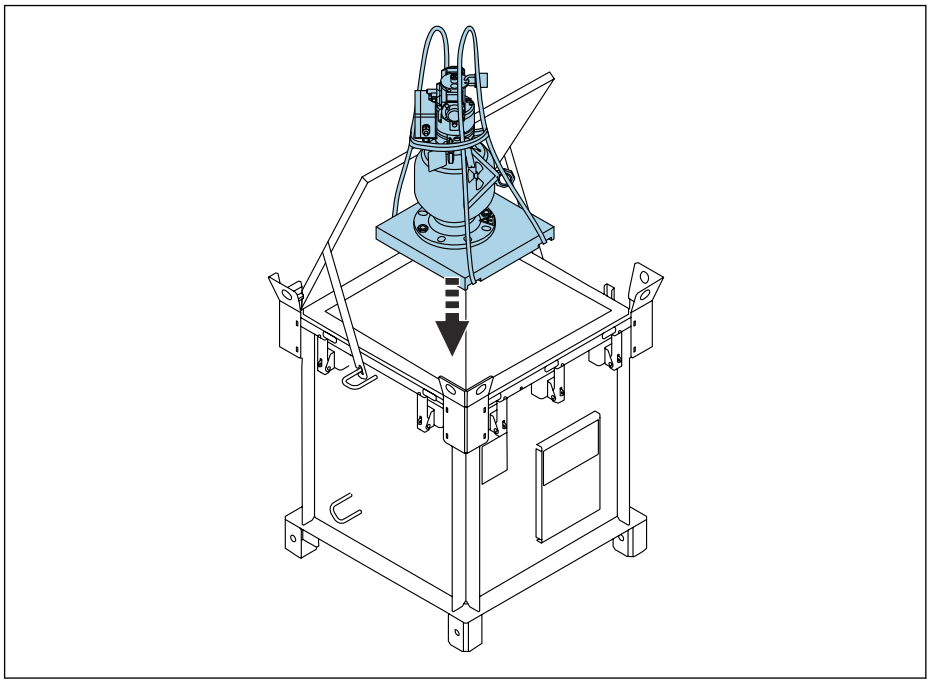
A0034745

2. Use the short harness to secure the top of the source container that is attached to the base plate in order to guard against tipping when lifted.



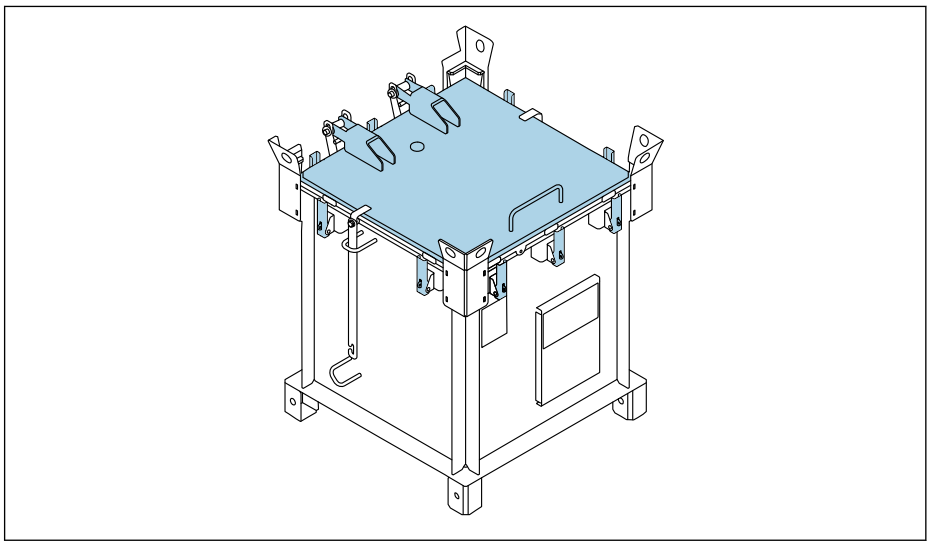
A0034746

3. Place the source container into the transport container and secure it using the securing elements located inside the transport container.



A0034870

4. Closing the transport container

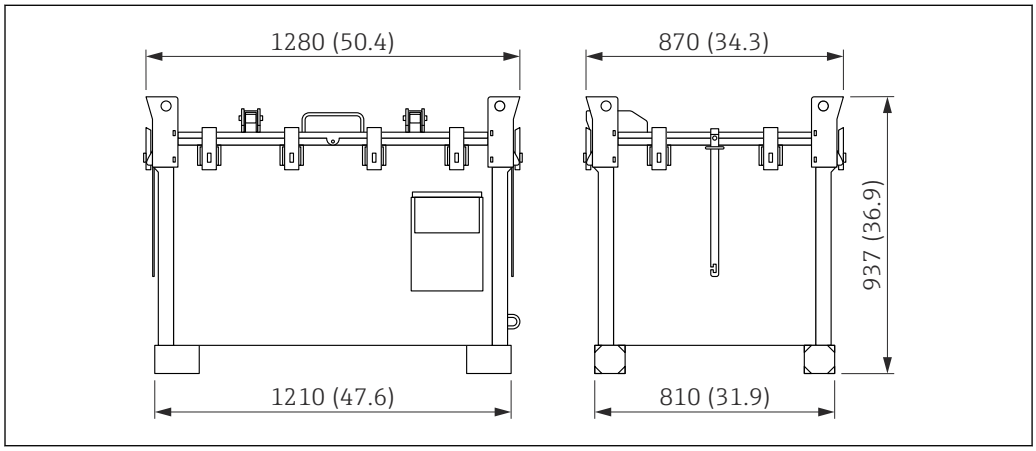


A0034871

4.5.3 HQG61-L (Type A packaging) for QG2000, Multiplex 9S, FQG64, other source containers

SD01901F/00

The QG2000, Multiplex 9S source containers are not Type A approved; HQG61 transport containers should therefore be used for transportation.



4 Type A packaging: HQG61-L (EB16-Q225)

Tare weight of transport container:

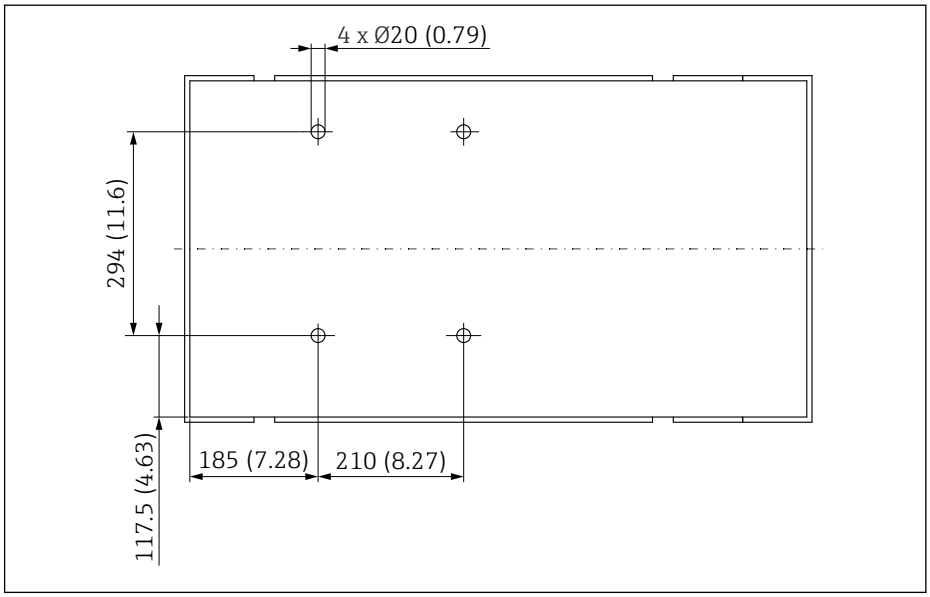
171.3 kg (377.3 lb)

Permitted total weight:

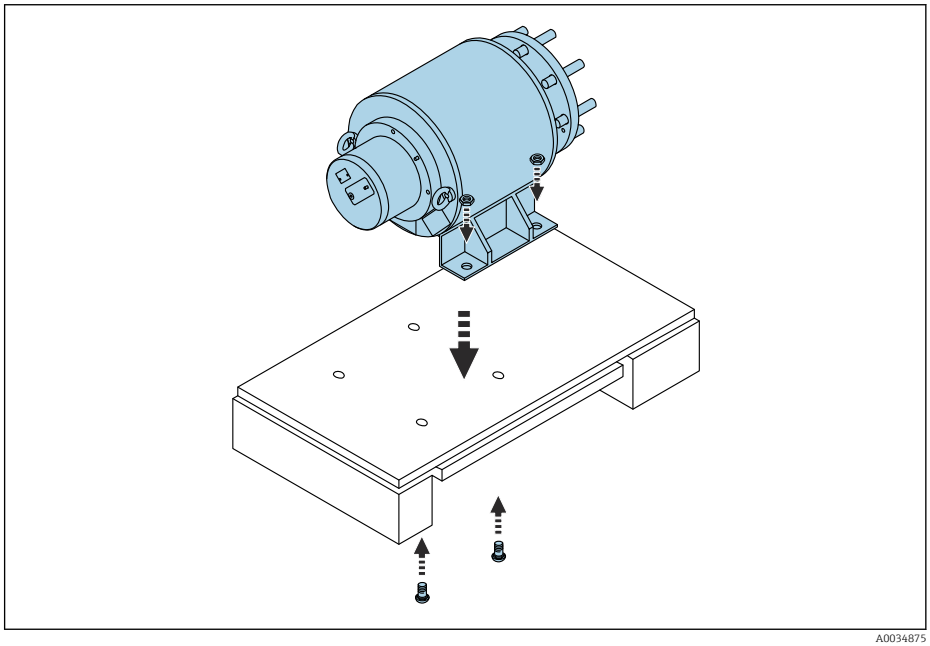
700 kg (1 541 lb)

4.5.4 Loading the HQG61-L transport container

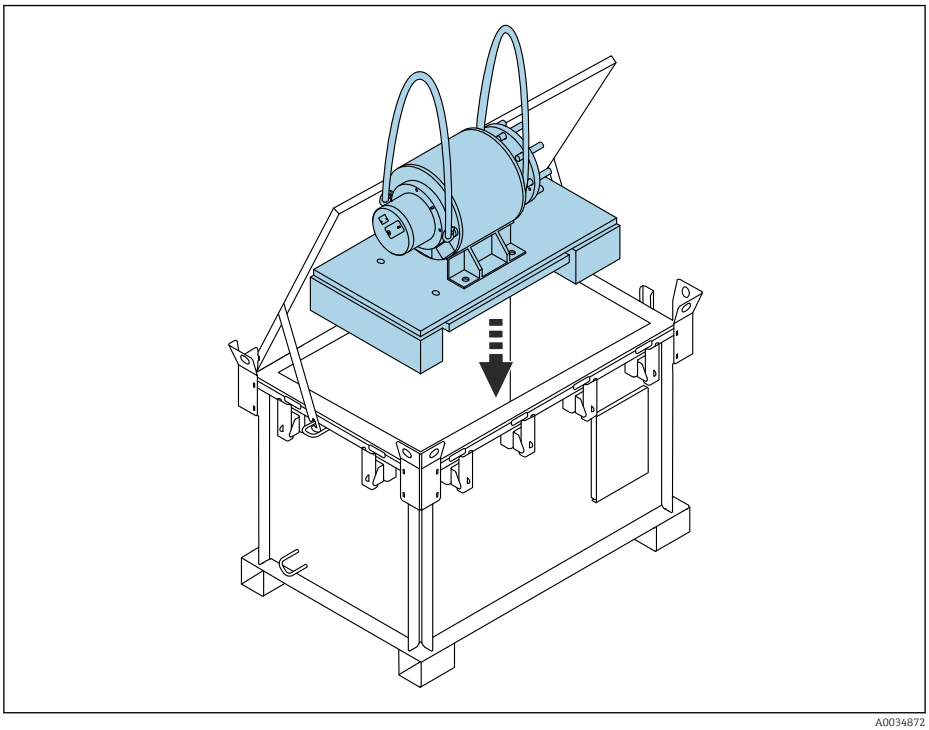
1. Drill securing holes in pallet for Multiplex 9S source container.



2. Mount the source container on the pallet using the screws and nuts provided.

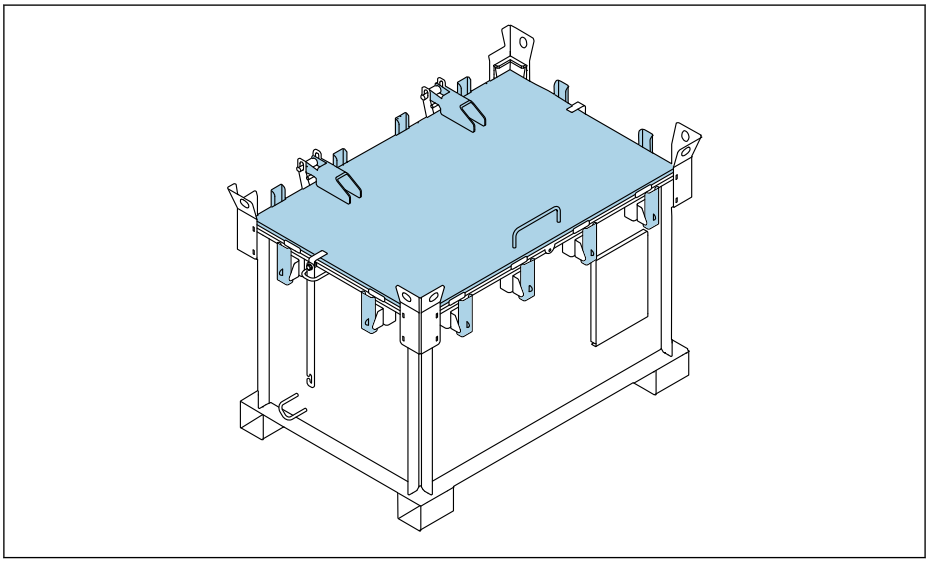


3. Place the source container into the transport container and secure it using the securing elements located inside the transport container.



A0034872

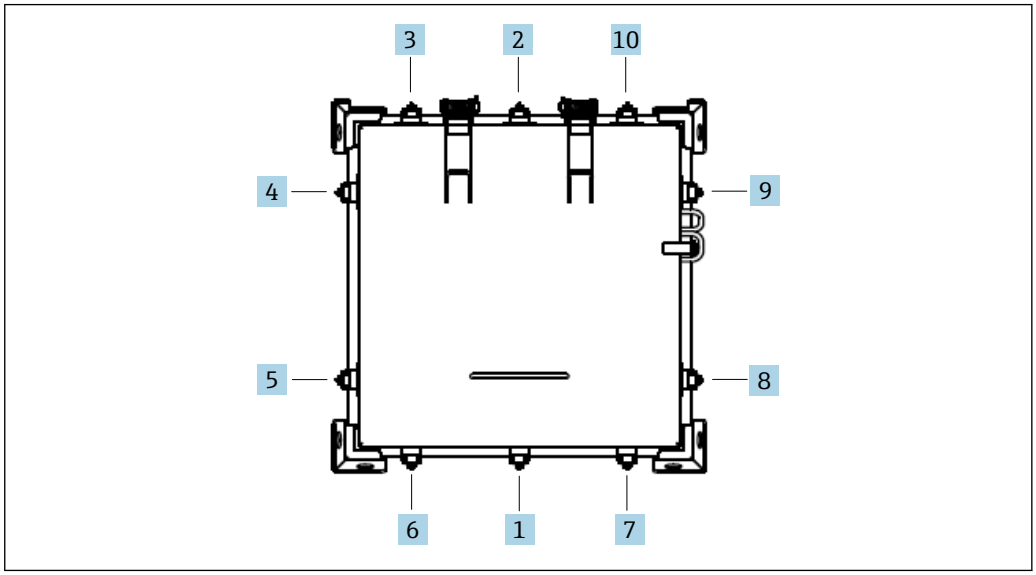
4. Closing the transport container



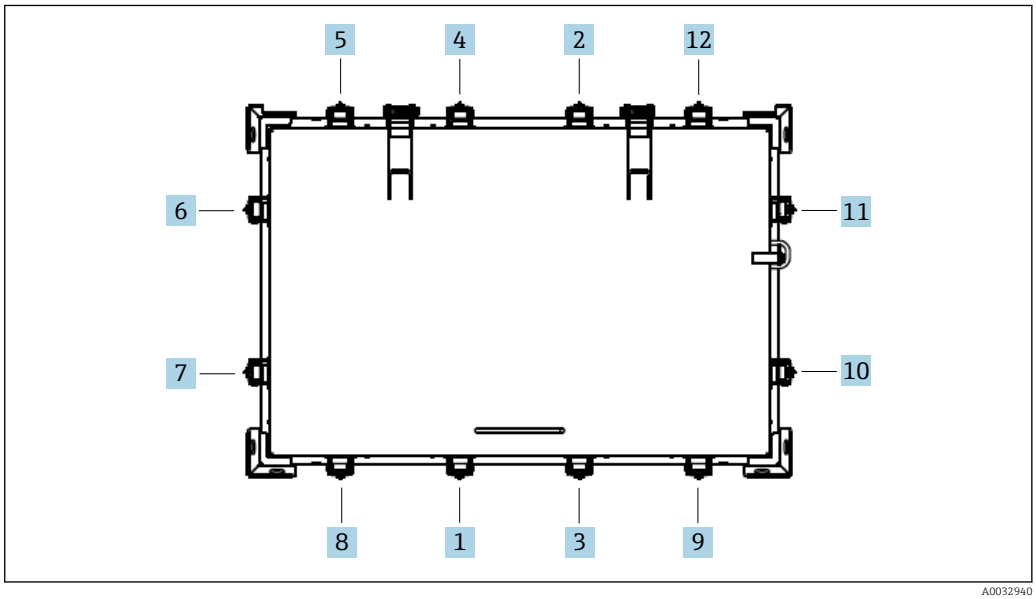
A0034873

4.5.5 Closing the transport container

- The lid is closed by means of the toggle fasteners which must be fastened in the order shown below.
- As per ADR 6.4.7.3, it is mandatory for transport containers to be sealed when properly closed. It is also possible to use containers without padlocks installed.



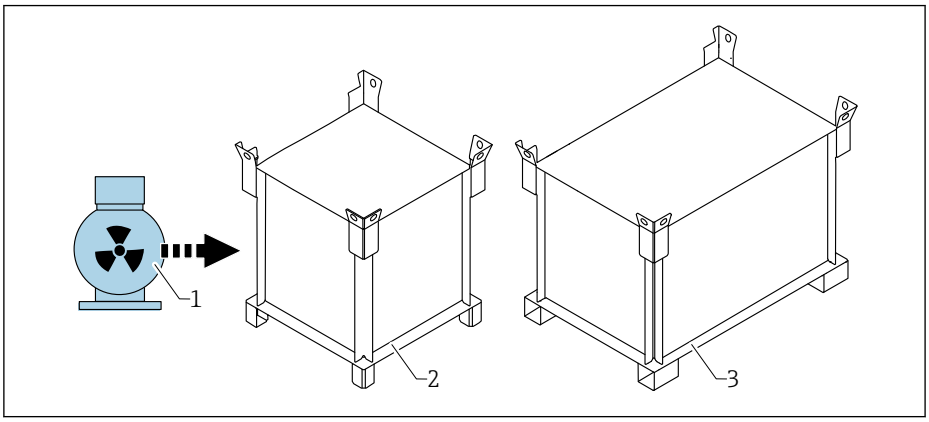
5 HQG61 S: Order of fastening



6 HQG61 L: Order of fastening

4.5.6 Return procedure for loaded source containers in HQG61 transport container

1. Load the source container into the HQG61-S or HQG61-L transport container.



1 Source container incl. radiation source: QG20/100/2000/Multiplex 9S/other earlier source containers
2 HQG61-S for QG20/QG100 source container
3 HQG61-L for QG2000/Multiplex 9S source containers/other earlier source containers/several QG20 or QG100 source containers

2. Label in accordance with applicable IATA requirements and national regulations.
3. Send to Endress+Hauser Maulburg.

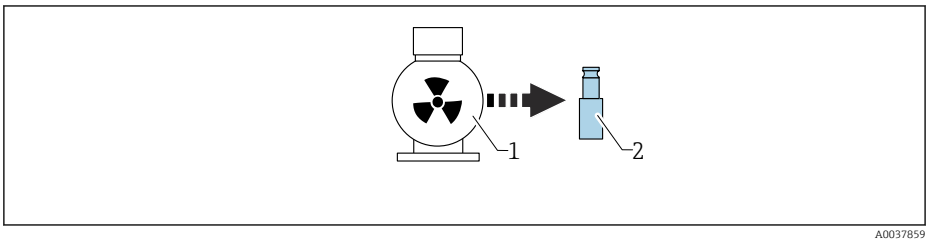
Rental fee of HQG61 transport container, order no.: 71348709. Must always be ordered separately. Once the transport container has been returned, a credit note is issued.

Additional information

SD01901F

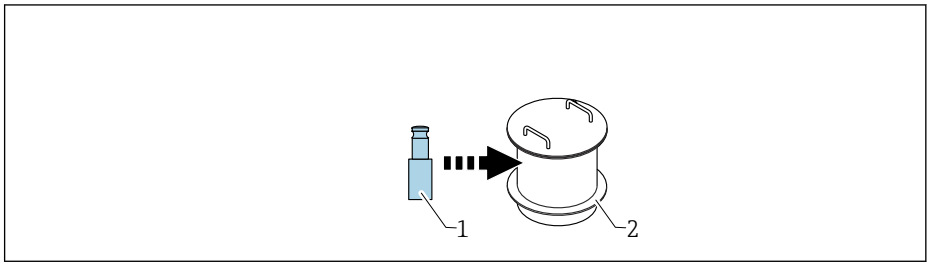
4.6 Return procedure for FSG60 and FSG61 radiation sources

1. Remove the FSG60/FSG61 radiation source from source container



1 Source container: QG20/100/2000/Multiplex 9S, FQG60/61/62/63/66
2 Radiation source: FSG60/FSG61

2. Depending on the activity, place the FSG60/FSG61 radiation source in the relevant transportation cask
   ↳ HQG60-S: max. 0.37 GBq (^{60}Co), max. 18.5 GBq (^{137}Cs)
   HQG60-L: max. 4.81 GBq (^{60}Co), max. 888 GBq (^{137}Cs)
   HQG60-X: max. 37 GBq (^{60}Co), max. 888 GBq (^{137}Cs)



A0037860

1 Radiation source: FSG60/FSG61
2 Transportation cask: HQG60-S/HQG60-L/HQG60-X

3. Rental fee of transportation cask HQG60, order no.: 71348708. Must always be included in the order. Once the transportation cask has been returned, a credit note is issued.
4. Send to Endress+Hauser Maulburg.

Label in accordance with applicable IATA requirements and national regulations.

Additional information

TI00439F

SD01316F/00

5 Tests before dispatch

Prior to return shipment, complete the checklist correctly and send it to Endress+Hauser.

5.1 Test before dispatch for FQG60, FQG61, FQG62, FQG63, FQG66, FQG74

See Operating Instructions for source containers.

Section "Maintenance" -> "Recurrent checks"

5.2 Tests before dispatch for HQG60, HQG61

CAUTION:

The goods must only be sent for return shipment after receiving written authorization from Endress+Hauser. An unauthorized delivery will be sent back.

Company
- Name: _____
- Address: _____
- Name of inspector and role: _____

Source container
- Order code: _____
- Model (if no order code is available): _____
- Serial number of source container: _____

Radiation source
- Isotope: ❑ ^{137}Cs ❑ ^{60}Co
- Serial number of the radiation source: _____
- Nominal activity: _____ ❑ MBq ❑ GBq
- Date of manufacture: _____

5.3 Acceptance criteria

5.3.1 Condition and absence of contamination

The criteria listed below must all be fulfilled.

The safety instructions in the Operating Instructions for the source container have been observed.
❑ **fulfilled**

An inspection certificate ("wipe test certificate") that confirms that the radiation source is leak-tight is submitted to Endress+Hauser and meets the following conditions:
- No more than three months old.
- Contains the result of the wipe test in the form of measured values.
- During the wipe test, the limit value 20 Bq was not exceeded on the replacement test surfaces (see Operating Instructions).
- During the wipe test, the limit value 200 Bq was not exceeded at the radiation source.
- Issued by an officially approved body.
- Contains the certificate for the performance of the wipe test as described in ISO 9978 or an equivalent standard.
  Applied standard: _____

❑ **fulfilled**

In the event of doubt, Endress+Hauser shall have the right to request a proof of competence from the examining body.

Photos documenting the status of the source container are submitted.
❑ **fulfilled**

EIN/AUS (ON/OFF) mechanism works correctly according to the Operating Instructions. All safeguards (e.g. lock, locking bolts, etc.) are present and intact.
❑ **fulfilled**

The source container has no signs of damage caused by falls, fire or collision.
❑ **fulfilled**

The source container has no signs of rust-through corrosion on the housing or on the EIN/AUS (ON/OFF) mechanism.
❑ **fulfilled**

5.3.2 Shipment

The source container comes from the FQG series ...
❑ **fulfilled** ❑ **not fulfilled**

If this is not fulfilled, it must be returned in type-tested Type A packaging.

The source container has no signs of corrosion or only negligible signs of corrosion, particularly on the weld seams and the ON/OFF mechanism.
❑ **fulfilled** ❑ **not fulfilled**

If this is not fulfilled, it must be returned in type-tested Type A packaging.

The criteria listed below must all be fulfilled.

The source container is in the OFF position. ON/OFF mechanism secured with a lock.
❑ **fulfilled**

The transport index has been determined.
The package has been labeled in accordance with the applicable IATA requirements and national regulations.
❑ **fulfilled**

Date: _____

Signature: _____

6 Certificate of suitability for Type A packaging

The source containers fulfill the requirements for a Type A package for the transport of radioactive materials of special form according to IAEA guidelines.

The documentation is available in the Download Area of the Endress+Hauser website (www.endress.com/downloads)

See the "Supplementary documentation" section

7 Certificate of suitability for HQG60

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Certificate of Conformity

No.: EWB-EB-TV-T40-T75-T110-Rev.13-E

For packages not requiring competent authority approval for the transport of radioactive material.

This is to confirm that the type of package as given below complies with the applicable requirements, see part 1 of this Certificate of Conformity.

Testing specification:	The transport regulations mentioned in Part 1 for the transport methods approved by us
Package:	**Transport Container T40, T75, T110, T130-W,** see Part 2 of this Certifcate of Conformity
Package type:	Type-A, Industrial package IP-2 and IP-3
Conveyances:	Road, railway, air, sea
Contents:	Radioactive material as defined in Part 3
Validity:	Until the testing specifications are amended.

Emergency measures: See written instructions of the sender.

Responsibility of the sender:

It is the responsibility of the sender to ensure that all requirements regarding Parts 3 to 9 of this Certificate of Conformity are met before the transport commences.

Amendments:

Without an EWB approval based on this Certificate of Conformity, no changes to the package, the specifications of the contents or instructions as mentioned are admissible.

The safety proof regarding the compliance of the type of package design with the regulations mentioned has been tested by the manufacturer.

The maximum admissible total weight of the package, including the contents is **450kg.**

This certificate does not release the sender from the necessity to observe possible additional instructions of the respective country affected by this transport.

Bassum, 12. December 2014

H. Grunau
Managing Director, EWB

EWB OMB

H. Rüchel
Works Inspector, EWB

E:\QSP\4_EWB-QSP-EB1-EB4\40_ TL-T40-T110\40.6 Eignungsbescheinigung\EWB-EB-TV-T40-T75-T110-Rev-13-E.doc

A0038351

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Part 1: Listing of the transport regulations the type approval is based on

[1] Gefahrgutverordnung Straße, Eisenbahn und Binnenschifffahrt (GGVSEB)

Verordnung über die innerstaatliche und grenzüberschreitende Beförderung gefährlicher Güter auf der Straße, mit Eisenbahnen und auf Binnengewässern (Gefahrgutverordnung Straße, Eisenbahn und Binnenschifffahrt – GGSEB) i.d.F. der Bek. vom 22.1.2013 (BGBl. I S. 110)

[2] ADR 2013 - Agreement for the Transport of the Dangerous Goods by Road (ADR)

Europäisches Übereinkommen vom 30. September 1957 über die internationale Beförderung gefährlicher Güter auf der Straße (BGBl. 1969 II S. 1489), in der Fassung der Bekanntmachung vom 03.06.2013 (BGBl.II 2013 S.648 und Anlagenband, ber.2014 S.237).

[3] RID 2013 - Regulations concerning the international carriage of dangerous goods by rail (RID)

vom 16.November 1993 (BGBl. II, 1993 S. 2044 und Anlagenband) in der Fassung der Bekanntmachung vom 16.5.2008 (BGBl. II S.475), zuletzt geändert durch V v. 25.05.2013 (BGBl. Teil II 2013 S. 562)

[4] Specific Safety Requirements No. SSR-6

International Atomic Energy Agency (IAEA) Regulations for the safe transport of radioactive material, 2012 edition, Specific Safety Requirements No. SSR-6, Vienna 2012

[5] IATA dangerous goods regulations 2014

International Air Transport Association, Gefahrgutvorschriften (IATA-Beschluss 618 Anlage "A"), erstellt im Einvernehmen mit der ICAO, 55. Ausgabe

[6] IMDG-Code 2012

IMDG-Code 2012 inkl. Amdt. 36-12 - International Maritime Dangerous Goods Code

Part 2: Description of the package

The package consists of steel / steel plate, shown on the drawing:

Type	Drawing no.	Parts list no.
Transport container T40	13-0985-000-01	ST13-0985-000-01
Transport container T75	13-0984-000-01	ST13-0984-000-01
Transport container T110	13-0988-000-01	ST13-0988-000-01
Transport container T110-EZ with inliner and garage	EB1-T110-500-00	EB1-T110-500-00
Transport container T130-W	11-0845-000-0	St11-0845-000-0.

A0038353

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Part 3: Admissible contents:

- Solid, low level radioactive material of class 7 admissible according to ADR 2.2.7 for Type IP-2, IP-3 and Type-A packages. The user of the package must classify the intended contents according to the applicable regulations.
- Type A packages shall not contain activities greater than either of the following: For special form radioactive material — A1; For all other radioactive material — A2.
- Except for gases.
- Except for liquids.
- Except for materials that require a package with an approval by a competent authority.
- Materials with low specific activity (LSA ...) provided these correspond to the restrictions according to ADR 2.2.7 for IP-2, IP-3 and Type A packages.
- Surface contaminated objects (SCO ...) provided these correspond to the restrictions according to ADR 2.2.7 for for IP-2, IP-3 and Type A packages.
- Contents to be allocated to an industrial package type IP-2, IP-3 and Type A according to ADR 4.1.9.
- The limits of the applicable regulations (see part 1) must be observed.
- Contents containing fissile material up to a quantity permitted according to ADR 6.4.11.
- Solid and mobile materials must be packed in the leak-tight containment according to the User Manual /1/.
- The contents must be compatible with the leak-tight containment.
- The contens must not contain additional dangerous properties within the meaning of the dangerous goods regulations.
- Further the requirements of the applicable regulations for Type A and IP-packages (se part 1) are to be adhered to.

Part 4: Quality assurance

Planning, type approval, manufacturing and certification of the package are subject to the constant inspection by our quality assurance system consisting of the quality manual no.: EWB-QMH and the associated quality assurance program no.: EWB-QSP-EB1-EB4 including the type list. It is the users responsibility to perform the operation of the package according to the instructions of the User Manual /1/.

Operation, transport and transport-related stay must be performed by the user according to an appropriate quality assurance system to ensure that the conditions of this certificate as well as the national and international Dangerous Goods Regulations to be applied are met. For this QA system exclusively the user of the package is responsible.

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Part 5: Loading

The loading must be performed according to the instructions of the User Manual /1/.

If necessary any additional shielding of the package must be released by EWB.

Part 6: Measures prior to the transport

Prior to the transport, the measures as specified in the User Manual /1/ must be carried out. Further instructions of the applicable regulations (see part 1) are to be observed.

The user must ensure that the package is marked according to the User Manual /1/ and the regulations (see part 1) applicable at the time of the transport and that the package is identified and labelled according to its contents.

Part 7: Periodic inspections

During every loading process, the inspections must be performed as specified in the User Manual /1/.

The periodic inspections specified in the User Manual /1/ must be performed by the user within the specified intervals.

Part 8: Emergency measures

Exceeding the known regulations and emergency measures, no special measures are required. This does not release the sender from his obligation to take precautions regarding emergency events. During the transport, make sure to carry the written instructions according to ADR / RID and further applicable regulations.

Part 9: Others

Requirements resulting from other legal standards, directives and other definitions (e.g. approval-related specifications, interim storage or final storage condition) are not affected by this certificate.

This certificate does not release the user of this package from the obligation to meet own stipulations regarding the quality assurance and monitoring concerning the operation of the package.

Part 10: Applicable documents

/1/ User Manual no. EWB-HA-TV-T40-75-110 Rev.5

For the Transport Container T110-EZ including inner container and garage, drawing no. EB-T110-500-00, consider Gebrauchsanweisung MultiSource HDR Afterloader, Nr. TD09_099, current revision (available from E&Z Bebig GmbH, Berlin).

A0038355

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Addendum:

Updating also of the documents contained in the documentation must be taken into account by the sender of the package prior to every transport or during periodic inspections. The procurement of this information must be provided by the sender.

Remarks:

The sender represents the user or other users.

Release note

13	12.December 2014	H. Rüchel EWB QMB	H. Grunau
Revision	**Date**	**Issued by Name, Signature**	**Checked and approved by Name, Signature**

8 Certificate of suitability for HQG61

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Certificate of Conformity

No.: EWB-EB-EB16-Q70-Q225-Rev.00-E

For packages not requiring competent authority approval for the transport of radioactive material.

This is to confirm that the type of package as given below complies with the applicable requirements, see part 1 of this Certificate of Conformity.

Testing specification:	The transport regulations mentioned in Part 1 for the transport methods approved by us.
Package:	**Transportcontainer EB16-Q70, EB16-Q225** See part 2 of this Certificate of Conformity.
Package type:	Type-A, IP-2 package, IP-3 package
Contents:	Low level radioactive material of class 7 as defined in Part 3.
Conveyances:	Road, rail, sea, air
Validity:	Until the testing specifications are amended.
Emergency measures:	See written instructions of the sender.

Responsibility of the sender:

It is the responsibility of the sender to ensure that all requirements regarding Parts 3 to 9 of this qualification certificate are met before the transport commences.

Changes:

Without an EWB approval based on this certificate, no changes to the package, the specifications of the contents or instructions mentioned are admissible.

The safety proof regarding the compliance of the type of package design with the regulations mentioned has been tested by the manufacturer.

The maximum admissible total weight of the package, including the contents is

- EB16Q-70 :300 kg
- EB16-Q225 :700 kg

This certificate does not release the sender from the necessity to observe possible additional instructions of the respective country affected by this transport.

Bassum, 21th October 2016

H. Grunau
Managing Director, EWB

M. Witt
Works Inspector, EWB

E:\QSP\5_EWB-QSP-EBQ\07-EB16-Q70-Q225\06-Eignungsbescheinigung\EWB-EB-EB16-Q70-Q225-Rev.00-E.doc

A0038357

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Part 1: Listing of the transport regulations the type approval is based on

/1/ Gefahrgutverordnung Straße, Eisenbahn und Binnenschifffahrt (GGVSEB)

Verordnung über die innerstaatliche und grenzüberschreitende Beförderung gefährlicher Güter auf der Straße, mit Eisenbahnen und auf Binnengewässern (Gefahrgutverordnung Straße, Eisenbahn und Binnenschifffahrt – GGSEB) i.d.F. der Bek. vom 30.05.2015.

/2/ ADR 2015 - Agreement for the Transport of the Dangerous Goods by Road (ADR)

Europäisches Übereinkommen vom 30. September 1957 über die internationale Beförderung gefährlicher Güter auf der Straße (BGBl. 1969 II S. 1489), in der Fassung der Bekanntmachung vom 17.04.2015.

/3/ Specific Safety Requirements No. SSR-6

International Atomic Energy Agency (IAEA) Regulations for the safe transport of radioactive material, 2012 edition, Specific Safety Requirements No. SSR-6, Vienna 2012

/4/ BAM-GGR 016

Maßnahmen zur Qualitätssicherung von Verpackungen nicht zulassungspflichtiger Bauarten für Versandstücke zur Beförderung radioaktiver Stoffe, Revision 0 vom 10.11.2014

Part 2: Description of the package

The package consists of steel as shown on drawing no.:

- 16-1290-100-00 Transportcontainer EB16-Q70
- 16-1290-300-00 Transportcontainer EB16-Q225

and the associated parts lists.

Part 3: Admissible contents:

- The packagings are only suitable for the transport of lead-coated containers in which there are contaminated, radioactive sources of radiation.
- The packaging is equipped with the filter: TRUVENT filter type MN0901765-NPX-S, power> 99.97% of the particles between 0.2 and 0.5µm are retained. Contents with a particle size <500µm must not be transported.

Above-mentioned content must also adhere to the following, where applicable:

- Solid radioactive material of class 7 admissible according to ADR 2.2.7 for Type A and IP-2, IP-3 packages. The classification shall be chosen by the user of the package according to the intended use or contents conform to the transport regulations.
- Except for gases. Except for liquids.
- Except for contents that are requiring packages with an approval by a competent authority.
- Surface contaminated objects (SCO ...) provided these correspond to the restrictions according to ADR 2.2.7 for Type-A and for IP-2, IP-3 packages.

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

- Contents to be allocated to a Type-A package and an industrial package type IP-2, IP-3 according to ADR 4.1.9.
- The allowable limits of the applicable regulations (see part 1) must be met.
- Contents containing fissile material up to a quantity permitted according to ADR 6.4.11.
- Solid and free-flowing materials must be packed in the tight containment according to the user manual /1/.
- The contents must be compatible with the leak-tight containment.
- The ingredients must not contain additional dangerous properties within the meaning of the dangerous goods regulations.
- Mechanical or chemical interactions of the contents with the transport container shall be checked by the user and shall be agreed with EWB where appropriate.

Part 4: Quality assurance

Planning, type approval, manufacturing and certification of the package are subject to the constant inspection by our quality system consisting of the quality management manual no.: EWB-QMH and the associated quality management plan no.: EWB-QSP-EBQ.

For the use of the transport container the instructions of the user manual /1/ must be observed. Application, transport and transport-related stay must be performed by the user within an appropriate quality system to ensure that the conditions of this certificate as well as the national and International Dangerous Goods Regulations to be applied are met. For this QA system exclusively the user of the package is responsible.

Part 5: Loading

The loading must be carried out according to the definition of the user manual /1/. If additional shielding should be necessary this must be designed by EWB.

Part 6: Measures prior to the transport

Prior to the transport, the measures must be taken as specified in the user manual /1/.

The user must ensure that the package is marked according to the specifications of the regulations applicable at the time of the transport and identified and labelled according to its contents.

Part 7: Periodic inspections

Periodic inspections are not applicable due to the restricted lifetime of three years, starting from the day of acceptance by EWB. However, the inspections before loading and during storage according to User manual apply.

Part 8: Emergency measures

Exceeding the known regulations and emergency measures, no special measures are required. This does not release the sender from his obligation to take precautions regarding emergency events. During the transport, make sure to carry the written

A0038359

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

instructions according to ADR / RID.

Part 9: Others

Requirements resulting from other legal standards, directives and other definitions (e.g. approval-related specifications, interim storage or final storage condition) are not affected by this certificate.

This certificate does not release the user of this package from the obligation to meet own stipulations regarding the quality assurance and monitoring concerning the operation of the package.

Part 10: Applicable documents

/1/ User manual no. EWB-HA-EB16-Q70-Q225 Rev.00.

Addendum:

Updating also of the documents contained in the documentation must be taken into account by the sender of the package prior to every transport or during periodic inspections. The procurement of this information must be provided by the sender.

Remarks:

The sender represents the user or other users.

Release note

00	26.09.2016	M. Witt M. Witt EWB QS	H. Grunau
Revision	**Date**	**Issued by**	**Checked and released by**

	Certificate of amendment Of Transportcontainer	Date: 14.11.2016 Document indicator: EWB-AE-EBQ-2016-11-13-E
Title: Adjusting the container coating of the transportcontainer EB16-Q70. Max.300kg according to customer requirements		Page 1 of 1

Component:
Transportcontainer EB16-Q70

Traffic law, reference to admission / procedure	**Atomic law**, reference to test certificate / procedure
Certificate of Conformity.: EWB-EB-EB16-Q70-Q225-Rev.00-E	Not applicable

1. Amendment

- The coating of the transportcontainer type EB16-Q70 produced according to drawing no .: 16-1290-300-00 were not carried out with the described coating system contrary to the part list no .: ST-16-1290-300-00. The transportcontainer were hot dip galvanized according to DIN EN ISO 1461.

2. Records

- None

3. Justification of the amendment

- Customer request

4. Assessment of the change and impact on precursor revisions

- The mechanical integrity of the transportcontainer type EB16-Q70 remains unaffected by the change
- EWB points out that, according to ADR, all packages must be easily decontaminated. The applied hot galvanizing is not.
- The user is obligated to ensure decontamination in an appropriate manner.
- The coating variant is made of the explicit request of the customer.

EWB Quality management
Date / Signature

23 NOV. 2016 M. Witt EWB QS

General: Invalid fields have to get depreciated when creating the dossier.

Revision directory

00	13.11.2016	Initial version	M. Bernhard EWB 279	M. Witt EWB QS
Revision	Date	Comment	**Issued by**	**Checked and released by**

E:\QSP\5_EWB-QSP-EBQ\07-EB16-Q70-Q225\06-Eignungsbescheinigung\EWB-AE-EBQ-2016-11-13-E.doc

A0038361

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Inspection Certificate

"type 3.1" according to DIN EN 10204

/

Acceptance Test Certificate

Type-A package
Industrial package IP-2

for the transport of radioactive material.

on the acceptance before initial operation of a package for the transport of radioactive material.

Test object:	Transportcontainer EB16-Q70
Test specification:	- Certificate of Conformity, No.: EWB-EB-16-Q70-Q225-Rev.00-E
	- Drawing No.: 16-1290-300-00
	- Parts list No.: ST-16-1290-300-00
	- Inspection sequence plan No. (FPP): EWB-FPP-16-Q70-Q225-Rev.00
Requirements:	Quality assurance program No. EWB-QSP-EBQ-Rev.00
Customer:	**Endress + Hauser GmbH + Co. KG, Maulburg**
Order No. of customer:	**196/1017015246**
Ordner No. of Manufacturer:	**16-10287**
Certificate No.:	**10287-2-E**
Delivery note No.:	**16-20717**
Ident. no.:	**10287-01, 10287-02, 10287-03, 10287-04, 10287-05**
Coating:	Galvanized according to DIN EN ISO 1461.
Leakage rate:	Not specified. 100 % of the container has been leak-tested by bubble test.
Inspection:	The correctness and the compliance with the testing specifications and the completeness have been checked.
Statement:	This is to confirm that the packages as mentioned at "Ident. no." are compliant with the type tested design according to the Certificate of Conformity, see above.
	The user shall apply labels for the identification of the package type if necessary.
	The Transportcontainer have been galvanized following customer requests. See Certificate of amendment EWB-AE-EBQ-2016-11-13-E

27211 Bassum, 14.11.2016

EWB QS

Works inspector of the manufacture

FB-B4-16-Rev1_10287-2-E-InspectionCertificate-Transport

A0038362

	Certificate of amendment Of Transportcontainer	Date: 14.11.2016
		Document indicator: EWB-AE-EBQ-2016-11-14-E
Title: Adjusting the container coating of the transportcontainer EB16-Q225. Max. 700kg according to customer requirements		Page 1 of 1

Component:
Transportcontainer EB16-Q225

Traffic law, reference to admission / procedure	**Atomic law**, reference to test certificate / procedure
Certificate of Conformity.: EWB-EB-EB16-Q70-Q225-Rev.00	Not applicable

1. Amendment

- The coating of the transportcontainer type EB16-Q225 produced according to drawing no .: 16-1290-100-00 were not carried out with the described coating system contrary to the part list no .: ST-16-1290-100-00. The transportcontainer were hot dip galvanized according to DIN EN ISO 1461.

2. Records

- None

3. Justification of the amendment

- Customer request

4. Assessment of the change and impact on precursor revisions

- The mechanical integrity of the transportcontainer type EB16-Q225 remains unaffected by the change
- EWB points out that, according to ADR, all packages must be easily decontaminated. The applied hot galvanizing is not.
- The user is obligated to ensure decontamination in an appropriate manner.
- The coating variant is made of the explicit request of the customer.

EWB Quality management
Date / Signature

14. NOV. 2016 M. Witt EWB QS

General: Invalid fields have to get depreciated when creating the dossier.

Revision directory

00	14.11.2016	Initial version	M. Bernhard EWB 279	M. Witt EWB QS
Revision	Date	Comment	**Issued by**	**Checked and released by**

E:\QSP\5_EWB-QSP-EBQ\07-EB16-Q70-Q225\06-Eignungsbescheinigung\EWB-AE-EBQ-2016-11-14-E.doc

A0038363

Hinterm Bahnhof 3, 27211 Bassum
Tel.: (0 42 41) 80 28-0, Fax 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

Eisenwerk Bassum m.b.H.

Inspection Certificate

"type 3.1" according to DIN EN 10204

/

Acceptance Test Certificate

Type-A package
Industrial package IP-2

for the transport of radioactive material.

on the acceptance before initial operation of a package for the transport of radioactive material.

Test object:	Transportcontainer EB16-Q225
Test specification:	- Certificate of Conformity, No.: EWB-EB-16-Q70-Q225-Rev.00-E
	- Drawing No.: 16-1290-100-00
	- Parts list No.: ST-16-1290-100-00
	- Inspection sequence plan No. (FPP): EWB-FPP-16-Q70-Q225-Rev.00
Requirements:	Quality assurance program No. EWB-QSP-EBQ-Rev.00
Customer:	**Endress + Hauser GmbH + Co. KG, Maulburg**
Order No. of customer:	**196/1017015246**
Ordner No. of Manufacturer:	**16-10287**
Certificate No.:	**10287-3-E**
Delivery note No.:	**16-20717**
Ident. no.:	**10287-06, 10287-07, 10287-08, 10287-09, 10287-10**
Coating:	Galvanized according to DIN EN ISO 1461.
Leakage rate:	Not specified. 100 % of the container has been leak-tested by bubble test.
Inspection:	The correctness and the compliance with the testing specifications and the completeness have been checked.
Statement:	This is to confirm that the packages as mentioned at "Ident. no." are compliant with the type tested design according to the Certificate of Conformity, see above.
	The user shall apply labels for the identification of the package type if necessary.
	The Transportcontainer have been galvanized following customer requests. See Certificate of amendment EWB-AE-EBQ-2016-11-14-E

27211 Bassum, 14.11.2016

EWB QS

Works inspector of the manufacture

FB-B4-16-Rev1_10287-3-E-InspectionCertificate-Transport

A0038364

Hinterm Bahnhof 3, 27211 Bassum
tel.: (04241) 80 28-0, Fax: 80 28-20
e-mail: eisenwerk@ewb-bassum.de
www.eisenwerk-bassum.de

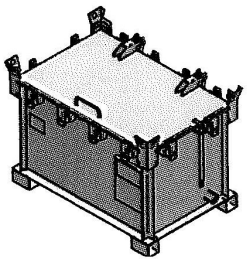
Eisenwerk Bassum m.b.H.

Technical Data sheet no.: EWB-DB-EB16-Q70-Q225-Rev.00-E

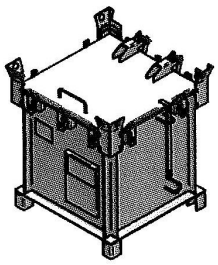
Transportcontainer EB16-Q70 und EB16-Q225

Operation parameter			Design		
1	Medium, admissible contents:	Solid substances, see and maintenance user manual	18	Material thickness side / end wall	3 mm
2	Conveyances:	Road, rail, see, air	19	Material thickness bottom:	5 mm
3	Operating temperature:	-40°C to +70°C	20	Material thickness Corner column:	5 mm
4	Nominal pressure (abs.):	Ambient pressure	21	Material thickness lid:	4 mm
5	Max. gross weight:	300 kg (EB16-Q70) 700 kg (EB16-Q225)	22	LAP-Transportcontainer, Hanging device:	4pcs. Stackcorners w. loop, Optional: Stapler bags, 2-sided
6	Tare weight:	apprx. 116 kg (EB16-Q70) apprx. 175 kg (EB16-Q225)	24	Internal load securing	4 pcs. VRS-F Ring screw 2 pcs. Lashing strap
7	Stackability:	5 times	**Classification**		
8	Tightness:	Not specified	25	Traffic law ADR	TYP-A / IP-2 / IP-3 package
Dimensions			**Coating and preservation**		
9	External dimensions:	800 x 800 x 940 mm **(EB16-Q70)** 1275 x 870 x 937 mm **(EB16-Q225)**	27	Coating system Internal- and external:	ISO 12944, 3-coat, SA 2 ½, DFT: 240µm
10	Internal dimensions:	600 x 600 x 703 mm **(EB16-Q70)** 1080 x 670 x 703 mm **(EB16-Q225)**	28	Decontamination of the outer	Test certificate according to DIN 25415-1, ISO 8690
Materials			**Manufacture**		
11	Steel compnents:	EN 10025-2, S355J2 (1.0577)	30	QMP-No.:	EWB-QSP-EBQ
12	Sealing:	EPDM	31	Drawing-no.:	16-1290-300 (EB16-Q70) 16-1290-100 (EB16-Q225)
13	Fasteners:	1.4301	**Operation and admissible contents**		
14	/	/	32	User manual no.	EWB-HA-EB16-Q70-Q225

EB16-Q225



EB16-Q70



Issued by 11.10.2016 M. Bernhard EWB 279 **Checked and approved: 11.10.2016** EWB QS

Observe the protective label DIN ISO 16016!

A0038365

www.addresses.endress.com

Endress+Hauser

People for Process Automation