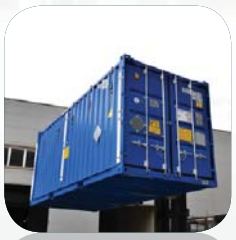
container

40 years of engineering

ATOM





ABOUT US

The company Container d.o.o. continues a tradition of more than 40 years of the production of special containers. With many years of experiences on engineering, development and testing fields a big range of containers, additional equipment and applications were developed for easy, efficient and safe handling of loads.

With a longstanding presence, focused view on a future and special concern for a clean and healthy environment, Container d.o.o. has become one of a market leaders of nuclear containers and fixation equipment.

Computerized production and own testing facilities enable us high responsiveness to market and short lead times from idea to certified containers.

ATOM CONTAINERS

ATOM Group containers present an excellent solution for storage and transport of low and medium radioactive materials. The Group consists of containers with lengths of 10‘, 20‘ and 40‘ in two shapes (as BOX container and an OHT containers with a removable hard metal roof).

All containers from the Atom Group are developed, tested and manufactured in accordance with international regulations IAEA IP-2 or IP-3 or Type-A (safety standard No. SSR-6, No. SSG-26), CFR, DOT 7A, CSC, ISO 1496-1, ARD, RID, IMO, TIR, IMDG.

They are painted with colors suitable for decontamination. Type-A containers ensure gas tightness (excess pressure or vacuum are exchanged through a decontamination filter) and are produced from certified materials making them suitable for use at temperatures ranging from -40 °C to 70 °C.

10’ CONTAINERS

Name	Dimension (LxWxH)	Tara (kg)	Max gross (kg)	Drawing
10‘ BOX IP-2 DFP	2.991x2.438x2.591	1.900	12.000	G03-816011-IP-2
10‘ BOX Type-A DFP	2.991x2.438x2.591	1.950	12.000	G03-816011-A
10‘ BOX Type-A AIR RH DFP	2.991x2.438x2.298	1.950	12.000	G03-816011-AA
10‘ OHT IP-2 DFP	2.991x2.438x2.591	2.050	12.000	G04-816039-IP-2
10‘ OHT Type-A DFP	2.991x2.438x2.591	2.100	12.000	G04-816039-A
10‘ OHT Type-A AIR RH DFP	2.991x2.438x2.298	2.200	12.000	G04-816039-AA

20’ CONTAINERS

Name	Dimension (LxWxH)	Tara (kg)	Max gross (kg)	Drawing
20‘ BOX IP-2	6.058x2.438x2.591	2.900	24.000	G01-816001-IP-2
20‘ BOX Type-A	6.058x2.438x2.591	2.900	24.000	G01-816001-A
20‘ BOX Type-A AIR	6.058x2.438x2.591	3.000	24.000	G01-816001-AA
20‘ OHT IP-2	6.058x2.438x2.591	3.250	24.000	G01-816005-IP-2
20‘ OHT Type-A RDH	6.058x2.438x2.591	3.300	24.000	G01-816005-A
20‘ OHT Type-A AIR	6.058x2.438x2.591	3.400	24.000	G01-816005-AA
20‘ OHT IP-2 FW HF RDH	6.058x2.438x2.591	4.225	30.480	815727-IP2
20‘ OHT Type-A FW HF RDH	6.058x2.438x2.591	4.350	30.480	816555-A
20‘ OHT IP-2 HH RDH	6.058x2.438x1.320	2.450	24.000	816407-IP2

40’ CONTAINERS

Name	Dimension (LxWxH)	Tara (kg)	Max gross (kg)	Drawing
40‘ BOX IP-2	12.192 x 2.438 x 2.591	5.450	30.480	G01-816001-40-IP2
40‘ BOX Type-A HC	12.192 x 2.438 x 2.896	6.100	32.750	816281-A

EASY AND EFFICIENT

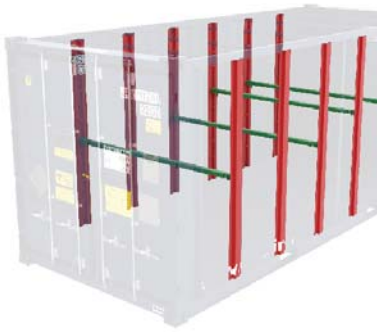
At company Container d.o.o. we are well aware, that daily manipulation with containers has to be easy, efficient and quick. For this purpose we are developing additional features of “easy and efficient equipment” with which we can provide new options for transport fixation and load manipulation. With long-standing cooperation with final users of containers and listening to the challenges they have with daily usage, we are developing and designing new innovative features for better handling and safer load fixation. Specialty of this equipment is, that it can be implemented on all ATOM containers (with minor exceptions) and it gives basic containers variety of solutions for safe handling of load and containers.

EASY AND EFFICIENT EQUIPMENT

Name	Remark	Drawing
Loading ramp - 2T (aluminium)	LR2T	C-383-309423
Loading ramp - 1,5T (aluminium)	LR15T	C-382-21-636610
Fixation: fixed lashing points	Fy*	C-206-616065
Fixation: flexible lashing points	Ly*	C-206-304379
Fixation: bars on front frame	Bx*	C-206-617150
Fixation: side wall rails	Wx*	C-206-26-616129
Fixation: rounded fi 20	Rx*	C-206-617845
Fixation: U-profiles	Ux*	C-383-22-636712 (U-profiles) C-382-636621 (pipes)
Fixation: omega profiles with round bars	OM6/OM7	C-209-618198 (OM6) C-209-636491 (OM7)
Fixation: telescopic rods	TR	C-209-30-636940
Fixation: Floor integrated rails	FR	307588
Fixation: Side wall integrated rails - SR-x*	SR-x*	306479

y*- here you have to specify number of fixation points (exmpl: L6 - means 6 flexible lashing points)
x* - here you have to specify number of levels on side wall (exmpl: W1 - means one level side wall rails)

EASY AND EFFICIENT EQUIPMENT



Name	Remark	Drawing
Reinforced floor group - 30T	G30	C-206-03-636931
Floor thickness 6	FT6	C-206-03-698666
Double fork-lift pockets	DFP	C-216-03-616597
Removable door header	RDH	C-209-14-615082
Fixed door header	FP	C-209-14-616437
Inner roof locking mechanism	ILM	C-213-30-618206
Door reinforcement: mesh protection	DMP	310410
Door reinforcement: bar protection	DBP	C-209-30-698661

y*- here you have to specify number of fixation points (exmpl: L6 - means 6 flexible lashing points)
x* - here you have to specify number of levels on side wall (exmpl: W1 - means one level side wall rails)

STORAGE BOXES

STORAGE BOXES are additional range of products for transport and storage of low and medium radio-active wastes. Design and structure are based on long term experiences and practical usage in daily environment. Special design gives standard containers solutions additional flexibility and a whole new range of implementation of systems in daily usage.

Storage boxes are developed, tested and manufactured in accordance with regulations IAEA IP-2 or IP-3 or Type-A.

They are painted with colors suitable for decontamination. Type-A boxes ensure gas tightness (excess pressure or vacuum are exchanged through a decontamination filter) and are produced from certified materials making them suitable for use at temperatures ranging from -40 °C to 70 °C.

STORAGE BOX AGENDA

Name	Dimension (LxWxH)	Tara (kg)	Max gross (kg)	Drawing
S BOX 233-Type A	2.100x1.450x960	470	1.500	C-233-00-816182
S BOX 255-Type A	2.100x1.450x985	470	1.500	C-255-00-816183
S BOX 340-Type A	1.600x1.100x1.100	350	1.500	C-340-00-816425
S BOX 317 IP-2	1.200x800x945	175	1.675	C-317-00-816370
S BOX 320	1.550x1.050x1.100	250	2.250	C-320-00-816373
BOX 500	1.100x800x500	75	1.500	C-414-00-816876
BOX 850	1.100x800x850	92	1.500	C-415-00-816877
PALLETE 850	1.100x800x850	90	1.500	C-416-00-816878

GENERAL CONDITIONS

TECHNICAL SPECIFICATION FOR ATOM CONTAINERS

All our ATOM containers are designed, built and tested according to the International Convention for Safe Containers (CSC) as well as International Atomic Energy Agency (IAEA) regulations.

MODULAR DESIGN

Our ATOM containers use a modular design, meaning that you can independently choose different features and fully customize your container by using our model code.
With our model code you can choose containers of different sizes and multiple types. But if you have any requirements that are not included within our code we can quickly adapt a container to your wishes, test it and certify it if it is necessary.

IAEA DESIGNATION

In accordance with appropriate regulations containers for transportation of radioactive materials must guarantee a high degree of safety against workers, public and environment.
All our ATOM containers conform to international regulations IAEA IP-2 or IP-3 or Type A (safety standard No. SSR-6, No. SSG-26), CFR, DOT 7A, CSC, ISO 1496-1, ARD, RID, IMO, TIR, IMDG in order to provide protection during normal transport conditions as well as under expected accident conditions.
IAEA regulations specify multiple levels: IP-1, IP-2, IP-3 and Type-A of containers with increasing safety requirements.
Our IP-2 ATOM containers are designed and tested to withstand the requirements of IP-1 and IP-2 safety levels. Our Type-A containers are conform to all requirements of IP-1, IP-2, IP-3 and Type-A safety levels.

IP-2 CONTAINERS

IP (industrial package) containers are used for transport of LSA (Low Specific Activity) materials that have low radioactive activity per unit mass and for transport of SCO (Surface Contaminated Objects) materials that are nonradioactive objects with low levels of surface contamination.
Materials transported in Industrial package containers range from fuel cycle machinery, parts of nuclear reactors and piping that have been contaminated by coolant or process water as well as some low-level in intermediate level radioactive waste.

Type-A and Type-A AIR CONTAINERS

Type A containers are used for transport of significant but limited quantity of radioactive material. They can be used to transport some nuclear fuel cycle materials.
Type A containers conform to all required safety levels for IP-1, IP-2 and IP-3 containers. Furthermore they have an additional door gasket that ensures gas tightness.
Excess pressure or vacuum are exchanged through a decontaminated filter. All Type A containers are suitable for use at temperatures ranging from -40°C to 70°C.
Type A AIR containers are adapted to air transport. They are built with stronger side walls and multiple nuclear filters that facilitate quicker compression and decompression during air transport.

GENERAL CONDITIONS

CONTAINER TYPES

BOX containers are standard inter modal containers built as a steel box with corrugated roof and side walls and double swing door at the rear end.
OHT (Open Hard Top) containers are similar to BOX containers but they have a removable roof permitting the loading of cargo from top. Additionally, OHT containers can have a removable door header (RDH) giving vertical clearance for cargo loading with a fork lift or crane.

MAX GROSS WEIGHT

Standard maximal gross weight of ATOM 20‘ containers is 24.000 kg while heavy duty containers (additional feature G30) have a maximal gross weight of 30.480 kg. ATOM 10‘ containers have max. gross of 12.000 kg.

FLOOR TYPES

Basic floor for ATOM containers (LS) has a 5 mm thick steel plate and is 20 mm lowered with respect to the door frame bottom cross beam to prevent liquid leakage. This step is smoothed with ramp at 3° angle.
Stainless steel floors have an additional 3 mm thick stainless steel plate resulting in a total thickness of 8 mm. Optionally floors with higher longitudinal beams are available. Stainless steel high floors (IH) have 85 mm high stainless folds on both longitudinal beams and front frame cross beam.
Heavy duty floors (G30) are available for 20‘ containers and increase maximal gross weight of container to 30.480 kg.

ADDITIONAL FEATURES

With additional features you can pick some nonstandard features that may not applicable to all containers.
FW: containers with flat walls for easier decontamination
G30: heavy duty floor enabling gross weight of 30.480 kg
RDH: removable door header in combination with removable roof (OHT) gives vertical clearance for cargo loading with a fork lift
FT6: floor thickness of 6 mm for increased resistance towards localized damage
DFP: double fork lift pockets for 10‘ containers so that they can be lifted with a forklift from all four sides
DOT: use Department of Transportation (DOT) approved nuclear filter that are required in the USA.

LOAD FEATURES

For load manipulation are developed special light ramps, which are integrated in doors during the transport. With this solution ramps are always available and they are not taking any loading capacities of container. For manipulation are available two ramps with total max gross of 2T (1T per ramp) LR2T and single ramp LR15T with max gross of 1,5T.
For door reinforcement two different solutions are available, to prevent any door damages. Doors are protected with connecting strip mesh DMP with total horizontal load up to 5T or bar protection with total horizontal load up to 20 T.

EASY AND EFFICIENT TYPES

CODE	Explanation
CONTAINER TYPE	
BOX	box container
OHT	open hard top – removable hard roof
IAEA DESIGNATION	
2A	air transport (IP1, IP2)
AA	air transport (IP1, IP2, IP3, Type-A)
FLOOR DESIGN	
LS	low steel floor
HS	high steel floor
LI	low stainless steel floor
HI	high stainless steel floor
ADDITIONAL FEATURES	
FW	container with flat walls
LH	lower height – 2298 mm
HH	half height
G30	gross weight of 30.480 kg (applicable only on 20‘)
FT6	floor thickness 6 mm instead of 5 mm
RDH	removable door header
FP	fixed door header
DFP	double fork-lift pockets
ILM	inner roof locking mechanism

EASY AND EFFICIENT TYPES

CODE	Explanation
FIXATION	
F	fixed lashing points (max. load 2 t on top and 5 t bottom)
L	flexible lashing points (max. load 2 t on top and 3 t bottom)
B	bars on front frame
W	side wall rails
R	rounded fi20 bars on side walls (possible implementation on several levels)
U	U-profiles with square pipes and fixation pins
OM6	omega profiles on side wall with implemented 6 round bars
OM7	omega profiles on side wall with implemented 7 round bars
TR	telescopic rods (implemented on omega profiles)
FR	floor integrated rails
SR	side wall integrated rails
LOAD FEATURES	
LR2T	aluminium loading ramp 2T system (combined by two half ramps)
LR15T	aluminium loading ramp 1,5T
DMP	door mesh protection
DBP	door bar protection

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