





Global supplier of containers, decontamination equipment, compactors and other radioactive handling equipment Industry-leading container solution product range

#### **Container Products Corporation**

112 North College Road • PO Box 3767 Wilmington, NC 28405 (28406)

> phone 800.635.5647 fax 910.392.6778 cfsales@c-p-c.com www.c-p-c.net



Argonne National Laboratory has been doing business with Container Products Corp for more than 10 years. It has been a great partnership. CPC has unique capabilities and expertise, that no other source can provide to satisfy the Laboratory's requirements. CPC has consistently met or exceeded the Laboratory's needs and expectations in both quality and delivery. CPC has shown to be a reliable Supplier and responsive to the Laboratory needs.

The engineering and fabrication of DOT packaging for Class 7 Radioactive Material was excellent. CPC engineering has the capability to design, analyze, test and certify package designs to support DOT requirements for packages.

-Argonne National Laboratory

Container Products Corp is a proven performer in the engineering and fabrication of DOT packaging for Class 7 Radioactive Material. CPC engineering has the capability to design, analyze, test and certify package designs to support DOT requirements for Industrial and Type A packages. CPC has consistently met or exceeded our expectations in both quality and delivery. CPC has shown to be a reliable supplier of one of a kind unique containers and high volume, multi year contracts for routine B25 containers. In all situations CPC is highly responsive to the customer needs.

-William Connors, CH2M Hill BWXT West Valley





#### Industryleading Products



#### CPC at a glance

NAC upender

#### **History**

Founded in 1981, CPC revolutionized radioactive waste handling in the nuclear industry with its introduction of the now industry-known B-12 and B-25 containers.

#### **Product Line**

A world-leading range of container solutions across major industrial applications including:

Hazardous waste Chemical
Radioactive source & waste Military
Nuclear decommissioning Transportation

Medical

- Custom shielded steel plate containers up to 9"thick
- Custom stainless steel, aluminum & carbon steel containers
- Highly engineered fixtures & component support systems
- · Laundry & equipment boxes
- Control rod (CRDM) containers
- · Special material containers
- Sealands & ISO containers
- Standard B-12 & B-25 waste boxes
- · Lead-shielded containers
- IP1, Type A capability
- Decon & custom design systems
- Fume hoods & glove booths
- Pump, valve & motor containers
- Drum compactors
- · Compactors & supercompactors



#### A World Leader in Design, Engineering & Manufacturing

CPC is located directly off I-40 in Wilmington, NC, where engineering, quality assurance, purchasing, sales, accounting and manufacturing are all under one roof.

Our full-service machine shop Southeastern Enterprises is located in Charlotte, NC.



CPC has more than 35 years of experience in design and manufacturing DOT approved IP-1, IP-2, IP-3 and 7A Type A containers for the nuclear industry in both the government and commercial sectors. NQA-1 qualified.

#### **Engineered Solutions**

CPC employs a staff of experienced designers and P.E.s that provide support and technical services to fill customer requests.

Capabilities comprise a broad range, from simple container designs and drawings to complex containers and systems — including design and analysis documentation packages — to satisfy customer needs. Finite element analysis is available upon request.

#### **Manufacturing Capability**Material Handling

- Single lift up to 35,000 pounds
- Dual lifts 100,000+ pounds
- · Large entries & exits for oversize projects

#### **Fabrication**

- In-house capability for shearing & bending
- CNC plasma & Oxy Fuel table
- Indoor Inventory maintained on standard sheet steel sizes

#### Welding

- · Qualified to ASME Section IV
- Mig, carbon-alum-stainless in all positions
- Mig, dissimiliar metals
- Tig, alum-stainless in all positions

#### **Painting/Coating**

- · Heated, double drive-through booth
- · High headroom for large projects
- Experience with all "wet" paints
- · Custom colors available



#### **Drum Compactors**



#### D-90 drum crusher application

- Used in medical & energy fields
- Has been used for controlled substance containerization



**Autoloading D-500 drum crusher** 

- Utilizes remote loading system
- Liquid capture system



#### D-500 drum crusher

- Stainless-steel lined
- Self-contained nuclear grade air evacuation
- Negative pressure HEPA



Above drums contained automotive engine blocks



#### **B-1000 Compactor**

Recent testing on the newest B-1000 compactor shows that a 9:1 compaction ratio can easily be achieved.

- Negative pressure HEPA filtered
- World-leading suppliers
- Designed around the B-1000 container
- ASTM A-500 structural tubing and ASTM A-36 steel frame construction with internal enclosed compaction chamber fabricated out of 304 Stainless Steel for easy decontamination
- 500,000lb compaction force
- Utilize container ejection systems









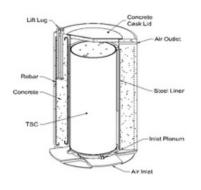




#### Custom Cask Upender

Provides a safe way to raise and lower casks into position for use or for transportation

- Utilizes multiple access doors
- Used for a customer's nuclear cask













- Complex interior weldments
- Used to hold fuel bundle assemblies
- Utilizes saddles & upending systems (can be raised & lowered)
- Can be locked into vertical or horizontal positions

CPC also manufacturers control rod drive assembly containers







# Need a dependable supplier for large multi-year projects?

#### No problem.

CPC is known worldwide for our ability to execute high-quality, high-quantity contracts spanning multiple years.

You can depend on CPC to deliver your product on time while meeting your exact specifications year after year.











#### Closures



Art Closure System



Draw Latch



Bolted Lid



Seal-Loc clips



Barrel Bolts



T-bolt



#### **Lead-lined Containers**

- Custom shielded component containers
- Combination lead/stainless steel storage containers
- Turbine shipping containers manufactured
- Utilize poured lead or sheet lead lining



Lead-lined demineralized container



Lead-lined source container with cart



9" thick lead-poured lead lining



# CPC: Experienced in Large-Scale Steel Containers

- Up to 12" thick steel plate containers
- 250,000-pound max gross weight Inquire about custom sizes!









#### ISO's & Sealands: We've Got Them!



- Single trip ISO Freight Containers modified to IP-1
- Hi-cube available



Custom 20' & 40' type A available





End opening, close top & open top configurations



#### Laundry Boxes

- L-42, L-54, L-87 & L-91
- Risers optional
- Removable casters
- Lighter aluminum hinged lid
- Drop-down front lid for easy loading
- T-bolt closure with new ergonomic handles
- PVC bumpers
- Available with hitching configurations



L42 with hitch



Multiple L42s with hitch



L42



L91



## Equipment Containers for Valves, Pumps or Motors

#### Need a valve box to return a valve for service/testing?

Target rock

Desser

Crosby

Valtech

Flowserve

Crane

Horizontal/vertical mounts

Any size, shape or payload!



Valve container



Valve container





Large motor container

#### Ramp-style Containers

#### **CPC can manufacture ramp-style containers:**

In any size, shape or configuration

With single or multiple access points & optional cable hoists for ramp door(s) Configured with shelving, cabinets, tie downs, etc.

Lightweight and ergonomic aluminum ramps







# Experiment and Fire Suppression Booths

- Experiment booths used for testing
- Hazardous/sensitive materials
- Test windows & doors
- Removable upper structure

Inquire about hazmat/fire suppression booth capability!









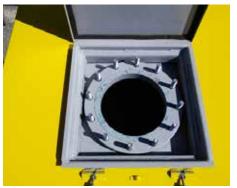


#### Liquid Containers

- Extensive capability manufacturing liquid hard-sided containers
- 375-gallon capacity
- DOT tested per 49 CFR 173.66, 30-foot drop test
- Inner-outer design

Inquire within!

Custom liquid totes



LQ-375



Sample box









# Containers Used by U.S. Military for Ship Decommissioning

CPC has extensive experience with the U.S. Military, including Norfolk and Portsmouth Naval Shipyards.

We are positioned to support the decommissioning of U.S. Navy nuclear carriers and submarines.





#### CPC is well-positioned to support the increase in nuclear power plant decommissioning

- Large carbon steel plate 5.25-inches thick
- Large multi-year contracts
- Containers up to 219x112x122 inches
- 250,000-pound max gross weight











### **Drop Test Capability**

- Type A container designs are required to pass rigorous drop test standards.
- Containers are loaded to the maximum gross weight, so that the center of mass is directly over the impact point, and dropped from a height of 48 inches onto a horizontal surface of such mass and rigidity so as to cause the full-impact force to be absorbed by the container vs. the drop surface.
- CPC engineered drop pad is a steel-reinforced concrete block with a thick steel plate attached to the top surface.
- Change in DOT interpretation of drop test results:
  - http://blog.c-p-c.net/2016/11/30/dot-interpretation-of-drop-test-height-2/
  - http://blog.c-p-c.net/2017/04/11/droptest-video-2/
- CPC has always drop-tested packages with a mass (maximum gross weight) of less than 11,000 pounds from a height of four feet.







# Multi-drum & B-25 Container Overpacks

- CPC offers standard design Overpacks, as well as custom designs to fit your specific needs
- Overpack containers can be used to "up-rate" a variety of mixed level material as a catch-all in Type A or IP-1 configurations
- Designs include 2, 3, 4, 6, 8 & 10 drum overpacks



Custom Split lid 2-Drum Overpack



Shielded 2-Drum Overpack



B-25 container overpack



Custom 2-Drum Overpack











#### Local Business on a Global Scale

CPC has worked with companies around the world, including:

- South Korea
- France
- United Kingdom
- Canada
- Spain
- Mexico

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