

IOC TANKS

Integrated Overflow Compartments



**Newest Innovation
in Overfill Protection
The Modern Way**



MODERN WELDING CO., INC.

IOC TANKS

Integrated Overflow Compartments

Reservoir Area holds up to a minimum of 10% of tank capacity.

(Can be pumped back to primary area)

Modern's IOC tank was created to eliminate spills, environmental cleanup and monetary loss related to overfilling aboveground storage tanks.

Our IOC tank captures and stores delivery overfills that may be the result of clogged or malfunctioning gauges, delivery equipment break down or just plain old human error during the tank filling procedure.

Modern's special overfill prevention design directs the excess product into the "Integrated Overflow Compartment". This only happens when the product level in the tank exceeds the 95% capacity rating.

The Overflow Compartment is large enough to contain an overfill of at least 10% of the tank's storage volume.* Since the entire IOC tank is UL listed for flammable and combustible product storage, the "Integrated Overflow Compartment" does not need to be cleaned or freed of vapors. The overfilled fuel can be recovered and when convenient, returned to the primary tank by means of a pump located on top of the tank.



Standard Steel Aboveground Horizontal Tank Designs

1. SuperVault™ MH, Multi-Hazard Rated "Protected" Secondary Containment Aboveground Tank with 4-hour fire exposure, hose stream resistant, fire rating, plus impact and ballistics resistance certification.
2. Fireguard, UL-2085 "Protected" double-wall insulated horizontal tank with secondary containment, a 2-hour
3. Flameshield, Southwest Research Institute, "Fire Resistant" double-wall steel horizontal tank with secondary containment, 2-hour fire tested.
4. F-921, UL-142 double-wall steel horizontal tank with secondary containment.
5. Modern Quality, UL-142 single-wall horizontal tank construction.

Double Wall Construction with interstitial monitoring space

Integrated Overflow Divider

Emergency Vents

Access Manway

Level Sensor

Spill Containment

Carbon Steel meets construction standards for the storage of flammable and combustible liquids.

Available from 12 gauge to 3/8" thick.

Space Limitations ...

Modern's IOC Tanks are available in rectangular construction designs.

Modern IOC Tanks are constructed of carbon steel and meet Underwriter's Laboratories UL-142, UL-2080, and UL-2085 construction standards for the storage of flammable and combustible liquids. Material thickness can be specified ranging from 12 gauge to 3/8". Flat-flanged heads are standard. All welding and inspections are per UL-142 and Steel Tank Institute specifications. Two 5 psi factory production air tests are performed prior to shipment so you are assured of a leak tight construction.

Materials of construction are carbon steel, stainless steel and stainless steel/carbon steel combinations for storing chemicals and hazardous liquids not compatible with just carbon steel. Interior linings** are available for the storage of aviation gas, jet fuel, specific chemicals and other specialty products.

Aboveground tanks have a standard Acrylathane exterior coating†. This coating provides superior corrosion protection in a single coat application. This coating system is completely VOC compliant and is applied over a commercial blast (SSPC-SP6) for superior adhesion.

*Consult Modern if secondary containment larger than 10% of the primary tank's capacity is required.

**Contact Modern for special interior linings on tank and Integrated Overflow Compartment.

†Coating systems may change due to availability and application.

IOC Tank Guide Specification

"Integrated Overflow Compartment" (IOC)

Section 1: Aboveground Tanks with 110% Total Containment Capability
Tanks shall be of diameter and capacity shown on the plans. Tanks shall be of welded steel construction of one of the following styles:

- Underwriters Laboratories UL-142 Double Wall
- Steel Tank Institute F-921 Double Wall
- Flameshield, Southwest Research Institute, Fire Resistant
- Fireguard, Underwriters Laboratories UL-2085, Fire Protected
- SuperVault, Southwest Research Institute, Multi-Hazard Rating

The primary and secondary tanks shall be fabricated in accordance with specified standards, and so labeled.

1. Tanks shall meet all applicable federal and state codes and regulations, and shall be compatible with the products to be stored.
2. Tanks shall include an integrated overflow compartment, capable of containing 10% of the capacity of the primary tank. When the primary tank liquid level exceeds 95% capacity, the product will flow into the "Integrated Overflow Compartment". This meets the NFPA 30 requirement for the primary tank not to exceed the 95% capacity level. Tanks shall be of "Integrated Overflow Compartment" (IOC) design and manufactured by Modern Welding Company.

3. Fittings and accessories:

- 3.1 Normal and emergency venting connections with vents shall be provided.
- 3.2 A minimum 2" pipe connection shall be provided in the secondary tank to monitor the annular space.
- 3.3 Lifting lugs of adequate size and lifting capacity shall be provided.
- 3.4 Tanks shall be furnished with support saddles, skids or stabilizers as shown on plans.

Exterior surfaces of tanks and supports shall be commercial blasted to SSPC-SP-6 and receive a shop applied finished coating system, i.e. Acrylthane or equivalent VOC compliant coating[†].

Tanks shall be tested by the manufacturer in accordance with the specified construction standards.

Tanks shall be installed in accordance with applicable codes, regulations and manufacturer's installation recommendations.

[†]Coating systems may change due to availability and application.



MODERN WELDING CO., INC.

Corporate Office

Modern Welding Co., Inc.

2880 New Hartford Road, Owensboro, KY 42303

Phone: 270-685-4400 • 1-800-922-1932 • Fax: 270-684-6972

www.modweldco.com • E-mail: modern@modweldco.com

Manufacturing Subsidiaries

Modern Welding Co. of Owensboro, Inc.

1450 E. Parrish Ave.
Owensboro, Kentucky 42303
Phone: 270-683-5323
Fax: 270-684-5245
modern1@modweldco.com

Modern Welding Co. of Ohio, Inc.

One Modern Way
Newark, Ohio 43055
Phone: 740-344-9425
Fax: 740-344-6018
modern5@modweldco.com

Modern Welding Co. of Florida, Inc.

1801 Atlanta Ave.
Orlando, Florida 32806
Phone: 407-843-1270
Fax: 407-423-8187
modern6@modweldco.com

Modern Welding Co. of Texas, Inc.

2 Locations
715 Sakowitz St.
Houston, Texas 77020
Phone: 713-675-4211
Fax: 713-673-4062
modern7@modweldco.com

200 N. Main St.
Rhome, Texas 76078
Phone: 817-636-2215
Fax: 817-636-2680
modern15@modweldco.com

Modern Welding Co. of Iowa, Inc.

2818 Mt. Pleasant Rd.
Burlington, Iowa 52601
Phone: 319-754-6577
Fax: 319-754-8428
modern8@modweldco.com

Modern Welding Co. of California, Inc.

4141 N. Brawley Ave.
Fresno, California 93722
Phone: 559-275-9353
Fax: 559-275-4381
modern10@modweldco.com

Modern Welding Co. of Georgia, Inc.

300 Prep Phillips Dr.
Augusta, Georgia 30901
Phone: 706-722-3411
Fax: 706-724-8133
modern14@modweldco.com

Modern Custom Fabrication, Inc.

2421 E. California Ave.
Fresno, California 93721
Phone: 559-264-4741 • 1-800-800-TANK
Fax: 559-237-3413
modern16@modweldco.com