

LEAD BY IMPACT™

# Sustainable Chemical Packaging Solutions & Services



**HOOVERCS**  
HOOVER CIRCULAR SOLUTIONS

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## MISSION | VISION | VALUES

Hoover CS is paving the way for customers across the chemical, refining, and general industrial-end markets to move away from single-use containers. Through our large rental fleet of reusable Intermediate Bulk Containers (IBCs), ISO tanks, and Catalyst Bins, combined with integrity management and fleet management services, Hoover CS's sustainable chemical and catalyst packaging solutions facilitate circularity across the supply chain, yielding an optimized environmental footprint through reduced plastic, water conservation, and lower greenhouse gas emissions.

### Mission

To empower environmental responsibility through sustainable packaging solutions.

### Vision

To make sustainable packaging the standard in the industries we serve.

### Values

At Hoover CS, our team believes that for every sustainable packaging solution we deliver, we're contributing to our customers' sustainability goals, enabling circularity across another supply chain, and making a positive impact on the environment around us.



#### Care

Believing in the impact of our work while prioritizing safety above all else



#### Share

Supporting one another with our knowledge, talents, and recognition



#### Deliver

Measuring what matters most while continually employing best practices

### Safety

Zero incidents. Zero injuries. Every day, we strive to achieve Goal ZERO.

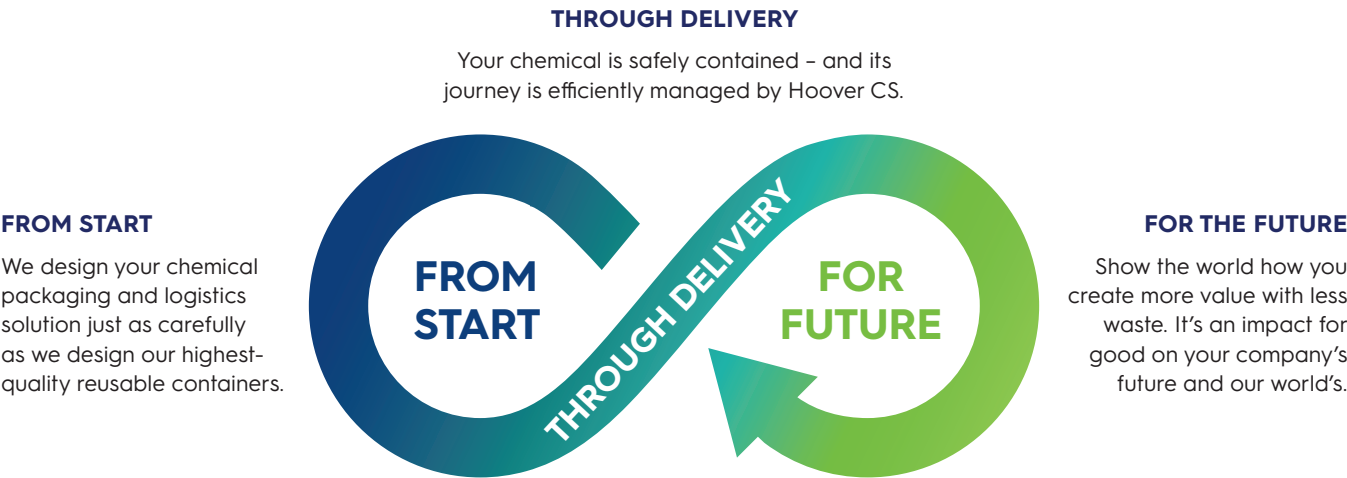
We believe that no job is so urgent that it can't be done in a safe and responsible manner. We aim to protect ourselves, our fellow employees, and the environment from harm through our Goal ZERO Program.

From site visits and trainings to tank restoration and unloading, being safe in all that we do is a core principle here at Hoover CS.



# CONTRIBUTING TO YOUR CIRCULAR SUPPLY CHAIN

Bring circularity into your supply chain by harnessing Hoover CS's reusable chemical packaging solutions. As one of the largest suppliers of stainless-steel IBCs, Hoover CS sets the sustainability standard for the storage, handling, and transportation of industrial chemicals and other liquid products and materials. At every step of the journey, we're here to help your company lead by impact – from start, through delivery, and for the future.



**Increase reusable packaging**

**Support reduction in plastic waste**

**Reuse and conserve water**

**Support a Circular Economy**

# CONTRIBUTING TO YOUR SUSTAINABILITY GOALS

Hoover CS is proud to support the Sustainable Development Goals and do our part to provide environmentally responsible packaging solutions. From climate change to responsible consumption & production, here's how we contribute to the Global Goals, and yours.

**SDG 6 – Clean Water & Sanitation**

Through our state-of-the-art water reclamation process, we're able to reuse approximately 95% of all water used to wash, flush and service tanks.

**SDG 13 – Climate Action**

We're able to reduce carbon emissions and overall waste through our fleet of reliable, reusable, and leak-proof packaging solutions, helping combat climate change.

**SDG 12 – Responsible Consumption & Production**

As an environmentally responsible packaging supplier, we provide reusable, circular packaging versus single-use containers.

**SDG 17 – Partnerships for the Goals**

Eliminating plastic waste from entering our oceans and rivers is of the utmost importance to us, which is why we participate in clean up events and recycling initiatives.

**ecovadis**  
Business Sustainability Ratings

Hoover CS is an EcoVadis Medal recipient for sustainability practices and performance.  
Ask your representative for our current rating.

## SUSTAINABLE PACKAGING FOR CHEMICALS & LIQUIDS

Hoover CS's rental fleet of reusable stainless-steel Intermediate Bulk Containers support the storage, handling, and transportation of chemicals, liquids, and other raw materials and products. While heavy industries have settled for predated, inefficient solutions through a reliance on single-use containers, we are paving the way for companies to evolve their commitment to sustainability with an environmentally responsible alternative.

Prioritizing strength and safety, our high-quality IBC designs nearly erase any chance of spillage while also minimizing leftover residue upon transfer which significantly reduces costs associated with product waste and disposal. We offer a variety of standard and specialty sizes, including 350-, 550-, and 793- gallon containers, with side, center, and front drain valve configurations, depending on your needs. The integrity of these containers is preserved through regular cleaning, maintenance, and recertification to ensure an optimal 25+ year lifetime.

To accommodate the need for larger chemical volumes, we offer an extensive line of ISO Tanks and Chassis. These tanks - capable of supporting up to 6,600 gallons of chemicals - are primarily used for specialty chemicals within onshore oil and gas operations in North America and are designed with modifications to enhance field safety.





# OUR FLEET OF IBCS

## STANDARD STAINLESS-STEEL IBCS

- 350 Gallon / 1,325 Liter
- 550 Gallon / 2,082 Liter
- 793 Gallon / 3,001 Liter
- Additional sizes include 120 (454 Liter), 180 (681 Liter), and 275-gallon (1,041 Liter) options

## SPECIALTY IBCS

- Cargo Valve Tanks
- Composite Tanks
- Aviation Tanks
- Conical Bottom Tanks
- Poly Tanks
- Food & Beverage Tanks
- Stacked IBC Systems

## Applications

- Combustible and flammable raw materials
- Solvents/solvent-based chemical preparations
- Water treatment chemicals
- Oil and water-based lubricants
- Down-hole chemicals
- Paints, resins, and allied products
- Pigments and dyes
- Cleaning and sanitation chemicals
- Pharmaceutical and food preparations
- Industrial organics
- Agricultural chemicals

## Features of Standard IBCs

- Sloped bottom
- Heavy duty lifting lugs
- Stackable leg positioners
- Side and center drain configurations
- Three-way forklift entry (side drain only)
- Full-length valve guard (side drain only)



# OUR FLEET OF ISO TANKS

## STANDARD SIZES

- 5,548 Gallon / 21,000 Liter
- 6,340 Gallon / 24,000 Liter
- 6,604 Gallon / 25,000 Liter

## Optimization Modifications

- Insulation and cladding with heat trace coils and thermometer
- Pipe down – single-hose connection for filling and discharge
- Local level display
- GPS asset tracking and level monitoring
- Pressure vessels with relief valve
- 1x500 mm, 8-point fastening man lid
- Atmospheric vent valve
- Bottom outlet valve

## Enhanced Safety Features

- Bottom fill lines
- Chassis with easy access step
- Standard tram and extended ladder (fall arrest system) with fender and handrail
- Optional upgrade to stairway accessory – replaces standard fall protection







## TANK SERVICES

Hoover CS is committed to protecting the endurance of every single container whether it's one of our own, or one of yours. To maximize the value and performance of all tanks, we provide one of the industry's most comprehensive maintenance and management service programs.

Our integrated services include tank cleaning, testing, regulatory recertification, reconditioning, restoration, part replacement, and repairs.

With a focus on quality control, our team meticulously inspects every tank, checking for damage and leaks that could potentially affect functional integrity.

### IBCs

All reusable tanks must be properly cleaned and tested at predetermined intervals, per UN/DOT standards. Whether the containers have stored hazardous or non-hazardous materials, we provide high-quality cleaning and maintenance that protects and extends the value of each and every tank.

- Interior and exterior wash, including replacement of valves and fittings
- Inspecting cleaned IBCs to certify they are clean, dry and odor-free
- Recertifying tanks – air tested, UN-thickness tested, DOT-record kept
- Providing cleaning and testing certificates for each IBC
- Proper inventory reporting
- Providing interim storage for cleaned IBCs prior to shipment
- Shipment and delivery of cleaned IBCs

#### **UN/DOT Testing & Recertification Requirements:**

- Stationary IBCs: every 2.5 years
- Transport IBCs: every 2.5 and 5 years



### ISO Tanks

All ISOs processed through our service facilities are air tested – or hydrotested – and UN-thickness tested, with appropriate DOT record. Each ISO Tank is given a complete external inspection prior to filling, as well as a thorough examination. Any defects identified by inspection are corrected prior to the ISO being offered for transportation.

- Interior and exterior wash
- Recertifying tanks – visual inspection inside and out, air tested/hydrotested, UN-thickness tested, DOT record kept
- Thorough tank inspection with restoration and repairs as needed
  - ▶ Shell, piping, valves, and other appurtenances for corroded areas, dents, defects in welds and other defects such as missing, damaged, or leaking gaskets



- ▶ Flanged connections or blank flanges for missing or loose nuts and bolts
- ▶ Emergency devices for corrosion, distortion, or any damage or defect that could prevent normal operation
- ▶ All required markings on the tank for legibility
- ▶ Any device for tightening manhole covers to ensure devices are operative and adequate to prevent leakage at the manhole cover
- ▶ Chassis – with DOT record

**UN/DOT Testing & Recertification Requirements for ISO Tanks: every 2.5 years**



## The General Cleaning Process for IBCs, ISO Tanks & Trailers

\*Different chemicals may require alternative cleaning processes.

CYCLE	OBJECTIVE	OPERATION
1	Dirty Flush	Flush with recycled water and transfer to wastewater tank
2	Hot Detergent Wash	Wash and recirculate detergent (or caustic) in a closed circuit
3	Freshwater Rinse	Rinse with hot or cold freshwater and return back to recycled water tank
4	Steam Cycle	Steam interior with direct feed from boiler system
5	Drying Cycle	Dry interior with filtered ambient air

Hoover CS service centers leverage innovative water reclamation and reuse techniques, ensuring responsible practices when servicing IBCs, ISO tanks and Catalyst Bins. As part of our water reclamation program, we can recycle approximately 95% of water used in the cleaning process.

### NAS 6 Cleaning

We can accommodate NAS6 cleaning requirements at our Scott, Louisiana and Houston, Texas Service Centers. Inquire with a Hoover CS Representative to learn more.

# FLEET MANAGEMENT

Hoover CS can unlock the potential performance of your tank fleet with our unique Fleet Management Program – consisting of advanced tracking technologies, our proprietary FleetAI platform, and thought partnership.

Our team assesses the current state of your fleet and explores areas of potential cost savings by making your fleet work smarter, not harder. We look at how we can improve fleet turns while reducing costs of tanks, trucking, and washes.

## Reduce Total Packaging Costs

- Right-size your fleet
- Significantly reduce money spent on tank losses
- Reduce compliance risk and cost across the fleet

## Improve Operational Inefficiencies

- Improve inventory management
- Increase visibility of delivery schedules, frequency & demand
- Reduce company risk with all tanks 100% DOT-compliant

## Increase Overall Productivity

- Improve tank utilization and turns
- Optimize wash frequency with product history
- Identify and address underutilized units

## FleetAI Platform

Our exclusive application is backed by the latest technologies with field managers ready to assist you.

- Customer portal accessible by mobile or desktop
- Standard and customized dashboards
- Reporting and alerts
- Document storage platform
- Any tank or asset can be tracked & captured/reported on
- Other services include level monitoring, asset linking



A tank technician scanning the QR Code on a Hoover CS stainless-steel IBC



# IBC Tracking Solutions

Backed by advanced tracking technologies, our solutions reliably monitor tank movement and location to improve fleet utilization and performance. Our IBC Tracking solutions are integrated into FleetAI, providing user-friendly dashboards with the tank details you need to get the most out of your fleet.

TRACKING SOLUTION	MOVEMENT TYPE	TECHNOLOGY TYPE	SAFETY RATING
Industrial+ (Real-time)	Point-to-Multipoint, Point-to-Point	Cellular GPS/WiFi	C1D1
Industrial (Real-time)	Point-to-Multipoint, Point-to-Point	Cellular GPS/WiFi	C1D2
Offshore (Real-time)	Point-to-Multipoint, Point-to-Point	Cellular/Satellite Hybrid	C1D1, ATEX
QR Code (Intermittent)	Point-to-Point	Scannable QR Codes	N/A

## Benefits

- Improves tank utilization and turns
- Eliminates tank loss or misplacement
- Improves inventory management
- Increases insight of delivery schedules, frequency, and demand



Industrial tracking solution installed on a 350-gallon side drain stainless-steel IBC, opposite of valve discharge

## OTHER SUSTAINABLE PACKAGING OPTIONS

While managing one of the largest mixed fleets of reusable IBCs and ISO tanks, Hoover CS is also proud to serve as the largest global supplier of Catalyst Bins for refining and petrochemical companies.

### Catalyst Bins

Hoover CS reusable Catalyst Bins support the storage, handling, and transportation of fresh, spent, presulfided, and precious metal catalysts within the petroleum refining, gas processing, and petrochemical manufacturing industries. Our rental fleet of Catalyst Bins are UN-11AX approved, hermetically sealed, and designed to prevent leakage and spills. Designed with a shelf life of 25+ years, our Catalyst Bins yield a smaller environmental footprint – proving to be an environmentally responsible alternative to disposable, single-use drums and sacks.



#### North America

- 37FT<sup>3</sup>
- 87FT<sup>3</sup>



#### Europe, Asia, and Middle East

- 1M<sup>3</sup>
- 2M<sup>3</sup>



#### Specialty Catalyst Bins

- Inverter Bin
- SPA Bin
- Additive Bin
  - X-2
- Custom Bins available in Carbon and Stainless-Steel





## CASE STUDY: MARTIN ENERGY SERVICES

Martin Energy Services utilized Hoover CS to analyze its fleet's performance. Over the course of twelve months, Hoover CS's team of experienced packaging, logistics, and operational leaders uncovered many opportunities to reduce risk, optimize their environmental footprint, and eliminate unnecessary costs.



### Who Is Martin Energy Services?

Martin Energy Services (MES) is a provider of quality fuels, lubricants and potable water supply, and operates a highly diverse network of facilities across the United States Gulf Coast region.

They provide 24/7 customer support at all 12 of their facilities – 365 days a year – for commercial and industrial product deliveries, and pride themselves in delivering on their customer's requirements in the most timely, cost-effective, safe, and environmentally friendly manner possible.

MES also provides full-service logistical support along the U.S. Gulf of Mexico, equipping their customers with operational support, such as access to cranes and loading docks for vessels, long-term parking for offshore workers, drilling mud blending plants, warehouses, fuel depots and office space with living quarters.

### Reoccurring Challenges

At the time, MES had over 5,000 Intermediate Bulk Containers (IBCs) and tanks in a single region, which posed many challenges in managing, tracking, and maintaining their fleet.

- Tanks being out of certification
- Compliance and quality concerns resulting in tank rejections
- Underutilized tanks
- Lost tanks

These challenges disrupted their operations, as well as with their customers.

To overcome these disruptions, Hoover CS performed an in-depth fleet analysis, giving a strong baseline while jointly building a vision for future operations.



## Implementing Strategic Initiatives

With a clear strategy in place, Hoover CS provided the necessary on-site personnel to implement our findings and partnered with the MES team to:

- Standardize the Fleet
  - ▶ Barcode all IBCs
  - ▶ Achieve 100% UN Certification Compliance
- Establish Fleet Quality Standards
  - ▶ Remove all unusable totes
  - ▶ Establish IBC quality standards and metrics to eliminate customer rejections
- Increase Turns of Fleet
  - ▶ Establish workspace, expertise, and parts on-site
  - ▶ Identify bottlenecks and instances of no movement
  - ▶ Establish time-based requirements
- Reduce Waste
  - ▶ Streamline product line allocation to reduce wash frequency
  - ▶ Enable accurate billing to customers for IBC use and loss
- Deliver Fleet Visibility
  - ▶ Develop dashboards and KPIs with daily reporting in FleetAI

After completing the above, a dedicated Hoover CS technician remained on-site to process incoming IBCs and perform inspection and maintenance as part of daily operations, lifting the burden from MES personnel.

The positive effects of right-sizing their fleet, tracking tank locations with FleetAI, streamlining certifications and wash frequency at Hoover CS Service Centers, as well as tapping into our transportation and logistics offerings, allowed Martin Energy Services to save in packaging costs.

## Opportunities Uncovered

Although MES was already participating in Hoover CS's rentable, reusable and returnable IBC program, they saw immense value in our full suite of circular solutions.

By taking advantage of our managed services – including tank services, fleet management technology, transportation & logistics – Martin Energy Services was able to reduce friction with their customers by delivering clean, certified, and compliant tanks that are easily tracked and maintained by their partner of choice—Hoover CS.

"Hoover CS truly presented the best turnkey operation for our needs, as they relate to inventory, repair, tracking, cleaning, and delivery," said Brad Justice, Vice President of Strategic Business Management at Martin Energy Services. "Our partnership has improved MES' internal processes and has proven to be instrumental in helping our customers streamline billing, location of tanks, and logistics. We highly recommend Hoover CS and look forward to growing our partnership."

## Strong Results Driven by Strategy

Within a few months, Martin Energy Services began feeling the impact of our work, and after the first year, our partnership delivered significant results.

- Achieved 100% certification compliance of their fleet of stainless-steel IBCs
- Reduced trucking costs by 70%
- Reduced fleet size by 50%

### GET IN TOUCH

→ Learn more at [www.hooversolutions.com](http://www.hooversolutions.com)

? Questions? Email us at [info@hooversolutions.com](mailto:info@hooversolutions.com)

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