

THINKING INSIDE THE DRUM



U. S. COEXCELL TAKES ULTRA PURE/TIGHT HEAD
DRUM MANUFACTURING TO A WHOLE NEW LEVEL





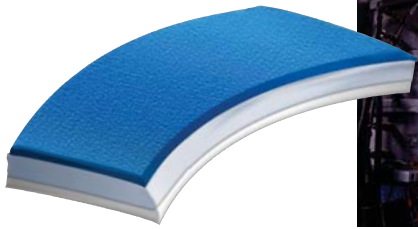
THINKING INSIDE THE DRUM



INTRODUCING ICAS™

The purity of chemicals directly correlates to the purity of the drums in which they are stored. This is particularly critical to the micro electronic chemical, biomedical, solar and pharmaceutical industries. It is also why U.S. COEXCELL developed our exclusive ICAS™ (Integral Clean Air System) HDPE drum manufacturing system.

Our ICAS™ drum manufacturing line incorporates an array of process control systems and advanced technology enhancements. This effectively optimizes the performance of the chemicals our drums are designed to contain.



STAGE ONE:

Our process begins with our ability to use specialty resins for the liner layer of our multilayer drum. This is especially critical to achieve the lowest possible metallic extractables.

STAGE TWO:

Our proprietary, multi-stage HEPA air filtration systems purify the air used in the blow mold and post-forming processes.

STAGE THREE:

Our post-forming area is a Class 1000 Clean Room which assures drum purity during final finishing.

STAGE FOUR:

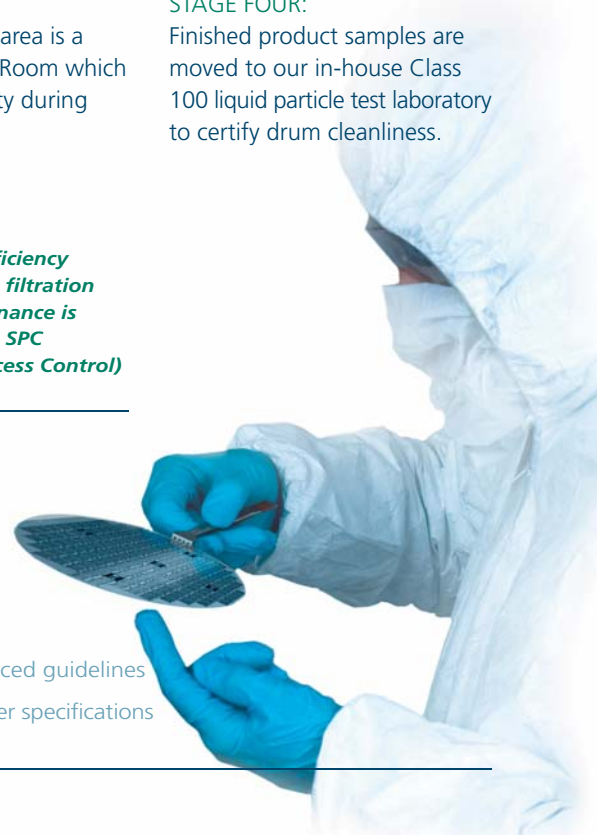
Finished product samples are moved to our in-house Class 100 liquid particle test laboratory to certify drum cleanliness.



HEPA (High-Efficiency Particulate Air) filtration system maintenance is included in the SPC (Statistical Process Control) protocol.

ICAS PROTOCOLS

- Comprehensive Class 1000 and 100 Clean Room Protocol
- All ICAS™ technicians fully and extensively trained, tested and monitored
- Within clean and test room environments, gowns, bonnets, gloves, and masks are worn at all times
- HEPA filters are maintained regularly, tested frequently and monitored 24/7
- All ICAS™ clean and test room surfaces are cleaned on strict schedule within enforced guidelines
- ICAS™ quality tested drums are certifiable to a particle count consistent with customer specifications



WHY U.S. COEXCELL? CUTTING EDGE LEADERSHIP AND INNOVATION.

After nearly two decades, U.S. COEXCELL is recognized as the preminent innovator in producing uniquely engineered, multi-layer HDPE plastic molded drums. With the introduction of our proprietary ICAS™ technology we have taken our processes – and the purity of our drums – to a whole new level.

U.S. COEXCELL OFFERS THREE ICAS™ PRODUCED TIGHT HEAD, ULTRA PURE DRUMS TO MEET YOUR SPECIFIC PARTICLE AND EXTRACTABLE REQUIREMENTS. MEET THE IC55UP AND C55UP AND C30UP!



U.S. COEXCELL has combined superior quality manufacturing techniques and proven product engineering to offer the highest purity drums available today. The IC55UP, C55UP and C30UP provide great handling options to both chemical producers and end users.

Multi-Layer HDPE Construction...
U.S. COEXCELL drums are manufactured with three-layers of molded structural strength and resilience using state-of-the-art blow molding technology. The IC55UP, C55UP and C30UP interior liner layers are produced using a proprietary HDPE high purity resin to support U.S. COEXCELL's industry leading manufacturing technology.

Superior Drainability...
U.S. COEXCELL's patented mold design gives the chemical user an ability to extract the maximum liquid content from the drum. The IC55UP, C55UP and C30UP are compatible with industry standard dispensing pumps and dip-tubes, allowing for ultimate flexibility when emptying the package.

Start-to-Finish Quality Assurance...
From raw material sourcing, treatment and processing to customer service, U.S. COEXCELL is focused on continuous product and system improvement giving drum users the confidence to ship their sensitive, ultra pure materials in our IC55UP, C55UP and C30UP packages.

Proprietary Manufacturing Protocol...
U.S. COEXCELL's ICAS™ (Integral Clean Air System) manufacturing technology effectively measures and controls the size and quantity of air-borne particulates throughout container formation producing an ultrapure interior for contact with the customer's products.

Regulatory Compliance...
The IC55UP, C55UP and C30UP meet or exceed all United Nations and U.S. DOT shipping regulations under HM-181 and Title 49 CFR performance oriented packaging standards. It is approved for the storage and shipment of Group I, Group II and Group III chemicals, allowing for the safe transport of challenging goods to domestic and international locations.

Comprehensive Testing and Reporting...
The IC55UP, C55UP and C30UP drums are certified on a lot basis for particulate content before shipment. This assures drum users that the highest purity standards are documented and reproducible.

Environmental Friendliness...
All U.S. COEXCELL drums are produced with secondary activities in mind. Recycling alleviates pressure on community landfills and helps contribute to company policies regarding environmental stewardship.

EXCEPTIONAL DRUMS WITH SUPERIOR CHARACTERISTICS

- IC55UP, C55UP and C30UP flange openings accept industry standard high purity extraction, gasket and O-ring styles used in ultra clean applications.
- IC55UP, C55UP and C30UP drums are certified for ultra clean integrity in U.S. COEXCELL's Class 100 liquid particle count test laboratory. Here we can provide purity certification to the lowest industry level.
- Three layer drum configuration isolates color concentrates and UV stabilizers in the outside layers of the IC55UP, C55UP and C30UP drums.
- Virgin inner liner layer made with proprietary ultra clean resin assures chemical contact with pure HDPE only.
- UN/DOT Performance tested and certified for transport of Group I, Group II and Group III chemistry with and without dip-tube.
- Patented drum design with integral sump below the flange for maximum extraction capability.



PATENTED AND EXCLUSIVE MOLD DESIGN PROMOTES SUPERIOR DRAINABILITY TO LESS THAN 50 ml.

C55UP & C30UP SPECIFICATIONS

THE C55UP

| | |
|--------------------------|---|
| Top Diameter | 23.38" (59.39 cm) |
| Overall Height | (Std. profile) 36.25" (92.10 cm) (Tall profile) 38" (96.52 cm) |
| Overflow Capacity | 60 gal. (227 liters) |
| Drum Body Wt. | 24 lbs. (10.9 kg) |

THE C30UP

| | |
|--------------------------|---|
| Top Diameter | 19.3" (49 cm) |
| Overall Height | (Std. profile) 31" (78.74 cm) (Tall profile) Not Available |
| Overflow Capacity | 36 gal. (136.27 liters) |
| Drum Body Wt. | 16.5 lbs. (7.48 kg) |

IC55UP SPECIFICATIONS

- One piece design delivers molded-in handling capabilities
- Integral chime withstands heavier chemicals with a high specific gravity and elevated temperatures

| | |
|------------------------------|------------------------|
| Top Diameter | 23.32" (59.23 cm) |
| Overall Height | 35.9" (91.19 cm) |
| Overflow Capacity | 59 gal. (223.3 liters) |
| Nominal Drum Body Wt. | 22.5 lbs. (10.21 kg) |





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Our company's mission is predicated on complete customer satisfaction. To this end, we strive to continually improve our process and, accordingly, our final product so we can effectively add packaging value to the customers we serve. Our introduction of the exclusive ICAS™ process is testament to our commitment to excellence. We serve the micro electronic chemical, biomedical, solar and pharmaceutical markets with unparalleled customer service, superior quality and exceptional value.

