

### **Choose Your Chassis**



#### Micro-HD v2.0 Specs

- Up to 52,000 sqft/Charge
- 12 / 15 Gallons
- 20 26 inch decks

#### **Applications**

- Automotive Shops
- Machine Shops
- Warehouses



### Mini-HD v2.0 Specs

- Up to 102,000 sqft/Charge
- 21 / 23 Gallons
- 25 29 inch decks

#### **Applications**

- Fabrication Shops
- Beverage Distribution
- Food Packaging



### Mag-HD v2.0 Specs

- Up to 170,000 sqft/Charge
- 35 / 37 Gallons
- 29 34 inch decks

#### **Applications**

- Distribution
- Sports Arenas
- Aviation

### **Choose Your Scrub Deck**



- Superior Tile & Grout Cleaning
- Great for Indoor Track Fields



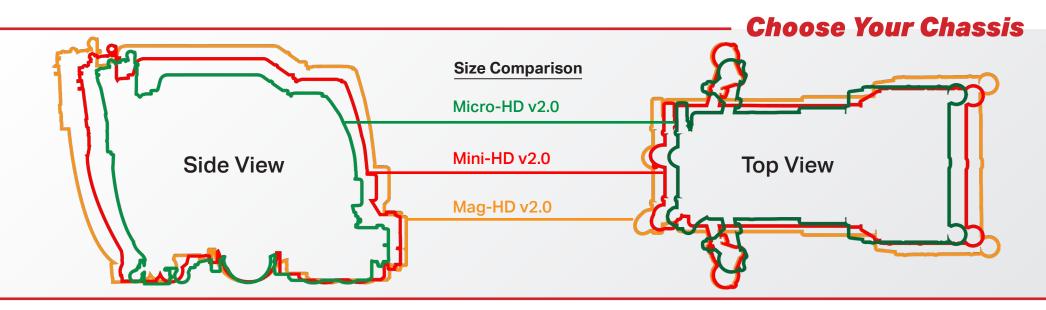
- Best Performance on Irregular Floors
- Brushes Individually driven



- Chemical Free Stripping
- Reduce Slip & Fall Potential
- 70% Reduction in Water Usage
- VCT Prep & Recoat

### **Choose Your Controller**

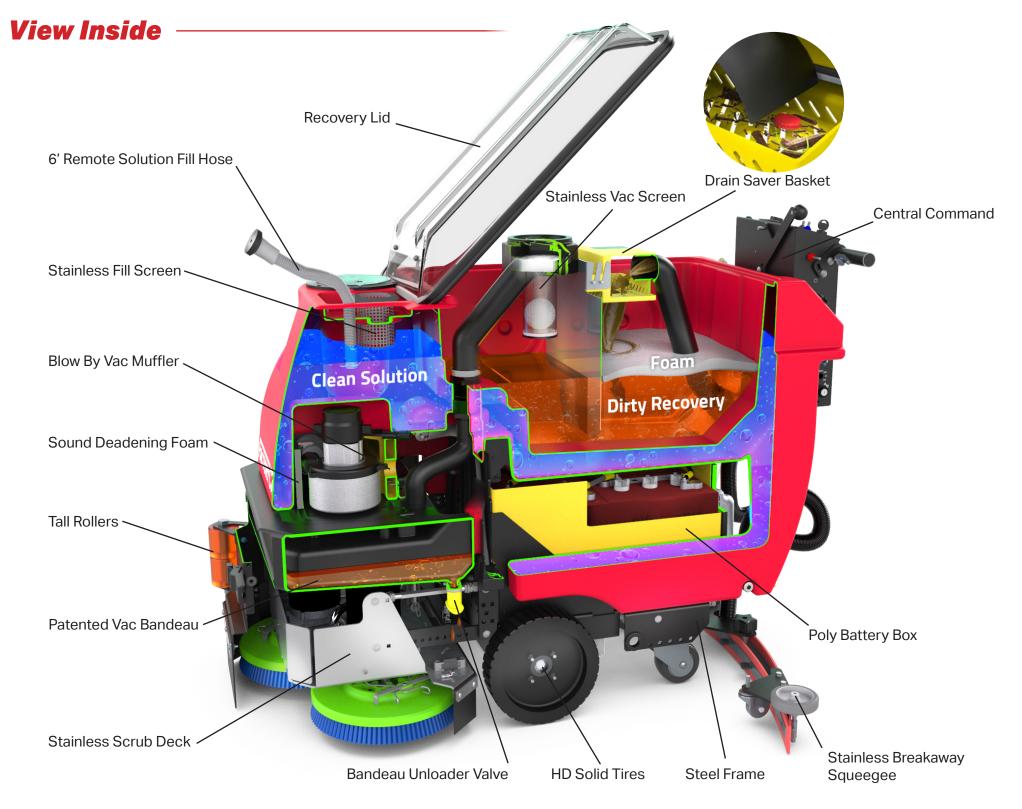




- Polypropylene: Black / Medium Light
- (2) Nylon: White / Light Soft
- (3) Tampico: Tan / Soft
- 4 Tufted Pad Driver: Red / Variety Pads
- (5)\* Neoprene Pad Driver: Black / Variety Diamond Pucks
- 6 \*Super Grit: Orange / Extreme Rough
- 7 Tough Grit: Black / Very Rough
- (8) Midi Grit: Blue / Rough
- 9 Light Grit: Grey / Medium

\*Not offered on Cylindrical Brushes

**Choose Your Brush** 



## **Choose Your Options**



#### **Antimicrobial Sanitation Package**

- Clean With Chemical, or Aqueous Ozone
- Spray Wand For Hard To Reach Places
- Antimicrobial Tank
- Dedicated 3 Gallon Disinfectant Tank



#### **Scrub And Vac Wand / Spray Jet**

- Brush for scrubbing, squeegee for water pickup
- Clean restrooms and under tables
- Pre soak the floor before scrubbing
- Rinse out recovery tank



### **Onboard Charger / AGM Batteries**

- Convenient Charging anywhere
- Logs most recent charge events
- Maintenance Free Batteries
- Spill Proof Housing



#### **Stainless Frame**

- Stainless Metal prolongs machine life
- Guards against moisture and chemical
- Great for corrosive applications (fertilizer, salt spreading for DOT)



#### Suds / ZERO3

- Automatic portion control with Suds
- Cleaning with chemical free Aqueous Ozone



#### Metal Lid / HD Wheels / Disk Shroud

- Heavy Duty Steel Lid
- Steel Hub HD Wheels
- Removable Disk Shroud

You Be The Judge

Easy Access to key components:
Vac Motor
Batteries
Deck Actuator
Solution Valve
Filters-Screens
Soap Drain

Battery Box Drain

Unloader Valve

Vac Switch

Scrub Motors



# Tip Back Tank

Our designers all have 25+ years of experience and recognize cleaning equipment will eventually require service.

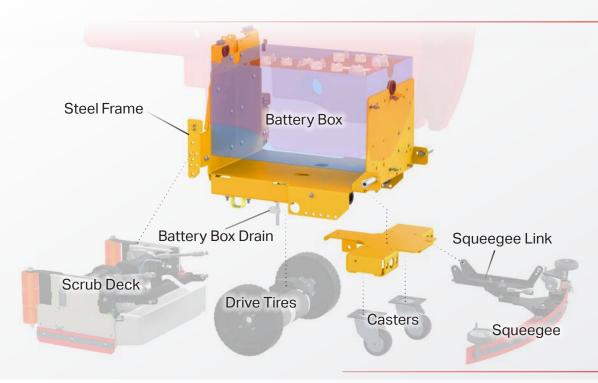
- Tanks tip back without tools, providing easy top side access to all important service items.
- Quick access allows the technician to trouble shoot from their feet and make repairs quickly, with less chance of creating unintended problems from disassembling 5 items to get to the 1 that failed.



## Large Clear Lid

Any customer who has previously owned and operated cleaning equipment will appreciate the value of full time viewing of the dirty water recovery tank.

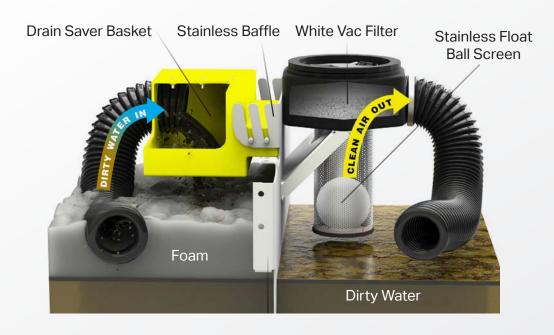
- This provides the operator with a real time view of the dirty water level, foam, debris tray, the vacuum's white dust filter and more.
- The fully accessible recovery tank is easily our most significant feature for cost reduction. Open the lid to clean out the recovery tank, eliminating odors and other contaminants which can become airborne and inhaled by employees.



### Steel Frame

We spend the extra time and money to through-bolt with stainless fasteners for longevity and service ease in the future. Some of our larger machines have 600-lbs in batteries in a full height poly liner, supported by the steel frame.

- All assemblies mount directly to the 7-ga (3/16" thick) steel frame, instead of plastic parts that will fatigue in time.
- Accidental damage to casters, or over tensioning the frame during transport will not damage our tanks since we don't bolt collision points to the poly tank.

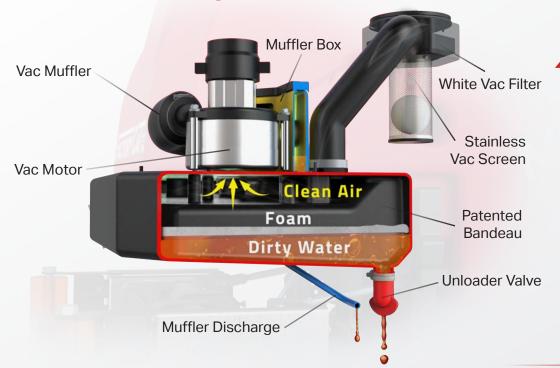


# **Baffle System**

Another feature you'll not find elsewhere is our stainless baffle wall that controls foam in the recovery tank.

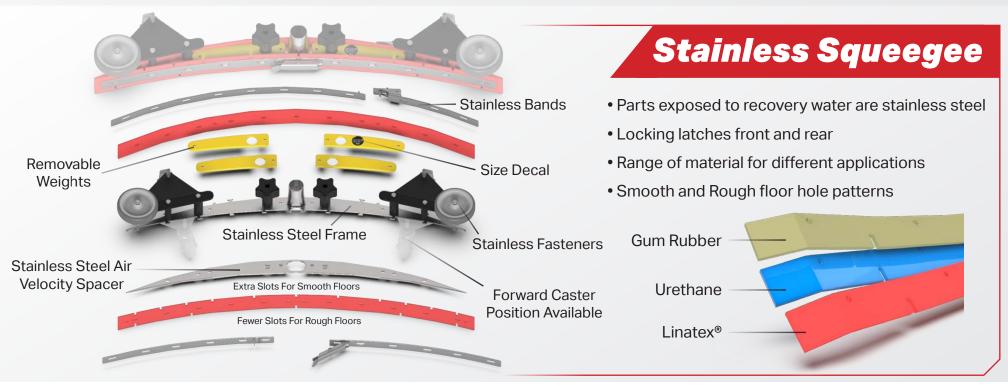
- The dirty water passes into our drain saver basket, and then fills up the rear side of the baffle such that the foam doesn't migrate to the front where the stainless screen and ball float operates.
- The stainless screen and white vacuum filter offer additional protection. These are the first of several steps taken to ensure good airflow (squeegee performance) and protecting the vacuum motor from moisture.

### You Be The Judge



## Patented Bandeau System

- This design was so unique and meaningful it earned a US Patent, and something you won't find elsewhere.
- The black bandeau is vacuumized and holds 1-gallon of foam or dirty water away from the vac motor, backing up the primary filters and balls screens.
- The "unloader" valve automatically drains off any residual water when vac is OFF.
- The yellow muffler box both reduces the noise and also directs any digested water out a tube, to alert the operator to a problem.



### **Applications**



### **Automotive**

Automotive dealerships and large Truck service centers are some of the toughest applications we've run across. Our equipment offers the maneuverability and performance to clean showrooms full of new cars on expensive floors. The same machine can survive use around steel car lifts, concrete edging and metal floor grates.



## **Aviation**

These customers appreciate reliability and quality as much as anyone. Our scrubbers collect floor debris and prevent FOD better than others, and the compact size combines productivity with good sight lines for operating close to expensive aircraft. Several aircraft manufacturers and FBO's trust our equipment to clean their assembly plants and service centers.



## Warehouse

Large distribution centers need maximum scrub path, tank capacities and run time, but in a footprint that allows for easy u-turns and cleaning close to racking. Our heavy duty products can withstand the expected collisions and have excellent water control so your stored product is protected. Our scrubbers offer superior productivity and durability.

### **Applications**



## Food & Beverage

Customers who deal with food and beverage manufacturing, processing and distribution appreciate our fully cleanable recovery tank and performance on the floor. Cleaning the reservoir that contains the dirty water eliminates bad odors and the transfer of various contaminants. Our optional onboard ozone system and remote hand tools takes this to an even higher level.



## **Manufacturing**

The process of cutting, welding, assembling and otherwise "building" stuff can be a tough application. Even with the latest production equipment it can be an environment demanding heavy duty products. Our equipment is built to take abuse and is easily serviced when necessary.



# **Sports Arena**

Applications that typically combine large open areas where productivity is important, with smaller aisles or elevators to access different locations. Our varied scrub head types and brushes allow customers broad flexibility for cleaning wood, tile, rubber, concrete, painted and other highly valued surfaces.

### **Specifications**



\*Includes Onboard Charger D. . . Ti-- -

Productivity - Theoretical:

\*\*\*Based off of ISSA 2010 Cleaning Times

Productivity - Practical:

\*\*\*Based off of ISSA 2010 Cleaning Times

### Aicro-HD v2 0

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BODY CONSTRUCTION / DIM	ENSIONS
Chassis Construction:	3/16" Steel (4.8 mm) Powder Coated
Front Wheels (Ø x Width)	(2x) 8" x 2" ([2x] 20 x 5 cm) - Solid Black
Rear Casters (Ø x Width):	(2x) 2.5" x 1.38" ([2x] 6 x 4 cm) - Non-Marking Grey
Size (L $\times$ W $\times$ H):	45" × 21" × 39" (114 × 53 × 99 cm)
Weight (w/o Batteries):	278 - 328 lbs (126 - 149 kg)
Weight (w/ 210 ah Batteries):	410 - 460 lbs (186 - 209 kg)
BRUSH / PAD SYSTEM	
Disk Dimensions:	20" - (1x) 20" Ø (51 - [1x] 51 cm)
Includes Jaws with Rollers for Wall Protection	26" - (2x) 13" Ø (66 - [2x] 33 cm)
Disk Motor:	20" (1x) 0.75 hp/ 200 rpm(51 cm [1x] 551 watts)
	26" - (2x) 0.75 hp/ 270 rpm(66 cm [2x] 551 watts)
Optional Motor Upgrade:	(2x) 1.0 hp / 350 rpm ([2x] 735 watts)
Cylindrical Dimensions: 6" Ø Brush	25" - (2×) 6" × 23" (64 - [2×] 15.2 × 58 cm)

(2x) 0.75 hp / 270 rpm (2x) 551 watts)
750 rpm
20" × 14" (51 × 35.6 cm) 24" × 14" (61 × 35.6 cm)
1.0 hp (735 watts) 2,500 rpm
Up to 175 lbs (79 kg) / 500 lbs (227 kg) Actuator Ratin
24 VDC / 130 ah WET
150 ah WET / 115 ah AGM* / 140 ah AGM*

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	Run Time:	Up to 2.5 Hours**		
	**Based on continuous scrubbing run times.			
	DRIVE SYSTEM			
	Power:	0.75hp - All Gear / Sealed (551 watts) & Pad Assist		
	Forward Speed:	0 - 230 ft/min / 0 - 2.6 mph (0 - 70 m/min / 0 - 4 km/h)		
	Scrubbing Speed:	0 - 184 ft/min / 0 - 2 mph (0 - 56 m/min / 0 - 3 km/h)		
	Reverse Speed:	0 - 130 ft/min / 0 - 1.5 mph (0 - 40 m/min / 0 - 2 km/h)		
	SOLUTION / RECOVERY SYSTEMS			
	Solution Tank Capacity:	12 Gallons (45 liters) - w/ Graduated Site Tube		
	Solution Flow / Filter:	0 - 0.5 GPM / Stainless Inline (0 - 2 LPM)		
	Recovery Tank Capacity:	15 Gallons (56.8 liters) - 1.5" Ø Drain Hose		
	Small Tank Capacity:	N/A		
	Demisting Chamber:	1.25 Gallons (4.7 liters)		
	Drain Saver:	30 cubic inches (492 cubic cm)		
	Vacuum Power	0.8 hp / 3 Stage / 5.7" Ø (588 watts)		
	(Water Lift / Airflow):	68" / 72 cfm (173 cm / 2 cm)		
	GENERAL			

Up to 26,000 sqft/hr (2,415 sqm)\*\*\*

Up to 12,059 sqft/hr (1,120 sqm)\*\*\*



	Mini-HD v2.0
BODY CONSTRUCTION / DIM	ENSIONS
Chassis Construction:	3/16" Steel (4.8 mm) Powder Coated
Front Wheels (Ø x Width)	(2x) 10" x 2.5" ((2x) 25.4 x 6 cm) - Solid Black
Rear Casters (Ø x Width):	(2x) 4" x 2" ((2x) 10 x 5 cm) - Non-Marking Grey
Size (L × W × H):	52" × 22" × 40" (132 × 55 × 101 cm)
Weight (w/o Batteries):	393 - 443 lbs (178 - 201 kg)
Weight (w/ 210 ah Batteries):	625 - 675 lbs (284 - 306 kg)
BRUSH / PAD SYSTEM	
Disk Dimensions:	26" - (2x) 13" Ø (66 - [2x] 33 cm)
Includes Jaws with Rollers for Wall Protection	28" - (2x) 14" Ø (71 - [2x] 35 cm)
Disk Motor:	(2x) 0.75 hp / 270 rpm ([2x] 551 watts)
Optional Motor Upgrade:	(2x) 1.0 hp / 350 rpm ([2x] 735 watts)
Cylindrical Dimensions:	25" - (2x) 6" x 23" (63 - [2x] 15 x 58 cm)
6" Ø Brush	29" - (2x) 6" x 27" (73 - [2x] 15 x 68 cm)
Cylindrical Motor:	25" - (2x) 0.75 hp ([2x] 551 watts)
	29" - (2x) 1.0 hp ([2x] 735 watts)
Cylindrical Brush Speed:	750 rpm
Orbital Dimensions:	24" × 14" (61 × 35 cm) 28" × 14" (71 × 35 cm)
Orbital Motor:	1.0 hp (735 watts) 2,500 rpm
Brush Down Pressure:	Up to 175 lbs (79 kg) / 500 lbs (227 kg) Actuator Rating
POWER SYSTEM	
System Voltage/Amps	24 VDC / 210 ah WET
Optional Battery:	245 ah WET / 250 ah AGM*
*Includes Onboard Charger	
Run Time:	Up to 3.5 Hours**
**Based on continuous scrubbing run times.	
DRIVE SYSTEM	
Power:	0.75hp - All Gear / Sealed (559 watts)
Forward Speed:	0 - 290 ft/min / 0 - 3.3 mph (0 - 88 m/min / 0 - 5 km/h)
Scrubbing Speed:	0 - 229 ft/min / 0 - 2.6 mph (0 - 70 m/min / 0 - 4 km/h)
Reverse Speed:	0 - 202 ft/min / 0 - 2.3 mph (0 - 61 m/min / 0 - 4 km/h)
SOLUTION / RECOVERY SYS	TEMS
Tank Solution Capacity:	21 Gallons (79 liters) - w/ Graduated Site Tube
Solution Flow / Filter:	0 - 0.7 GPM / Stainless Inline (0 - 2 LPM)
Tank Recovery Capacity:	23 Gallons (87 liters) - 1.5" Ø Drain Hose
Small Tank Capacity:	16 Gal (60 liters) Solution 17 Gal (64 liters) Recovery
Demisting Chamber:	1.25 Gallons (4.7 liters)
Drain Saver:	30 cubic inches (492 cubic cm)
Vacuum Power	0.8 hp / 3 Stage / 5.7" (588 watts)

68" / 72 cfm (173 cm / 2 cm)

Up to 29,029 sqft/hr (2,696 sqm)\*\*\*

Up to 13,454 sqft /hr (1,250 sqm)\*\*\*

(Water Lift / Airflow): **GENERAL** 

Productivity - Theoretical:

\*\*\*Based off of ISSA 2010 Cleaning Times

Productivity - Practical:

\*\*\*Based off of ISSA 2010 Cleaning Times

#### Mag-HD v2.0 **BODY CONSTRUCTION / DIMENSIONS** Chassis Construction: 3/16" Steel (4.8 mm) Powder Coated Front Wheels (Ø x Width): (2x) 12" x 2.75" ([2x] 30 x 7 cm) - Solid Black Rear Casters (Ø x Width): $(2\times)$ 5" $\times$ 2" $((2\times)$ 12.7 $\times$ 5.1 cm) - Non-Marking Grey Size $(L \times W \times H)$ : $55" \times 26" \times 40"$ (139 × 66 × 101 cm) Weight (w/o Batteries): 441 - 481 lbs (200 - 218 kg) 775 - 825 lbs (352 - 374 kg) Weight (w/ 315 ah Batteries): BRUSH / PAD SYSTEM Disk Dimensions: 30" - (2x) 15" Ø (76 - [2x] 38 cm) 34" - (2x) 17" Ø (86 - [2x] 43 cm) Includes Jaws with Rollers for Wall Protection Disk Motor: (2x) 1.0 hp / 350 rpm ([2x] 735 watts) Optional Motor Upgrade: (2x) 1.0 hp / 350 rpm ([2x] 735 watts) Cylindrical Dimensions: 29" - (2x) 6" x 27" (73 - [2x] 15 x 68 cm) 6" Ø Brush 33" - (2x) 6" x 31" (83 - [2x] 15 x 78 cm) Cylindrical Motor: (2x) 1.0 hp ([2x] 735 watts) Cylindrical Brush Speed: 750 rpm Orbital Dimensions: 28" x 14" (71 x 35 cm) $32" \times 14" (81 \times 35 cm)$ Orbital Motor: 1.0 hp (735 watts) 2,500 rpm

Brush Down Pressure:	Up to 185 lbs (84 kg) / 500 lbs (227 kg) Actuator Ratin
POWER SYSTEM	
System Voltage/Amps	24 VDC / 310 ah WET
Optional Battery:	360 ah WET / 335 ah AGM*
*Includes Onboard Charger	
Run Time:	Up to 5.0 Hours**

0.75hp - All Gear / Sealed (559 watts)

#### \*\*Rased on continuous scrubbing run times DRIVE SYSTEM

Forward Speed:	0 - 290 ft/min / 0 - 3.3 mph (0 - 88 m/min / 0 - 5 km/h)
Scrubbing Speed:	0 - 229 ft/min / 0 - 2.6 mph (0 - 70 m/min / 0 - 4 km/h)
Reverse Speed:	0 - 202 ft/min / 0 - 2.3 mph (0 - 61 m/min / 0 - 4 km/h)
SOLUTION / RECOVERY SYS	TEMS
Tank Solution Capacity:	35 Gallons (132 liters) - w/ Graduated Site Tube
Solution Flow / Filter:	0 - 1.0 GPM / Stainless Inline (0 - 4 LPM)
Tank Recovery Capacity:	37 Gallons (140 liters) - 1.5" Ø Drain Hose
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37 Gallons (140 liters) - 1.5" Ø Drain Hose
32 Gal (121 liters) Solution 33 Gal (125 liters) Recovery
33 Gai (125 mers) Necovery
1.25 Gallons (4.7 liters)
30 cubic inches (492 cubic cm)
0.8 hp / 3 Stage / 5.7" (588 watts)
68" / 72 cfm (173 cm / 2 cm)

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Power:

Productivity - Theoretical:	Up to 33,932 sqft/hr (3,152 sqm)***
***Based off of ISSA 2010 Cleaning Times	
Productivity - Practical:	Up to 15,784 sqft /hr (1,466 sqm)***
***Based off of ISSA 2010 Cleaning Times	





We produce heavy duty equipment and require a good amount of thick steel in the construction. We use a combination of Stainless 304 (Austenitic 18/8) and mild steel with e-coating + powder paint for corrosion resistance. Steel fabrication is done in-house or from local suppliers with specialty equipment.



Complex shapes that allow for our "tank-in-tank" design are best achieved with in-house equipment. We own multiple dual station rotational molding machines that allow us to produce finished parts from raw plastic. Producing consistently higher quality parts and respond quickly to sales spikes.



Our team has designed and engineered over 100 unique machines. Each new generation of machines evolve from prior designs to retain the strengths and correct any weakness. From the first pencil sketch we focus on durability, serviceability, performance, productivity, specifications, and value.