

CARTER DAY
24 and 48 SCALPERATOR
AGRIBUSINESS CAPACITIES

24 MODULAR SCALPERATOR

Table with dimensions and capacities for the 24 Modular Scalperator. Dimensions include width, length, height, and weight for both open and closed circuits. Capacities are listed for various crops like Wheat, Barley, Corn, Soybeans, etc., based on 3/4" x 3/4" mesh.

Table with capacities for the 24 Modular Scalperator based on 3/4" x 3/4" mesh. Columns list crop types and their respective capacities in Bu/Hr and MT/Hr.

(Alternative scalping screen sizes available)

48 MODULAR SCALPERATOR

Table with dimensions and capacities for the 48 Modular Scalperator. Dimensions include width, length, height, and weight for both open and closed circuits. Capacities are listed for various crops like Wheat, Barley, Corn, Soybeans, etc., based on 3/4" x 3/4" mesh.

Table with capacities for the 48 Modular Scalperator based on 3/4" x 3/4" mesh. Columns list crop types and their respective capacities in Bu/Hr and MT/Hr.

(Alternative scalping screen sizes available)

- NOTE:
1. Hourly input ratings are directly influenced by the screen sizes, the amount of foreign materials, the physical characteristics of the product, and the moisture content.
2. Capacities shown are in bushels and metric tons (one metric ton weighs 1,000 kilos or 2,205 pounds).
3. Capacities shown are based on U.S. harvesting practices.
4. Dry grains are considered to have a moisture content of less than 14%.
5. The following volumetric weights (pounds/bushel) apply:

Table showing volumetric weights (pounds/bushel) for various crops: Barley, Soybeans, Canola, Sorghum, Safflower, Corn (Maize), Paddy Rice, Mustard, Oats, Wheat, Sunflower Seed, and Edible Beans.

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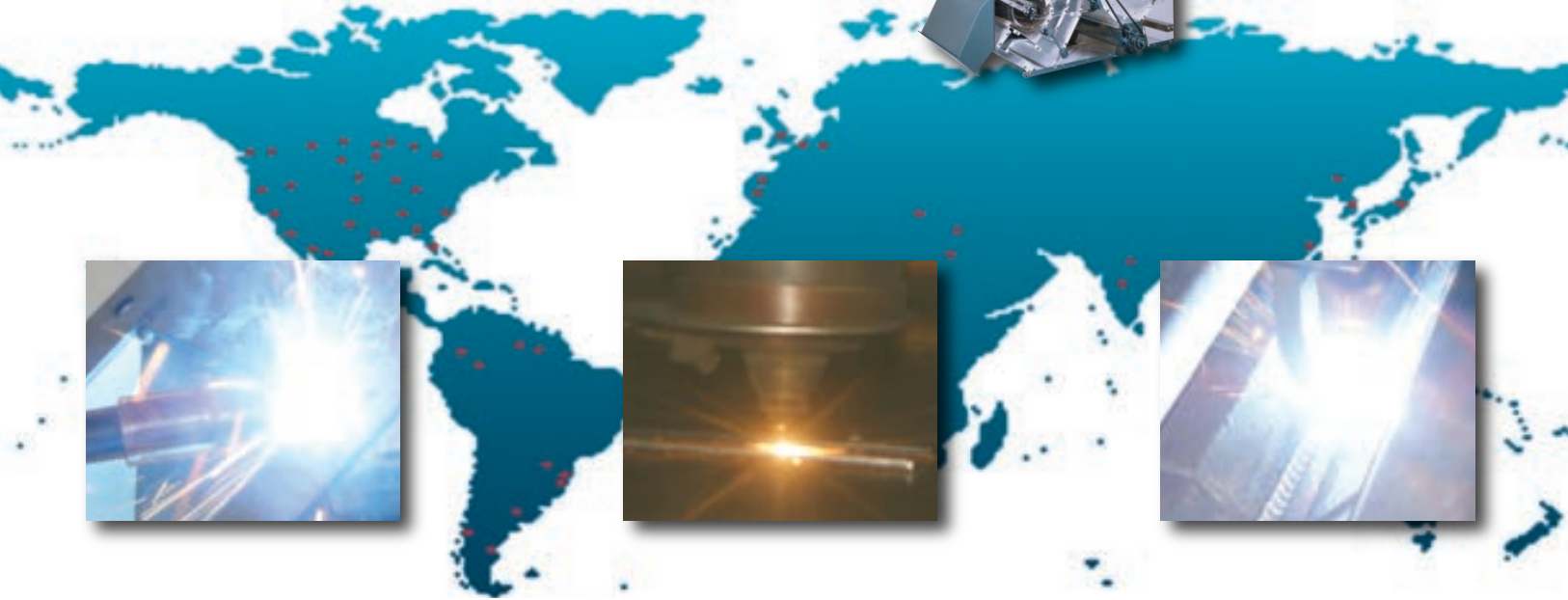
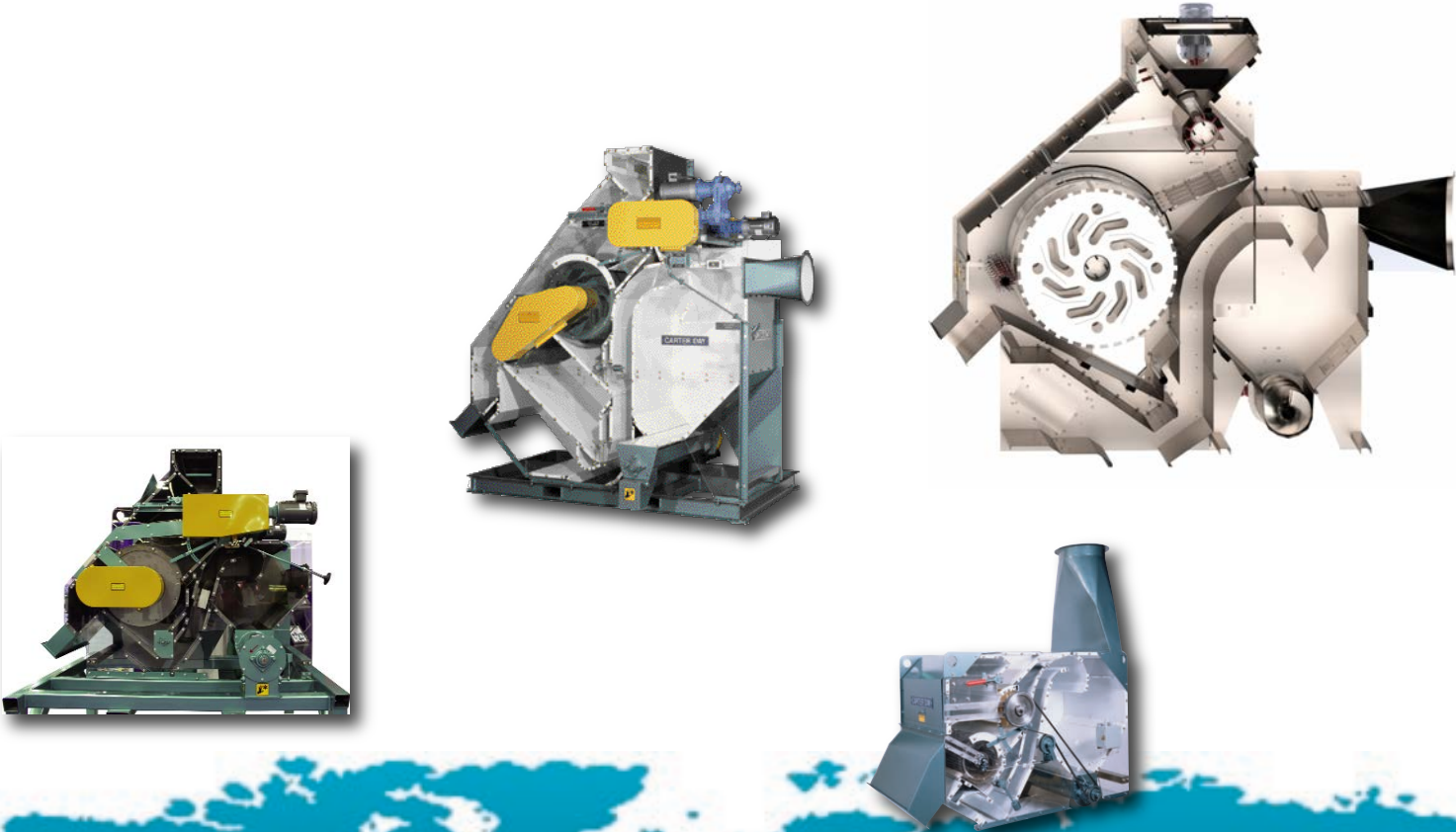


CARTER DAY
Sizing & Separating Equipment
JACOBSON

SCALPERATOR GUIDE

24 AND 48 SCALPERATOR AGRIBUSINESS AND PLASTICS

24 AND 11 SCALPERATOR LOW PROFILE AGRIBUSINESS



WORLDWIDE REPRESENTATION

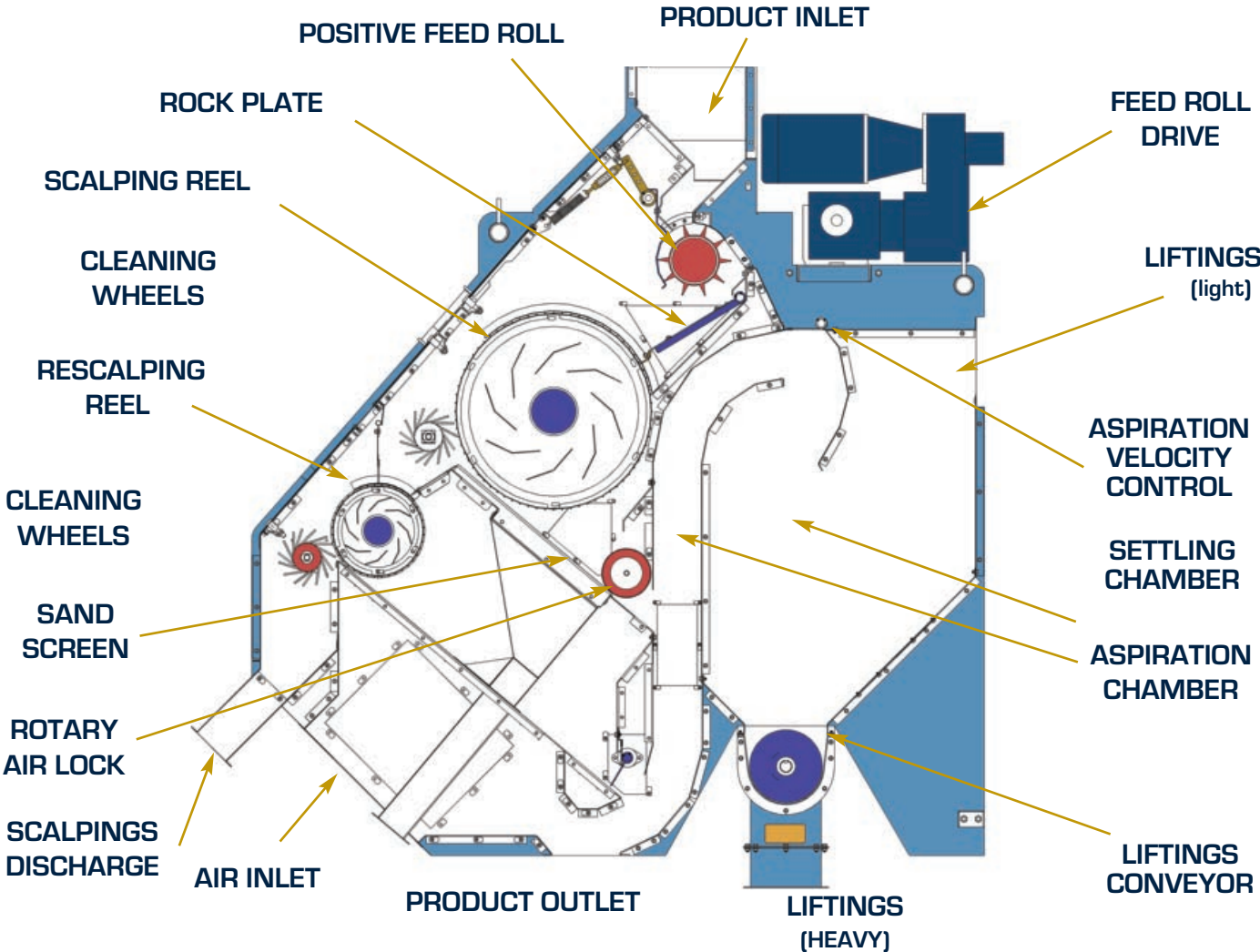
CARTER DAY
THE SCALPERATOR

For more than 75 years Carter Day has been manufacturing quality equipment. We continue this tradition with the 11,24 and 48 Scalperator for high capacity, one pass cleaning of incoming or outgoing grains, seeds, and rice and plastic pellets.

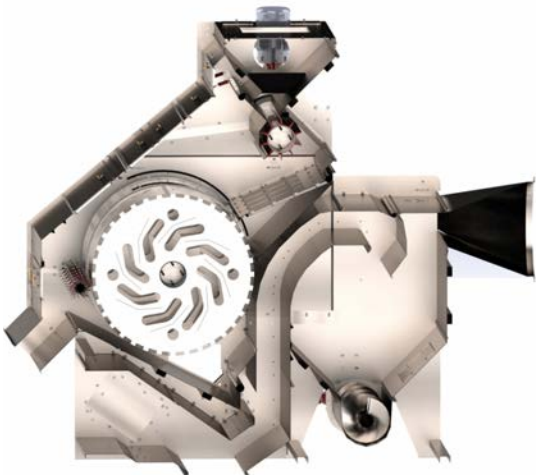
The 24 Scalperator features scalping, rescalping and aspiration in a single machine to provide a high capacity method for removing roughage, light fines and chaff in a single pass. Incoming grain passes through a rotating wire mesh or perforated scalping reel eliminating roughage and other over- sized materials and high volume aspiration then removes the light materials. On wheat and barley we able to take standard dockage with levels of 2 percent down to .5 percent or less.

When your application calls for fine scalping using a near size slot or round hole the scalperator can handle the task. Using a 13 - 15/64th wire we can take wheat scalping to fine cleaning. On wheat and barley we able to take standard dockage with levels of 2 percent down to .5 - .25 percent.

Performance-engineered aspiration chamber and flow-modulated air valve provide consistent cleaning of the product and our simplified design provides for easy clean out and routine maintenance. Our oversized settling chamber auger allows for high capacity take away when the application requires it.



CARTER DAY
48 SCALPERATOR
DOUBLES . STREAMERS . FINES REMOVAL



The 48 Scalperator is a machine for processors who need overall high capacity, high capacity in a smaller foot print or fine scalping using smaller scalping apertures. The 48 Scalperator for high capacity of scalping and aspiration of free flowing plastic pellets.

The 48 Scalperator featuring scalping and aspiration in a single machine which provides a high capacity method for removing streamers, agglomerates, and fines in a single pass, surpassing the capabilities of traditional Elutriators. Incoming pellets pass through a rotating perforated scalping reel eliminating angle hair and other over- sized materials and high volume aspiration then removes the light materials.

When your application calls for fine scalping using a near size slot or round hole the scalperator can handle the task. Using a 13/64th wire slot we are able to remove doubled pellets and aspirate fines and broken pellets in one pass.

Performance-engineered aspiration chamber and flow-modulated air valve provide consistent cleaning of the product and our simplified design provides for easy clean out and routine maintenance. The 48 Scalperator has both high capacity and standard capacity aspiration thickness dependent on the scalping reel aperture size defined at time of order.

Operator friendly machine controls of the rock plate and aspiration chamber provides accurate control of all process variables. Indicators on these controls provide enhanced repeatability and accurate machine set-up. Impact resistant polycarbonate windows allow the operator to monitor cleaning performance. Simplified design provides for easy clean out, access for routine maintenance and reel and feed valve replacement.

24 SCALPERATOR CAPACITIES

Pellet Size/Pellet/Reel Perforation	24x28/CFM *6"	24x56/CFM *6"	24x84/CFM *6"	24x112/CFM *6"
3x4.5 mm (PP, HDPE,LDPE) With Slip, 1/2 R	20/2500	40/5000	60/7500	80/10000
3x4.5 mm (PP, HDPE,LDPE) No Slip,1/2 R	17/2500	34/5000	51/7500	68/10000
3.2x3 mm (PP, HDPE,LDPE) Slip,1/2 R	25/2500	50/5000	75/7500	100/10000

48 SCALPERATOR CAPACITIES

Pellet Size/Pellet/Reel Perforation	48x28/CFM *6"	48x56/CFM *6"	48x84/CFM *6"	48x112/CFM *6"
3x4.5 mm (PP, HDPE,LDPE) With Slip, 1/2 R	79/2007	107/2718	134/3404	163/4140
3x4.5 mm (PP, HDPE,LDPE) No Slip,1/2 R	135/3430	141/3581	149/3785	155/3937
3.2x3 mm (PP, HDPE,LDPE) Slip,1/2 R	130/3302	130/3302	134/3404	134/3404

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24 SCALPERATOR

STREAMERS AND FINES REMOVAL

We continue 24" Scalperator tradition with our high capacity, one pass cleaning of pellets from the dryer or outgoing plastic pellets at finishing.

The Scalperator features scalping and aspiration in a single machine to provide a high capacity method for removing agglomerates, light fines and broken in a single pass. Incoming plastic passes through a perforated agglomerate plate and perforated scalping reel eliminating agglomerates and other oversized materials and high volume aspiration then removes the light materials.

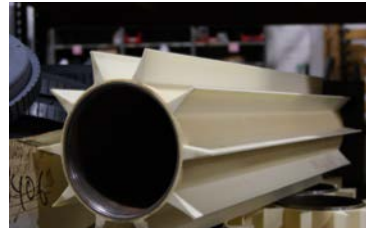
Performance-engineered aspiration chamber and flow-modulated air lock valves provide consistent cleaning of the product and our simplified design provides for easy clean out and routine maintenance.

Operator friendly machine controls provide accurate control of all process variables. Optional feedback indicators on critical process variables provide enhanced repeatability and accurate machine set-up. Impact resistant polycarbonate windows allow the operator to monitor cleaning performance. Simplified design provides for easy clean out and access for routine maintenance.



The Stainless Steel Scalperator features scalping and aspiration in a single machine which provides a high capacity method for removing streamers, agglomerates, and fines in a single pass.

Incoming pellets pass through a rotating perforated scalping reel eliminating streamers and other oversized material. The high volume aspiration then removes fines from the pellet stream.

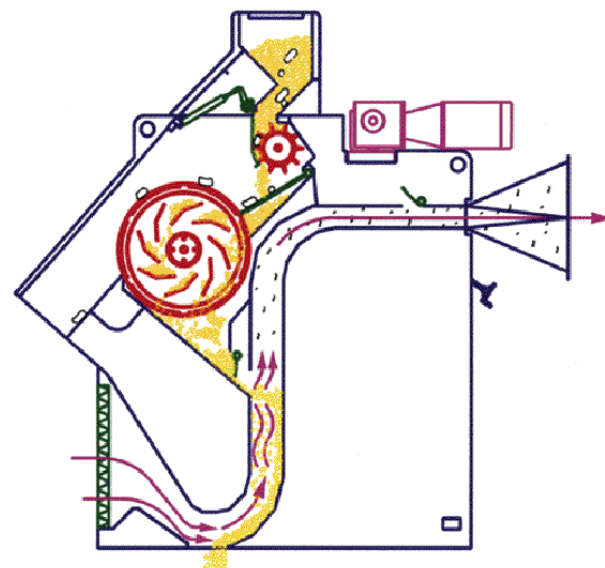


A **molded urethane feed roll** accurately controls the process feed rate and provides a positive shut-off. The urethane feed roll has high wear resistance and its smooth surface resists build-up of product and contamination.

The **agglomerate plate** ensures high capacity scalping performance and minimizes agglomerates and other particulate buildup behind the scalping reel.

Rotating Scalping Reel is constructed of a electro polished stainless steel perforated screen with 1/2" (12.7 mm) diameter holes. The perforated screen design eliminates blinding of the scalping reel.

Performance-engineered aspiration chamber and flow-modulated air lock valve provides high efficiency cleaning of the product.

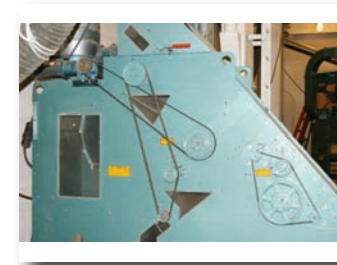


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SCALPERATOR ADVANTAGES

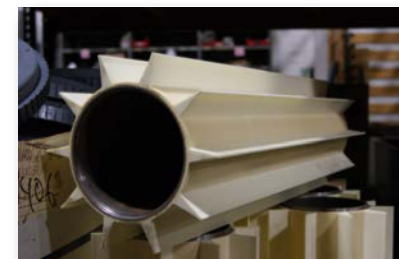
Operator friendly machine controls of the rock plate and aspiration chamber provides accurate control of all process variables. Indicators on these controls provide enhanced repeatability and accurate machine set-up. Impact resistant polycarbonate windows allow the operator to monitor cleaning performance. Simplified design provides for easy clean out, access for routine maintenance and reel and feed valve replacement.



The **HTD drive** package provides increased reliability and decreased downtime with minimal adjustment and maintenance.



The **rock plate** ensures high capacity scalping performance and minimizes rock and other particulate buildup behind the scalping reel. The correct setting of the rock plate position establish stick separation.



A **molded urethane feed roll** accurately controls the feed rate and provides a positive shut-off. The urethane feed roll is highly wear resistance and its smooth surface resists build-up of product and contaminations. VFD controlled variable speed drive accommodates a variety of feed rate ranges.



FEED VALVE feed roll accurately controls the high capacity feed rate and provides a positive shut-off. The steel valved feed roll is highly wear resistance and its smooth surface resists build-up of product and contaminations. VFD controlled by customer to provide feed rate changes.



A **molded urethane feed roll gate** accurately controls the process feed rate as the product enters the air wash. The VFD controlled variable speed drive of the feed roll controls the feed roll and feed roll gate RPM to accommodate variety of feed rate ranges.



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SCALPING REELS & WIPERS



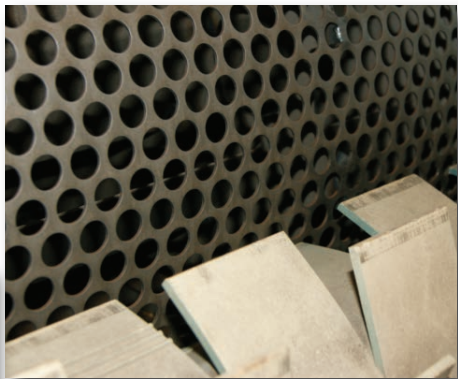
Round Hole Perforated Scalping Reels custom punched and specially hardened by Carter Day provides unmatched Scalping Cleaning. The terrific cleaning of sticks, straw, pods, string etc. comes from the proper selection of the punched round hole diameter.

Mesh Scalping Reels custom made with hardened wire for high capacity cleaning of sticks, straw, pods, string etc. comes from the proper selection of the mesh size.



Round Hole Perforated Stainless Steel Scalping Reels custom punched and specially polished by Carter Day provides unmatched Scalping Cleaning. The terrific cleaning of streamers, agglomerates and triples. High performance comes from the proper selection of punched round hole diameter.

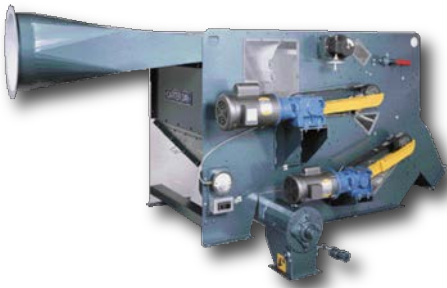
Patented Molded Elastomer Wiper Blades provide critical cleaning of the Scalping and Rescalping Reel. The terrific cleaning of sticks, straw, pods, string etc. comes from the proper matching of round hole or mesh scalping reels and wiper blades.



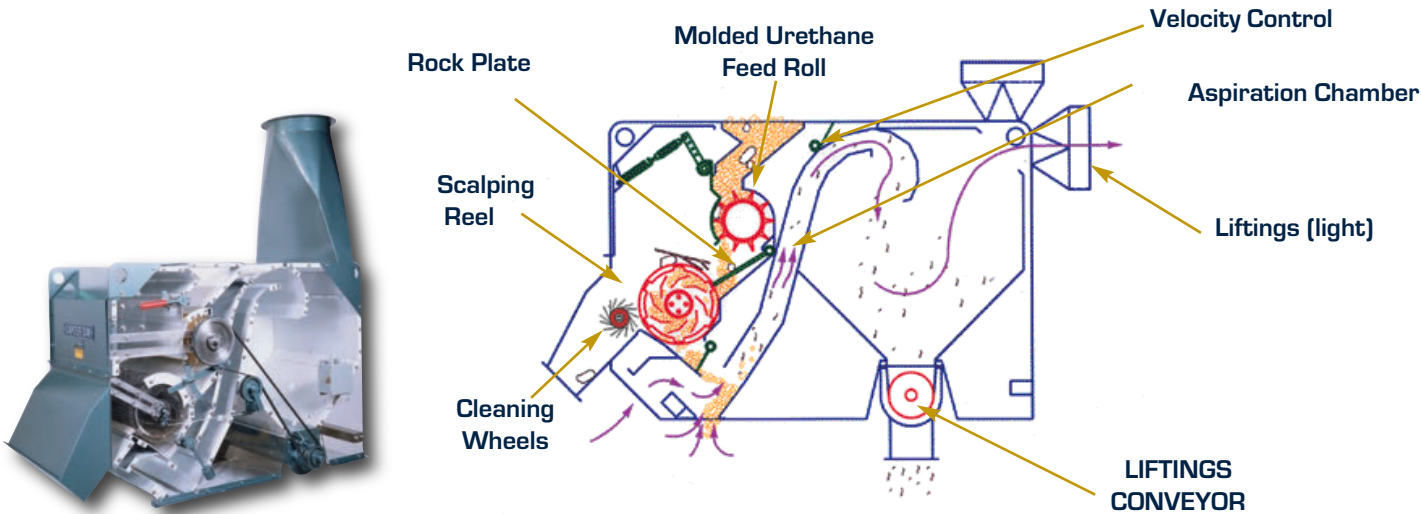
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11" LOW PROFILE SCALPERATOR

The 11" Scalperator provides lower capacities in a low-profile design, shares many of the features of the 24" Scalperator. The 11" Scalperator line is designed to be coupled directly to many of our cleaning machines which require pre-cleaning of the incoming product before finish cleaning. It can also be used as a stand-alone pre-cleaner where installation conditions demand a low-profile machine.



The shared features of the 24" Scalperator found in the 11" model are defined in the below flow diagram.

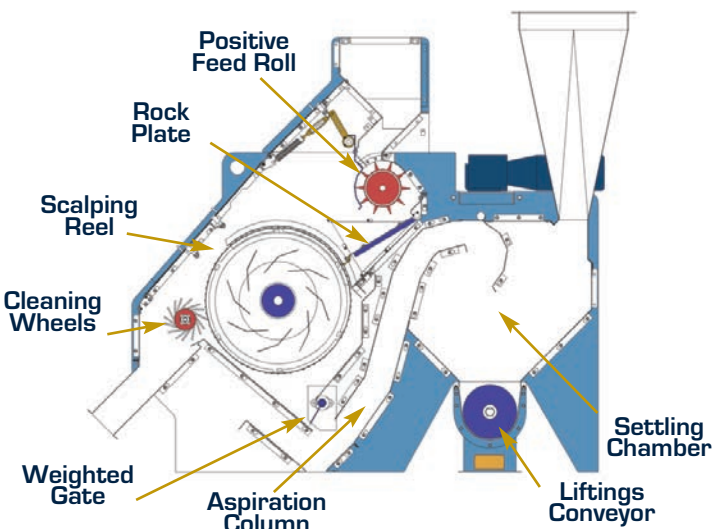


11" MODULAR SCALPERATOR									
DIMENSIONS	28" WIDTH		56" WIDTH		84" WIDTH		112" WIDTH		
	US	METRIC	US	METRIC	US	METRIC	US	METRIC	
OPEN CIRCUIT									
WIDTH	49"	1245 mm	77"	1956 mm	105"	2667 mm	133"	3379 mm	
LENGTH	106"	2692 mm	106"	2692 mm	106"	2692 mm	106"	2692 mm	
HEIGHT	48"	1219 mm	50"	1270 mm	51"	1295 mm	52"	1320 mm	
WEIGHT	1225lbs	557 kgs	1750lbs	796 kgs	2300lbs	1046 kgs	2900lbs	1319 kgs	
CAPACITIES	CAPACITIES BASED ON 3/4" x 3/4" MESH SCALPING SCREENS *								
	Bu/Hr	MT/Hr	Bu/Hr	MT/Hr	Bu/Hr	MT/Hr	Bu/Hr	MT/Hr	
Wheat	630	16.3	1250	34.0	1900	51.4	2500	68.0	
Barley	500	10.9	1050	22.9	1600	34.8	2100	45.7	
Safflower	450	11.4	950	24.1	1400	35.6	1900	48.2	
Corn	400	10.2	800	20.3	1200	30.5	1600	40.6	
Soybeans	400	10.8	800	21.6	1200	32.6	1600	43.2	
Oats	400	5.8	800	11.6	1200	17.4	1600	23.2	
Sunflower	300	4.4	600	8.7	900	13.1	1200	17.4	
Paddy Rice (dry)	300	6.1	600	12.2	900	18.4	1200	24.4	
Paddy Rice (wet)	175	3.6	350	7.2	500	10.2	700	14.4	
Edible Beans	325	8.8	650	17.7	1000	16.3	1300	35.4	
Canola	250	6.8	500	13.6	750	24.0	1000	27.2	
Mustard	250	6.8	500	13.6	750	20.4	1000	27.2	
Sorghum	600	15.2	1200	30.4	1800	45.7	2400	60.8	

NOTE:

- Hourly input ratings are directly influenced by the screen sizes, the amount of foreign materials, the physical characteristics of the product, and the moisture content.
- Capacities shown are in bushels and metric tons (one metric ton weighs 1,000 kilos or 2,205 pounds).
- Capacities shown are based on U.S. harvesting practices.
- Dry grains are considered to have a moisture content of less than 14%.
- The following volumetric weights (pounds/bushel) apply:

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24 LOW PROFILE SCALPERATOR



The 24" Low Profile Scalperator features scalping and aspiration in a single machine to provide a high capacity method for removing roughage, light fines and chaff in a single pass.

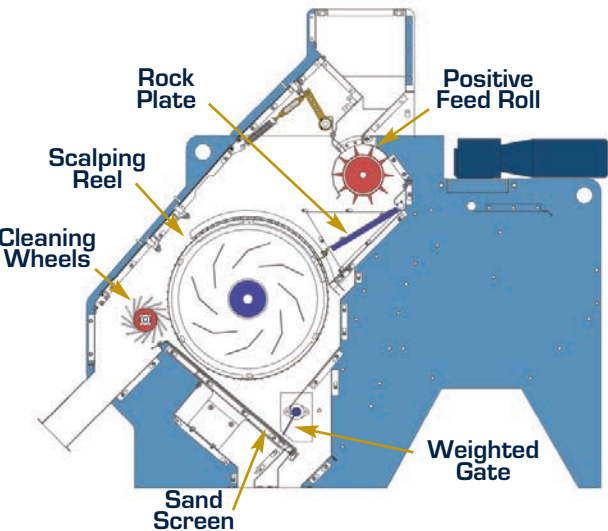
High capacity stand-alone pre-cleaning where installation conditions demand a low-profile machine.

We use all of the features of our 24" Scalperator in our low profile size less the feed roll gate.

The 24" Low Profile Scalper features scalping and sifting in a single machine to provide a high capacity method for removing roughage and fines in a single pass.

High capacity stand-alone scalping and sifting where installation conditions demand a low-profile machine.

We use all of the features of our 24" Scalperator in our low profile size less the feed roll gate.

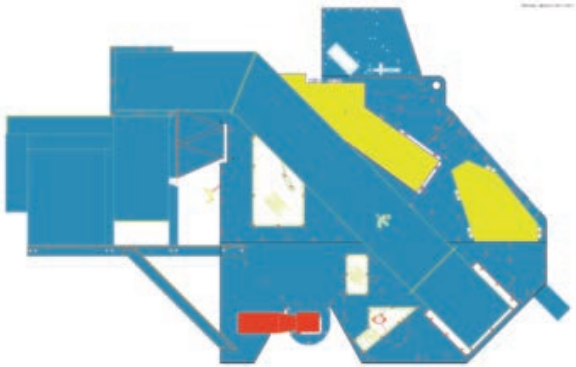


24" MODULAR SCALPERATOR LOW PROFILE

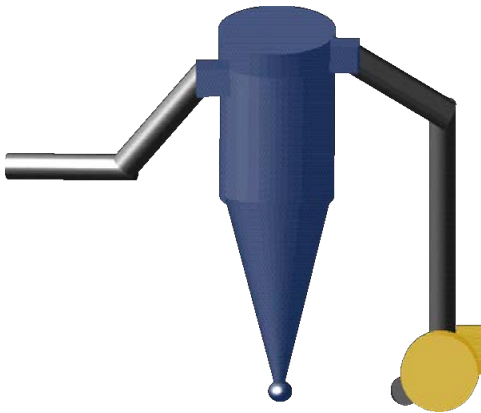
Table with dimensions and capacities for the 24 inch Modular Scalperator Low Profile. Dimensions include width, length, height, and weight for open circuit configurations. Capacities are listed for various crops like Wheat, Barley, and Soybeans, based on 3/4 inch x 3/4 inch mesh scalping screens.

Complete laboratory service is at your disposal. Carter Day's facility enables us to test your unique product sample in our laboratory or on full size equipment to aid in determining the right machine for your application.

CARTER DAY
OPTIONS AND UPGRADES

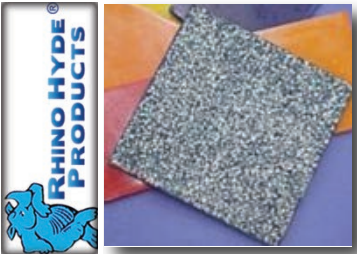


CLOSED CIRCUIT



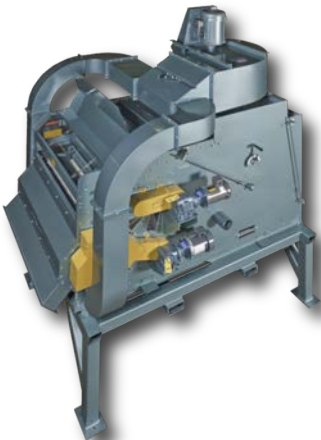
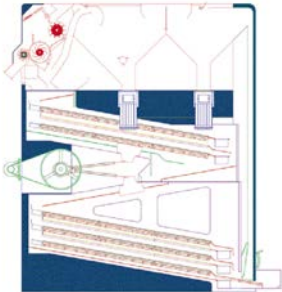
OPEN CIRCUIT

24" Closed Circuit Air options can be field added, and conversions between closed and open-circuit machine configurations can be accomplished as future needs arise. Self contained closed circuit designs are available in all size ranges and features high-efficiency. Use dust pick ups to reduce dust recirculation.



Product Wear Liners are a great option to increase machine life. We offer replaceable bolt in AR and Rhino Hyde® with Ceramic Panels. Plus permeantly installed high wear resistant Ceramic Tile.

The ASC Top Air Scalperator features scalping and aspiration in a single machine to provide a high capacity method for removing roughage, light fines and chaff in a single pass.



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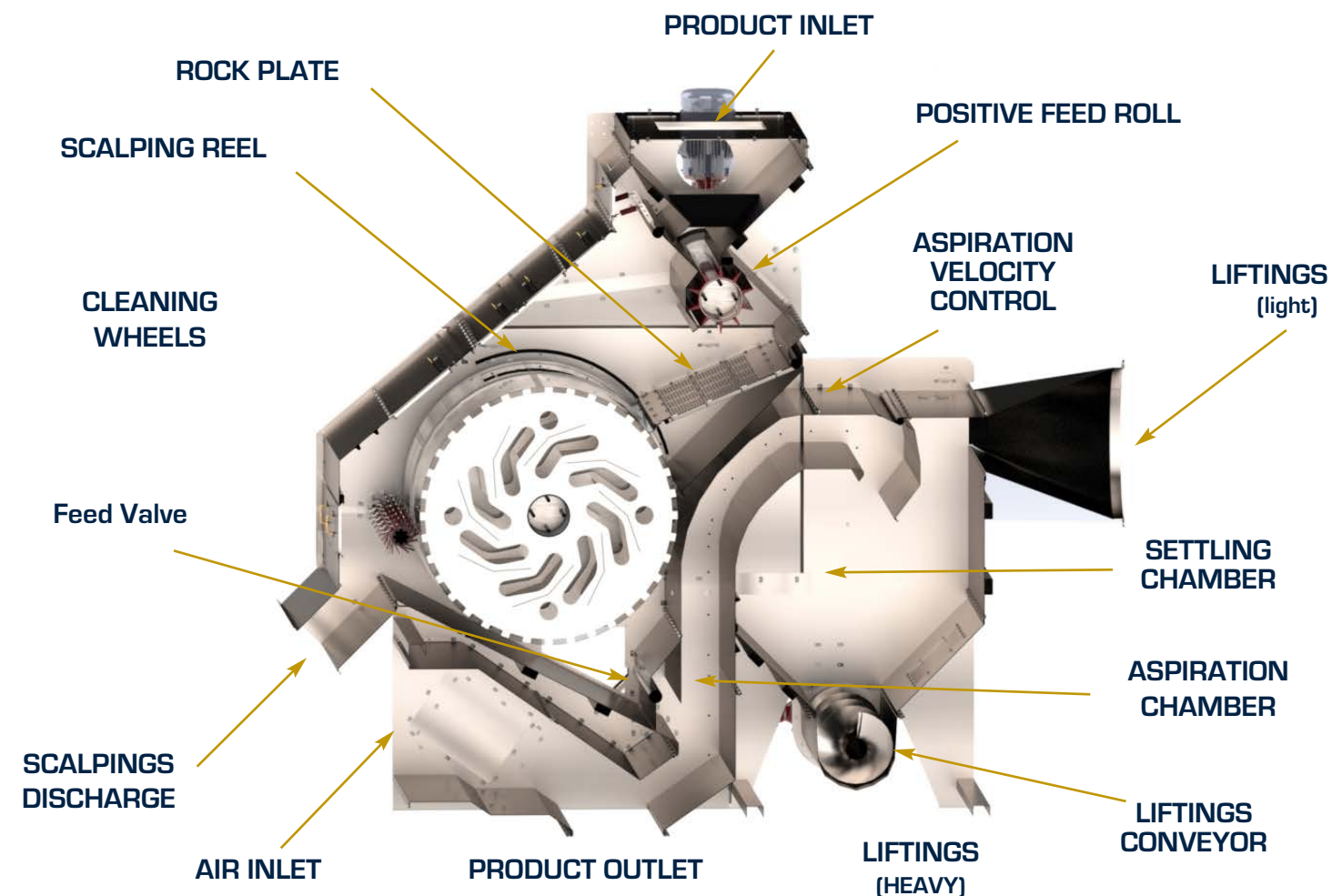
48 SCALPERATOR

HIGH CAPACITY CLEANING

The 48 Scalperator is a machine for processors who need overall high capacity, high capacity in a smaller foot print or fine scalping using smaller scalping apertures. The 48 Scalperator for high capacity, one pass scalping and aspiration of grains, seeds, and rice and all other free flowing materials.

The 48 Scalperator features scalping and aspiration in a single machine to provide a high capacity method for removing roughage, light fines and chaff in a single pass. Incoming grain passes through a rotating wire mesh or perforated scalping reel eliminating roughage and other oversized materials and high volume aspiration then removes the light materials. On wheat and barley we are able to take standard dockage with levels of 2 percent down to .5 percent or less.

When your application calls for fine scalping using a near size slot or round hole the scalperator can handle the task. Using a 13 - 15/64th wire we can take wheat scalping to fine cleaning. On wheat and barley we are able to take standard dockage with levels of 2 percent down to .5 - .25 percent.



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48 SCALPERATOR

HIGH CAPACITY SCALPING

Performance-engineered aspiration chamber and flow-modulated air valve provide consistent cleaning of the product and our simplified design provides for easy clean out and routine maintenance. The 48 Scalperator has both high capacity and standard capacity aspiration thickness dependent on the scalping reel aperture size defined at time of order. Our oversized settling chamber auger allows for high capacity take away when the application requires it.

Operator friendly machine controls of the rock plate and aspiration chamber provides accurate control of all process variables. Indicators on these controls provide enhanced repeatability and accurate machine set-up. Impact resistant polycarbonate windows allow the operator to monitor cleaning performance. Simplified design provides for easy clean out, access for routine maintenance and reel and feed valve replacement.

Our 48 Scalperator can be broken down into modules for shipping and ease of installation.

Our extra large **molded urethane feed roll** accurately controls the process feed rate and provides a positive shut-off for high capacity applications.

Our extra large high capacity feed valve controls the process feed rate and provides a positive shut-off for high capacity applications.

The **agglomerate plate** ensures high capacity scalping performance and minimizes agglomerates and other particulate buildup behind the scalping reel.

Rotating Scalping Reel is constructed of either wire mesh or hardened perforated plate. The perforated screen design eliminates blinding of the scalping reel.

Performance-engineered aspiration chamber and flow-modulated air valve provides high efficiency cleaning of the product. While the weighted gate valve allows for high capacity aspiration control

