Oliver Hi-Cap Separators

Model 240 (also Models 160, 80 & 50)



- **Unparalleled Value**
- Versatile
- **Outstanding Craftsmanship & Design**
- Dust Control Accessories



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Model 240

Oliver Hi-Cap Gravity Separators are the best selling specific gravity machines in the world today for many reasons.

Unparalleled Value

The Hi-Cap Series Separator can achieve better results at a lower cost than any other separator on the market. As a result, processors all over the world have found the Oliver Gravity Separator to be the most profitable machine for their operations. Oliver equipment is used to clean virtually all of the world's coffee crop. Most of America's bean processing plants use Oliver Gravity Separators, and they are used in many seed houses to raise germination potential of seed stocks.

Versatile

The Oliver Separator may be used to separate any type of dry bulk particles that are about the same size but differ in weight. Common uses for Oliver Gravity Separators include: the elimination of infertile, light seed; the removal of weed and other undesirable seed; the grading of two or more quantities of a given commodity differing in weight; the recovery of good material from screenings; the elimination of rocks, sticks, pods, and other trash; and the removal of cracked, damaged, insect-eaten, or frosted material. Commodities for which the use of Oliver Gravity Separators is common include coffee beans, peas, edible beans, cereal grains, corn, cotton seed, grass seed, alfalfa, rice, peanuts, soybeans, herbs and a variety of non-agricultural products including plastics, minerals, and

Oliver offers a wide variety of deck coverings, optimizing the performance of a particular machine for any separation problem. "A" decks are covered with a large mesh wire cloth and provide the best separation of commodities of the size of wheat or larger. "B" decks can be covered with fine wire mesh cloth or with linen, depending on the separation involved. We will be happy to advise you on the selection of a deck cover.

Outstanding Craftsmanship & Design

Oliver Hi-Cap Gravity Separators offer many advantages over competing machines. They have a *rectangular deck* for greater capacity and accuracy. They provide maximum efficiency for the removal of light products from heavy materials. Heavy, easy-to-separate particles are discharged from the side of the deck through adjustable gates. The lighter pieces move the entire length of the deck. This extra travel yields the lowest percentage of middling or unseparated particles and the cleanest light and heavy fractions available.

The Oliver Gravity Separator features a patented *multiple fan system*. Evenly spaced fans, found beneath the deck of the machine, are individually adjustable, permitting precise control of the air flow (by reducing power-robbing baffling). The multiple fan system is also extremely efficient. Horsepower requirements are one-third to one-half those of competing machines.

The Oliver Gravity Separator is easy to adjust. All changes can be made while the machine is in motion and each requires a minimum of operator training and supervision. In addition to individually adjustable air gates for each fan, adjustments are provided for speed of eccentric motion, side and length tilt, and rate of feed.

Eccentrics are counterbalanced, eliminating excessive vibration and greatly extending bearing life. This feature, along with a heavy steel base, makes the Oliver Separator the most rigidly constructed gravity separator on the market.

Oliver decks are constructed of **specially selected wood** to eliminate cracking problems found with metals used in constant vibration, and the deck is reciprocated on **specially tempered steel springs** that firmly hold the movings parts of the machine.

All components of the Oliver Gravity Separator, including the motor and fans, are located within a single unit for ease of installation. Built-in air filters can be removed quickly for cleaning and easy access to the moving parts. The Oliver Gravity Separator is safe, because moving parts and drives are located within the base of the machine. Oliver Gravity Separators meet the mechanical safety requirements of the 1970 Williams-Steiger Act (OSHA).

Finally, the company quickly and economically provides repair parts for machines regardless of age, even though Oliver products are well-known for their long life and reliability.

Oliver Gravity Separators are available in rightor left-hand discharge models. (A left-hand machine is one in which the heavy product is discharged off the left-hand side of the machine when viewed from the discharge side of the machine.) Left-hand models are standard, while right-hand models are a no-cost option. The availability of left- and right-hand models permits installations where a wall or other obstructions might create difficulties. Right- and left-hand models may also be paired to feed resulting rock product onto an Oliver Stoner or resulting light products onto an additional Oliver Gravity Separator for further reclamation.

All Oliver Gravity Separators are operated by a single electric motor installed inside the frame of the machine. (Oliver will put in competitively priced electric motors upon request.)

Dust Control Accessories

Because the Oliver Gravity Separator passes a large volume of air through the material it separates, dust can be a problem when separating some commodities. Oliver manufactures a line of dust control accessories that can control particulates regardless of severity. The Oliver Aspirating Feeder is the most economical form of dust control where dust and chaff are only minor irritations. It can eliminate up to 90% of loose dust mixed with the product. For severe dust problems, the Oliver Dust Control Hood provides the solution. It will contain 99% + of an extreme dust problem. All Oliver dust control accessories can be fitted on machines already in the field or installed as a factory option.

Installation Requirements

Gravity separators must be located on a firm foundation, because a weak one absorbs much of the eccentric motion resulting in poor separation. Generally, a concrete slab or reinforced flooring is adequate.

Clean air is also necessary for operation of the Oliver Gravity Separator. Room air is usually adequate when sent through the filters at the base of the machine; however, for extremely dusty conditions, a nipple panel is supplied with the machine to allow outside air to be pumped in.



Capacities

A gravity separator's capacity is a function of the difference in specific gravities as well as the particle size of the commodities to be separated. Capacities shown below represent average production where a 10% difference exists. Certified seed processors generally run at approximately three-quarters of the listed capacities. Extremely close separations, where less than 1% difference exists, may be accomplished on Oliver machines. Capacities will drop, however, to as little as one-third of the listed amount. (With each closer separation desired, capacities will lower.)

The following estimates are furnished as a guide and should not be taken literally. Due to the wide variation in separation requirements, Oliver Manufacturing Company cannot guarantee these specific capacities; however, these estimates are conservative and have been equalled or exceeded when the Gravity Separators and other associated equipment have been installed and operated properly.

(All figures in pounds	per hour)			
- 8 0	NO. 50	NO. 80	NO. 160	NO. 240
LARGE SEED Beans, Corn, Peas 10 Mesh "A" Deck	3,500	6,000	10,000	15,000
MEDIUM SEED Wheat, Oats, Corn 16 Mesh "A" Deck	2,500	4,000	7,000	10,000
SMALL SEED Alfalfa, Millet, Sesa 30 Mesh "B" Deck		2,400	3,500	5,000
LIGHT SEED Clover, Fescue, Blu Linen "B" Deck	700 uegrass	1,200	2,000	3,000
General Specif	fications	NO. 80	NO. 160	NO. 240
			, and the same of	
DECK SIZE	30" × 60"	36" × 72"	42" × 90"	48" × 118"
SHIPPING WEIGHT	1150 lbs.	1320 lbs.	1530 lbs.	1950 lbs
OVERALL DIMENSIO		540	Veles	1000
Length	75″	87"	105"	130
	43"	49"	55"	58
Width				
Height (variable)	54"	54"	54"	
Height (variable) TO TOP OF FEEDER	65 1/2 "	651/2"	65"	65 1/2
Height (variable) TO TOP OF FEEDER	500			55′ 65½′ 15
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors)	65 1/2 "	651/2"	65"	65 1/2
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA	65 1/2 "	65 ½ " 7 ½	65″ 10	65½ 15
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA	65½″ 5	65½" 7½ 88" (224 cm.)	65" 10 107" (272 cm.)	65½ 15 137" (348 cm.
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS:	65½" 5 76" (193 cm.) 45½" (116 cm.)	65½ " 7½ 88" (224 cm.) 51½ " (131 cm.)	65" 10 107" (272 cm.) 59" (150 cm.)	65 ½ 15 137 " (348 cm. 64 ½ " (164 cm.
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS: Length Width Height	65½″ 5	65½" 7½ 88" (224 cm.)	65" 10 107" (272 cm.)	65 1/2
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS: Length Width Height VOLUME	76" (193 cm.) 45½" (116 cm.) 60" (152 cm.)	88" (224 cm.) 51½" (131 cm.) 61½" (156 cm.)	107" (272 cm.) 59" (150 cm.) 62½" (159 cm.)	137" (348 cm. 64 ½ " (164 cm. 62" (157 cm.
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS: Length Width Height VOLUME Cubic Feet	76" (193 cm.) 45½" (116 cm.) 60" (152 cm.)	88" (224 cm.) 51½" (131 cm.) 61½" (156 cm.)	107" (272 cm.) 59" (150 cm.) 62½" (159 cm.)	137" (348 cm. 64½" (164 cm. 62" (157 cm.
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS: Length Width Height VOLUME Cubic Feet Cubic Meters	65½" 5 76" (193 cm.) 45½" (116 cm.) 60" (152 cm.)	88" (224 cm.) 51½" (131 cm.) 61½" (156 cm.)	107" (272 cm.) 59" (150 cm.) 62½" (159 cm.) 224 6.4	65½ 15 137" (348 cm. 64½" (164 cm. 62" (157 cm. 311 9.0
Height (variable) TO TOP OF FEEDER HORSEPOWER (T-frame motors) EXPORT DATA BOX DIMENSIONS: Length Width Height VOLUME Cubic Feet	76" (193 cm.) 45½" (116 cm.) 60" (152 cm.)	88" (224 cm.) 51½" (131 cm.) 61½" (156 cm.)	65" 10 107" (272 cm.) 59" (150 cm.) 62½" (159 cm.) 224 6.4 1300 lbs. (590 kg.)	65 ½ 15 137 " (348 cm. 64 ½ " (164 cm.

