

LEXION[®]



LEXION[®] ROTARY COMBINE MODELS

460 R, 470 R, 475 R, 480 R, 485 R

LEXION[®] STRAW WALKER COMBINE MODELS

450, 460, 465



It's your livelihood and you won't settle for second best.

You need a combine that will take you through the field with little grain loss and unbeatable grain quality. And the Lexion combine does just that.

The Lexion combine is the most advanced combine in the industry. It features the patented Accelerated Pre-Separation System (APS) for thorough and gentle threshing in even the toughest conditions.

You'll love the productivity and ease of operation. Make adjustments on-the-go from inside the comfortable cab and save time and effort. And with the exclusive Mobil-trac™ System Undercarriage (MTS), you can harvest on your schedule, not the weather's.

Don't settle for second best. Harvest with a Lexion combine and harvest with confidence.



More Acres a Day. Greater Grain Quality. Less Loss. There Are No Compromises with Lexion Combines.



	Feature	Benefit
Headers (pages 6-9)	Auto Contour (optional)	Maintains consistent cutting height over uneven terrain with simultaneous up/down and side-to-side motion
	Auto Pilot (optional)	Automatically steers the combine when harvesting corn to reduce operator fatigue and improve performance
	Laser Pilot (optional)	Automatically steers the combine in small grains allowing the use of the full header width, freeing you to optimize machine settings
	Multi-Link Connector	Electric and hydraulic connections can be made in one step—saves time and eliminates the chance for misconnections or oil leaks
Feederhouse (page 6)	Long/Wide Feederhouse	Provides excellent crop capacity and support for large headers; allows superior visibility
	Variable Speed Feederhouse Drive	Allows you to optimize feederhouse and header speed to harvest conditions
Threshing System (pages 10-11)	APS Cylinder (Accelerated Pre-Separation)	Preserves grain quality and maximizes performance by feeding crop to the main threshing cylinder at a constant speed, angle, width and thickness; up to 30 percent of the crop is pre-separated and goes directly to the cleaning system
	APS Concave Blocking Plate	Improves threshing performance when engaged (single lever) to help thresh difficult crops
	In-Cab Concave Adjustment	Saves time when dealing with changing crop conditions; choose factory settings or create your own
	Parallel Concave Clearance	A long pathway through the threshing system with no pinch points improves capacity and protects grain quality
	Hydraulic Overload Protection	Opens concaves to allow obstructions to pass through then returns to preset positions
Straw Walker Separating System (page 13)	Intensive Separation System (ISS) (optional)	Reduces crop mat compaction and allows the kernel to fall through faster—increases agitation of straw for improved separation
	Impeller	Spreads a thin crop mat across the straw walker to ensure maximum separation
	Straw Walkers 5 Walkers (450) 6 Walkers (460/465)	Operate with a short stroke and faster rotations to gain additional G force for increased separation
Rotary Separating System (pages 14-15)	Two-Rotor Design	Increases productivity by using large-capacity dual rotors—high centrifugal force and a thin crop mat ensure excellent performance
	Variable Speed Rotor (optional)	Improves productivity by matching separation speed to crop conditions from the cab
	Independent Rotary Speed Adjustment	The speed of the separation rotors can be changed independently of the threshing system

	Feature	Benefit
Cleaning System (pages 16-17)	Visible Returns Window	Allows visual inspection of returns contents
	Removable Preparation Pans	Grain from the threshing system falls on preparation pans which transfer it to the cleaning system using a shaking motion that stratifies the grain from the chaff for easier cleaning—no augers needed
	Top Sieve Adjustment	The upper and lower sieves can be adjusted independently to help you fine-tune your harvest
	3-D Sieve System (optional)	Reduces grain loss and protects grain quality when harvesting on slopes up to 20 percent
Grain Tank/Grain Handling (page 17)	Electric Sieve Adjustment (optional)	Saves time by allowing you to make in-cab adjustments to sieve openings as conditions change
	Electric Grain Tank Extensions	Extensions fold down to keep out moisture and reduce machine height
	Unloading Auger Grain Tank Sensors and Rotary Beacon Clean-Out	Increases productivity by emptying the tank in less than two minutes Two adjustable sensors alert you and the grain cart operator when the grain tank is nearing or at full capacity Quick-release latches and a pre-programmed setting make clean-out fast and easy
Control and Monitoring System (pages 20-23)	Multi-Function Control Handle	Provides finger-tip control of header operation and unloading auger, as well as combine speed and direction
	In-Cab Adjustability	Saves time by allowing many performance adjustments to be made from the cab, on-the-go, including concave opening, sieve opening, rotor speed, fan speed and monitor sensitivity
	IMO Computer System	Assures timely, accurate information to maximize quality and productivity
	CEBIS Computer System (optional)	Provides advanced feedback on combine performance, crop conditions, and records harvest data
	Quantimeter (optional) Yield Mapping (optional)	Registers accurate readings on yield and moisture Captures harvest data for future management practices
Engine (page 24)	3126B, C-9 and C-12 Engines	Cat diesel engines give you the greatest fuel efficiency and highest reliability of any engine in the marketplace
Tracks/Wheels (page 25)	Mobil-trac™ System	Allows harvesting in virtually any field condition; improves flotation, reduces transport width and maximizes soil health
	Tires	A variety of sizes and treads is available

Productivity, Grain Quality and Ease of Operation Start Out in Front

One pass is all it takes to know that Lexion combines are powerful performers in the field. The strength of the cutting and feeding systems comes from components that set the Lexion combine apart from the competition.

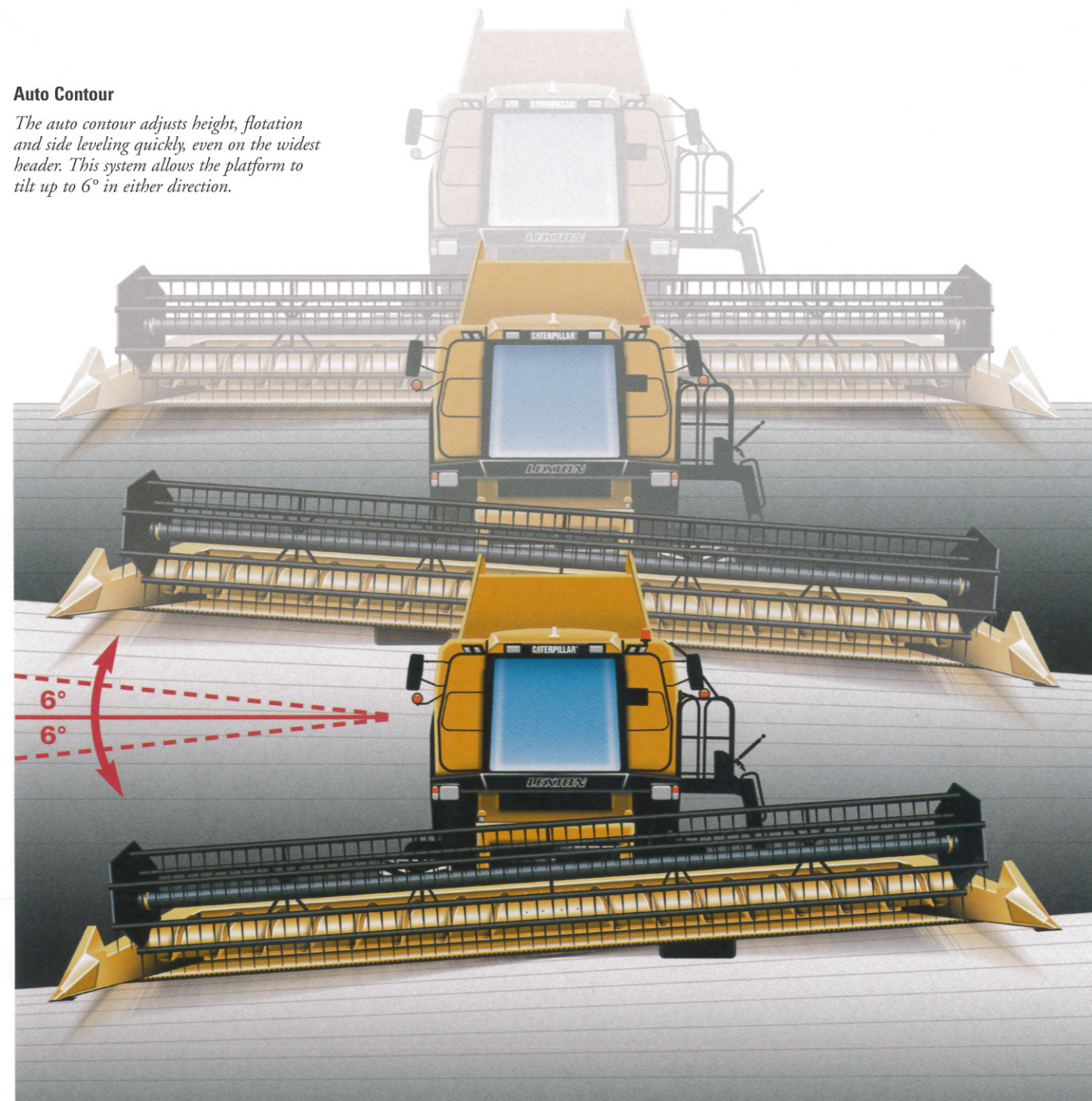
Feederhouse

The large, wide feederhouse is built to support large and heavy headers. Its ample size and shallow angle provide room for a thinner crop mat, minimizing loss and damage. The feederhouse length gives you greater visibility of the crop and the header.



Auto Contour

The auto contour adjusts height, flotation and side leveling quickly, even on the widest header. This system allows the platform to tilt up to 6° in either direction.



6

7

Multi-Link Connector

Make five connections in one step. Two hydraulic and three electrical connections can be made quickly with no chance of errors or spilled oil.

Variable Speed Feederhouse Drive Optional

Harvest faster and protect grain quality at the same time with the optional variable speed feederhouse drive.

Rock Trap

The large rock trap opens from the side making it easy to clean.

Hydraulic Reverser

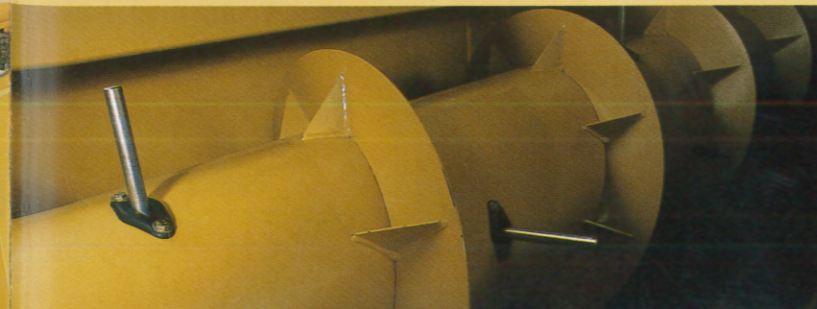
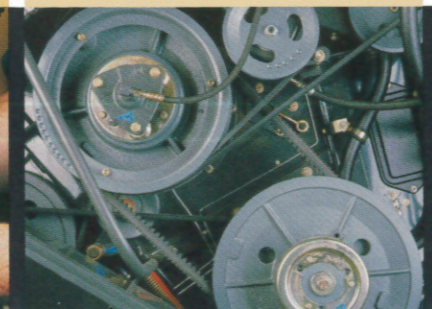
The two-stage engagement of the hydraulic reverser ensures full power is available to clear blockages that may occur in the header or feederhouse.

Full-Length Retractable Fingers

Retractable fingers the entire length of the auger provide smooth crop flow into the feederhouse.

Auto Contour System Optional Lexion Exclusive

Rolling ground is no excuse for inconsistent cutting heights. Sensors detect terrain changes and trigger header adjustments automatically, allowing you to concentrate on maximizing performance. (Auto Contour is available for all headers. Corn head shown.)

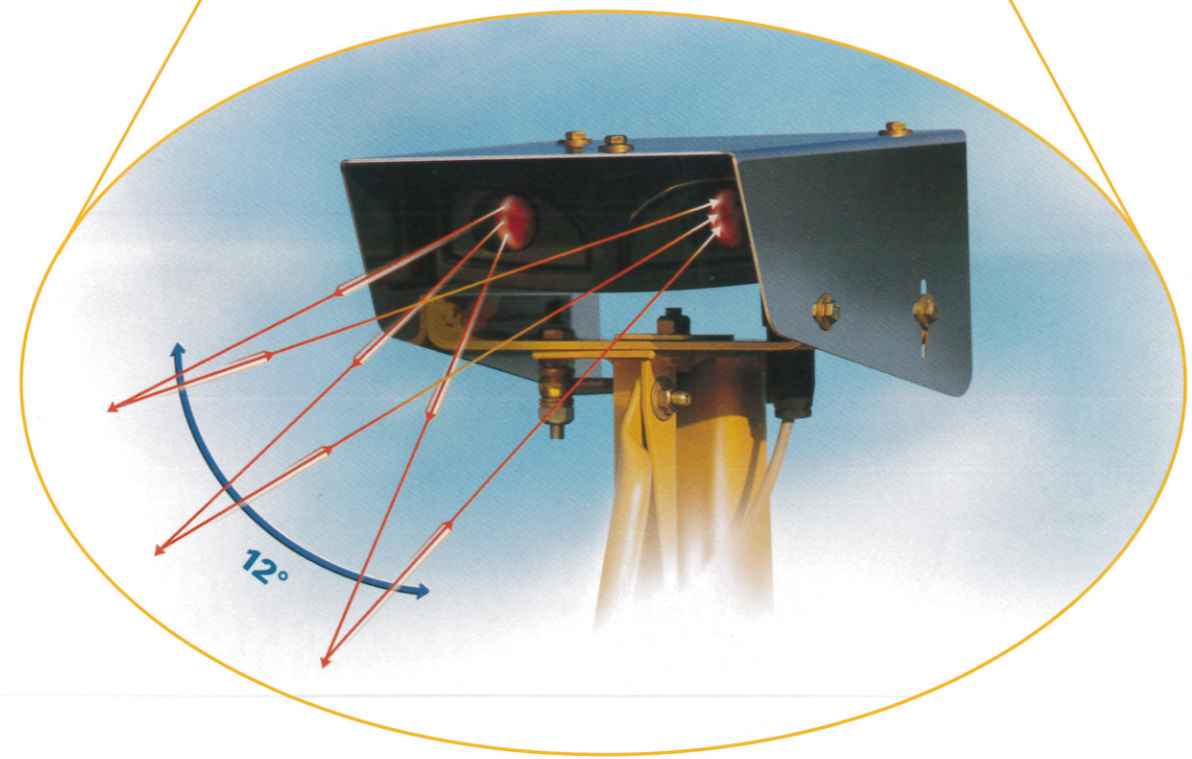


State-of-the-Art Technology Ensures Industry-Leading Productivity and Operator Comfort

The exclusive Auto Steering system, available for all Lexion combines, uses cutting-edge guidance technology to take stress out of harvest. Auto Steering frees you from constant steering and allows you to concentrate on the field or to fine tune settings without disrupting machine operations.

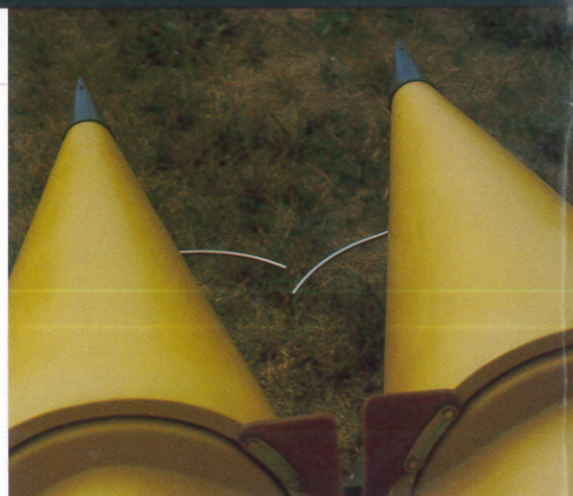


One side of the module transmits a laser beam over a 12° arc three times per second. After it bounces back, the other side receives the beam and by comparing the length of time between transmission and reception, the Laser Pilot module can determine the edge between standing crop and stubble.



Auto Pilot System For Corn Heads

Auto Pilot (option) reduces potential ear loss caused by poor tracking in tough conditions. Using whisker-like sensors attached to the center row snouts, Auto Pilot navigates the combine down the row at speeds up to 7.5 miles per hour. Because the system operates by feel, harvesting down corn stalks is easy. The rugged, low profile poly snouts glide right under the stalks as each sensor feels its way through the field to ensure proper row tracking which minimizes ear loss.



Laser Pilot System For Platform Heads

Laser Pilot (option) can be fitted to any Lexion combine's platform heads to ensure full-width utilization of the cutter-bar. A laser optic sensor mounted to the head's frame monitors the difference in height between cut and uncut crop. The Lexion navigates through the field according to the boundary determined by the difference in height, maintaining a harvest swath the full width of the header. Because this function is automatic, you're free to focus on the field, function settings and adjustments.

The Accelerated Pre-Separation System (APS) Allows You to Improve Capacity and Protect Quality

The Lexion combine's threshing system is made up of three cylinders: the Accelerated Pre-Separation cylinder, main threshing cylinder and impeller.



Accelerated Pre-Separation (APS) Cylinder Lexion Exclusive

Up to 30 percent of the grain is separated at the APS cylinder and sent on to the cleaning system. The remaining crop is fed to the main threshing cylinder at a constant speed, angle, width and thickness. As a result, threshing is faster, more efficient and produces higher quality grain.

Synchronized Tip Speed

Maintaining a constant relative speed among all threshing cylinders is critical to efficient operation. The APS, main and impeller cylinders remain at an ideal ratio for smooth and gentle grain handling.

Impeller

The impeller features a chevron design to divide the threshed crop and feed it into two rotors for maximum separation.

Intensive Threshing Segment

Depending on crop conditions, you may choose to install the intensive threshing segment to create a narrower point in the threshing process.

Blocking Plate

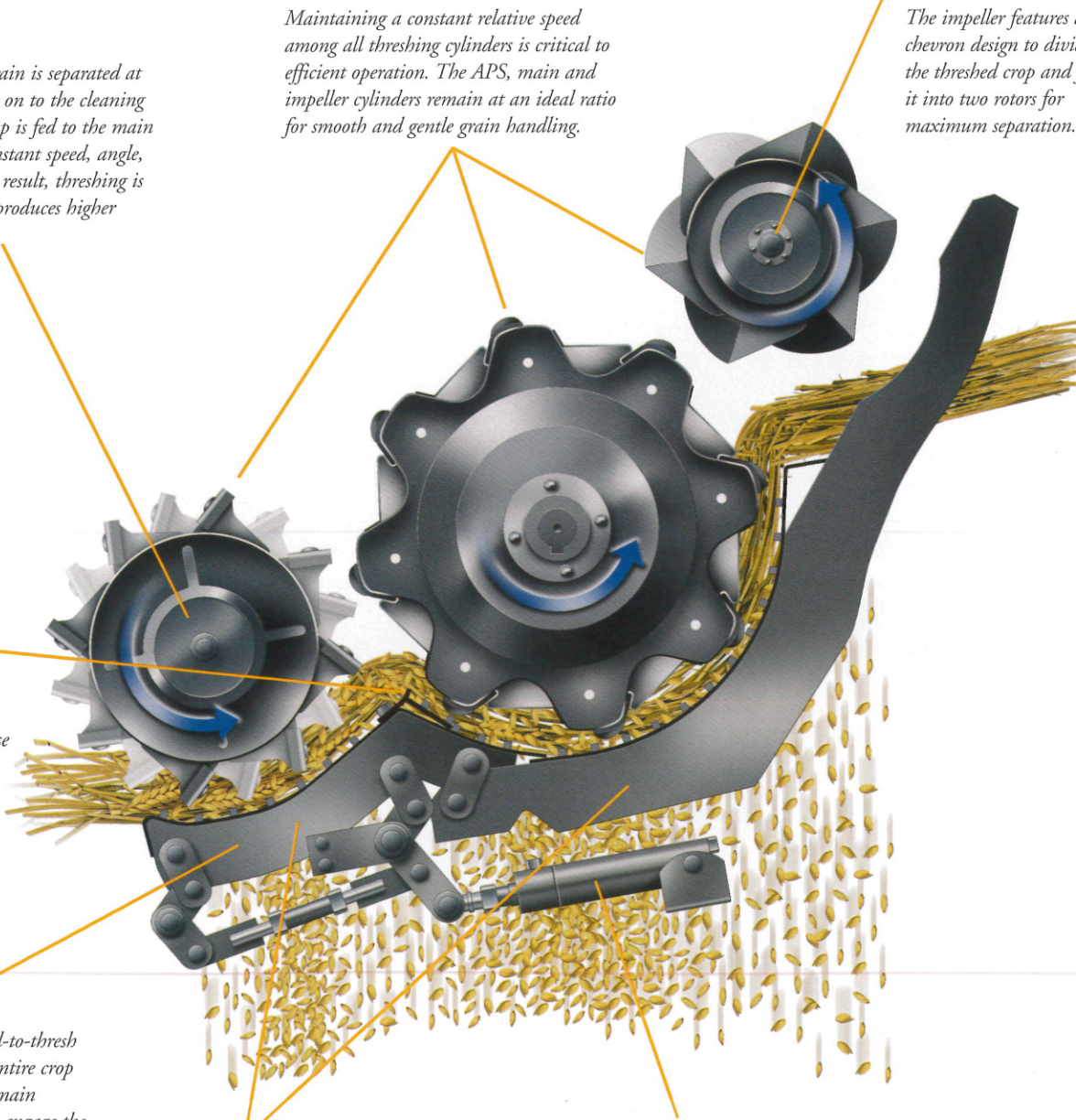
If you're harvesting a hard-to-thresh grain you may want the entire crop mat to go through to the main threshing cylinder. Simply engage the blocking plate with a single lever to cover the concave openings below the APS cylinder.

Concaves for the APS and Threshing Cylinders

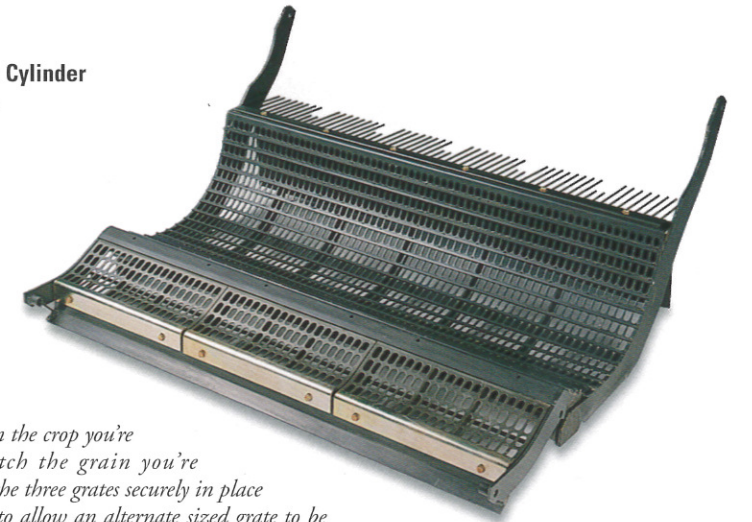
Speed harvest and improve grain quality by making adjustments to the concaves from the cab as conditions change.

Hydraulic Overload Protection

The threshing system concaves will automatically open fully if an obstruction is brought in from the feederhouse. When the object has passed, the concaves automatically return to preset positions.



Universal Main Cylinder 12.5 mm x 40 mm

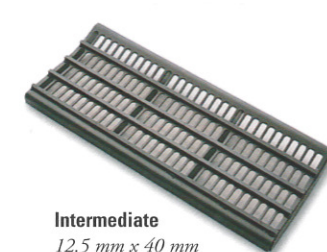


APS Cylinder Concaves

Three sizes of APS concaves are available for you depending on the crop you're harvesting. Changing the three-piece concave to match the grain you're harvesting is a simple procedure. Unbolt the brackets holding the three grates securely in place and lift up on each grate. The grates slide out of their frame to allow an alternate sized grate to be installed. Grates are easy to access through the large rock trap. At 10.5 inches wide, the Lexion's rock trap allows for superior stone protection and access to the threshing system.



Small Grains
6 mm x 40 mm



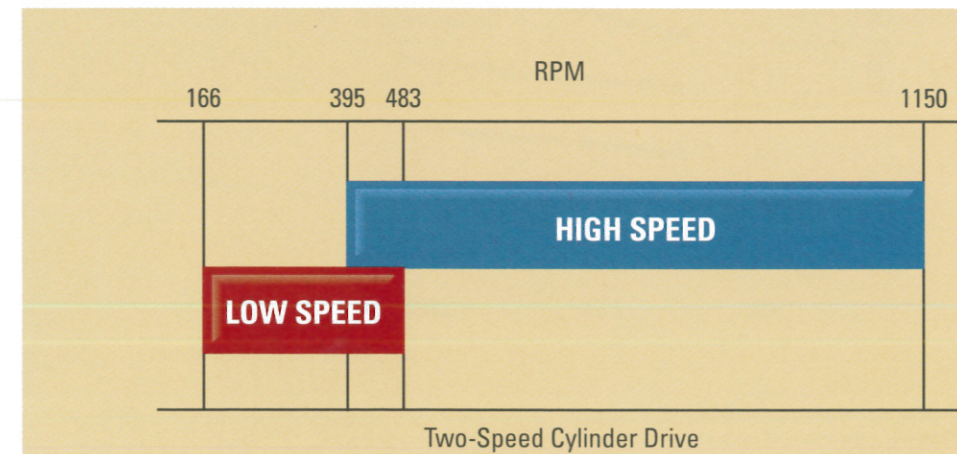
Intermediate
12.5 mm x 40 mm



Corn/Soybeans
19 mm x 40 mm

Two-Speed Cylinder Drive

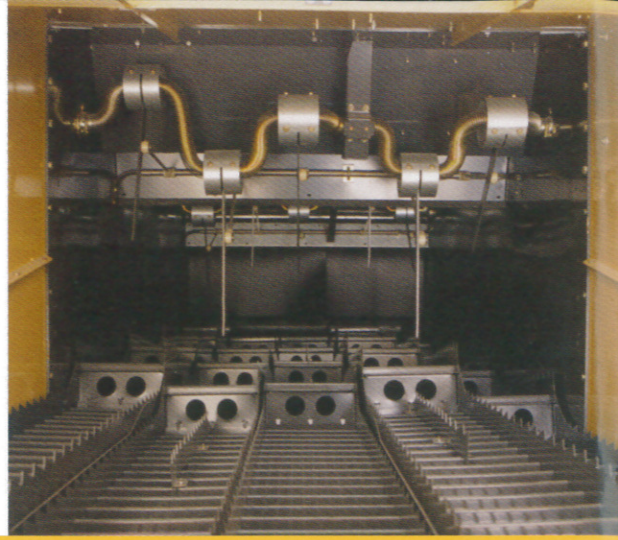
The standard variable cylinder speed range is 395-1150 rpm on small grain version combines. An optional two-speed system is available and offers an additional speed range that can go as slow as 166-483 rpm to help protect grain quality. (The two-speed cylinder drive is standard on corn and rice version combines.)



Two-Speed Cylinder Drive

Grain Quality is a Lexion Priority

Claims of higher quality grain aren't idle claims when it comes to Lexion combines. Producer testimonials and independent studies prove that Lexion combines harvest cleaner, faster and with less loss than the competition.

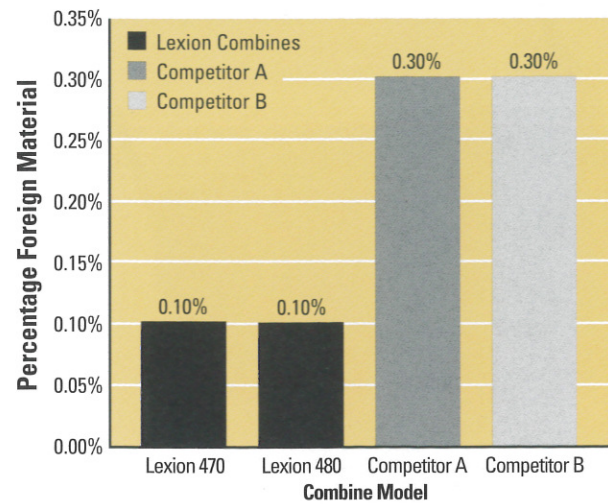


Straw Walker Separating System

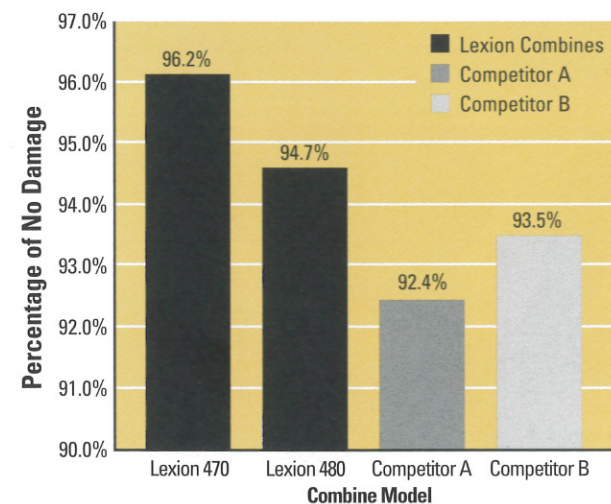
The Straw Walker Separation System Uses a Short Walker Stroke With Faster Rotations to Gain Additional G Force

The Lexion combine sets the standard for straw walker performance, letting you harvest at higher speeds while maintaining high grain quality and low grain loss. The straw walkers on the Lexion 450, 460 and 465 separate the grain from the straw through a shaking motion. The Lexion combine uses a short walker stroke with faster rotations to gain additional G force.

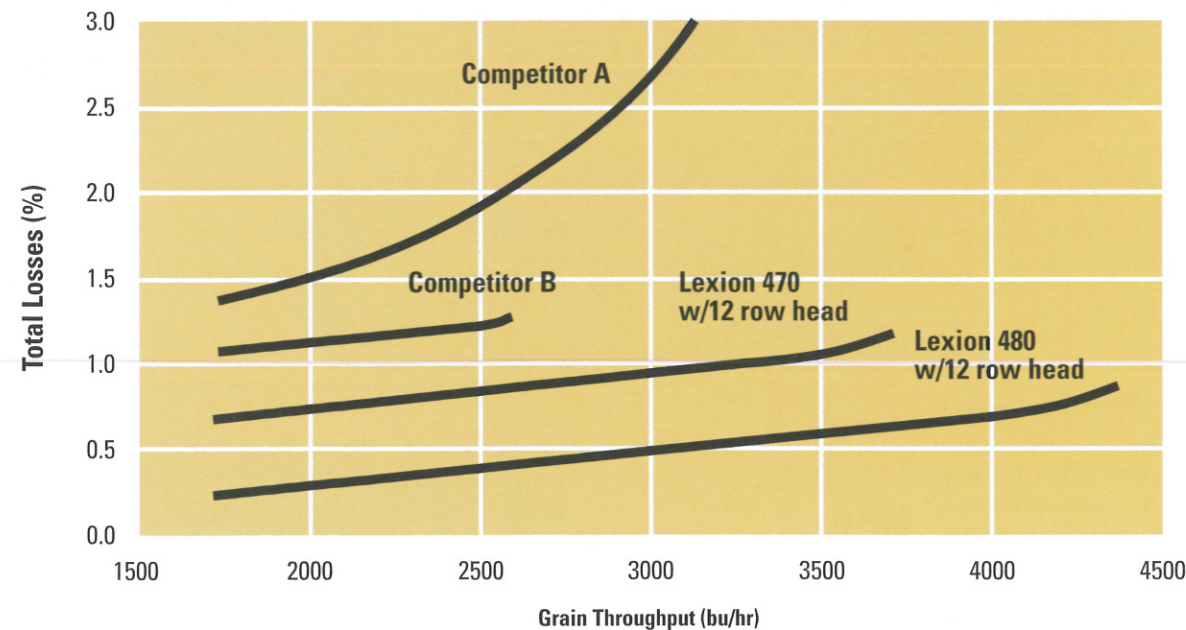
BCFM* Averages of Foreign Material for All Combines



Fast Green** Average for All Combines Category: No Damage



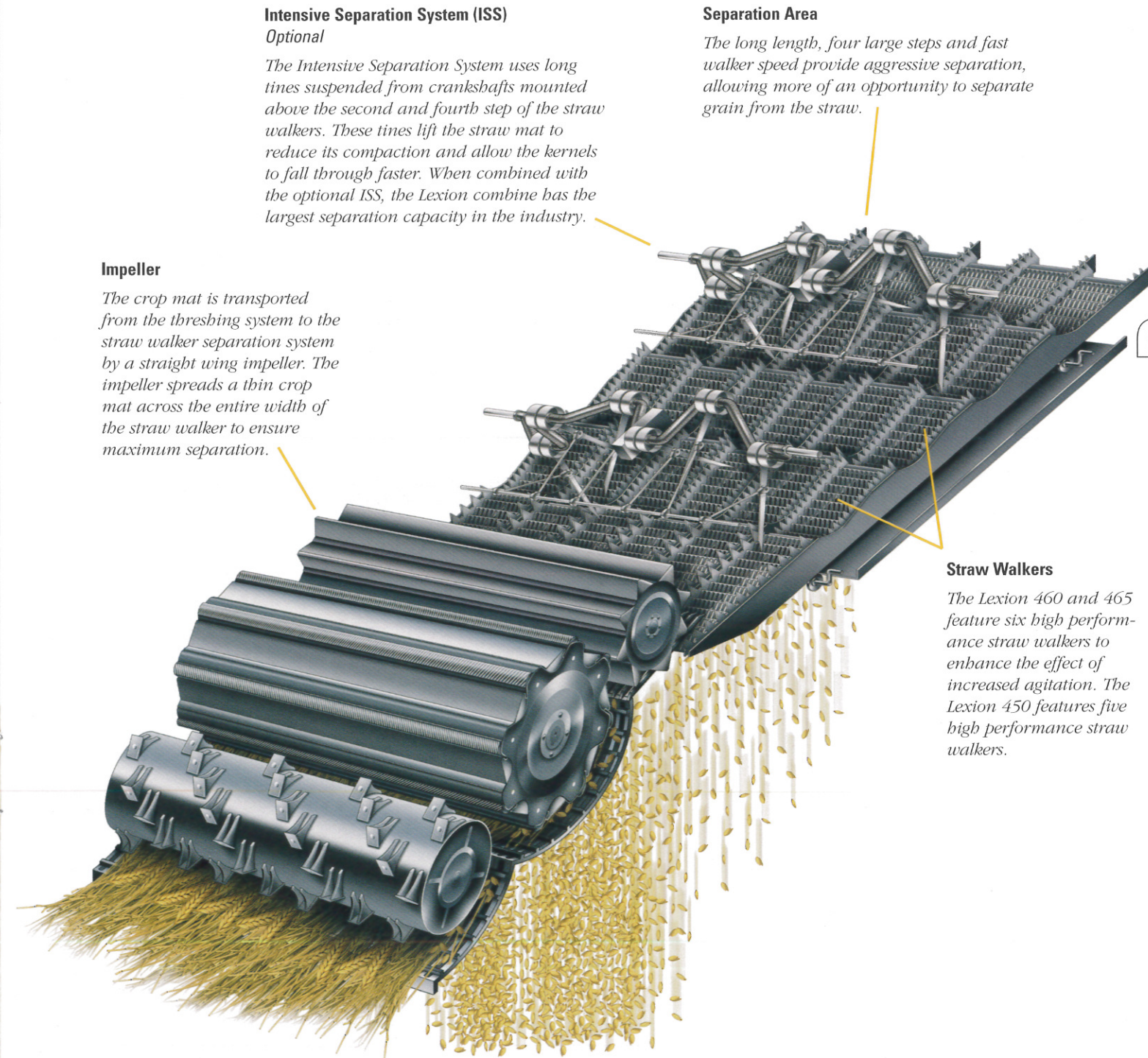
Performance Curves for All Combines (bu/hr vs. % loss) (exponential curves)



*Broken Corn and Foreign Material

**Test that measures how much of the seed's outer covering (pericarp) is damaged

Research conducted by Agri-Growth, an independent testing organization.



Intensive Separation System (ISS)
Optional

The Intensive Separation System uses long tines suspended from cranks mounted above the second and fourth step of the straw walkers. These tines lift the straw mat to reduce its compaction and allow the kernels to fall through faster. When combined with the optional ISS, the Lexion combine has the largest separation capacity in the industry.

Separation Area

The long length, four large steps and fast walker speed provide aggressive separation, allowing more of an opportunity to separate grain from the straw.

Impeller

The crop mat is transported from the threshing system to the straw walker separation system by a straight wing impeller. The impeller spreads a thin crop mat across the entire width of the straw walker to ensure maximum separation.

Straw Walkers

The Lexion 460 and 465 feature six high performance straw walkers to enhance the effect of increased agitation. The Lexion 450 features five high performance straw walkers.

The Rotary Separation System Uses Gentle, Continuous Centrifugal Force for Final Separation

The separation system for the 460 R, 470 R and 475 R features two 17-inch diameter paddle rotors that generate industry-leading centrifugal force. Competitive single rotor designs can achieve acceptable levels of force but only with faster tip speeds that tear up more crop mat, overloading the sieves and reducing capacity. The 480 R and 485 R feature the proven spiral rotor system.

Dual Function Rotors

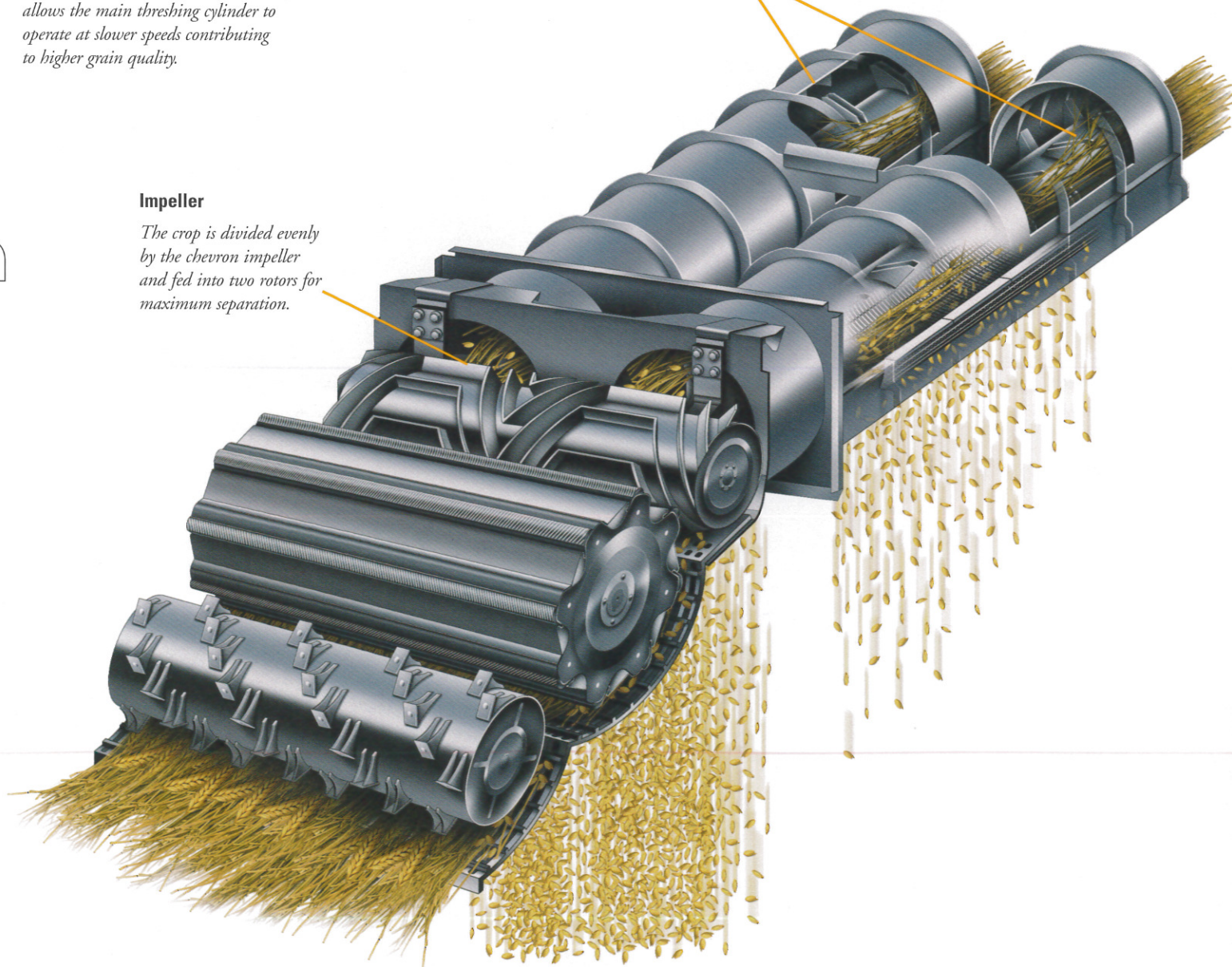
In fragile crops you can set the rotary separation system on Lexion combines to provide additional threshing as well as separation. This dual function allows the main threshing cylinder to operate at slower speeds contributing to higher grain quality.

Independent Rotor Speed Adjustment

You can change all rotor speeds independently of the threshing system. This versatility compared to single rotor systems allows you to optimize grain quality and performance.

Impeller

The crop is divided evenly by the chevron impeller and fed into two rotors for maximum separation.



Easy Inspection/Service Access

The separation rotor grates can be removed for quick, effortless cleaning and maintenance. (470 R/475 R rotors shown.)

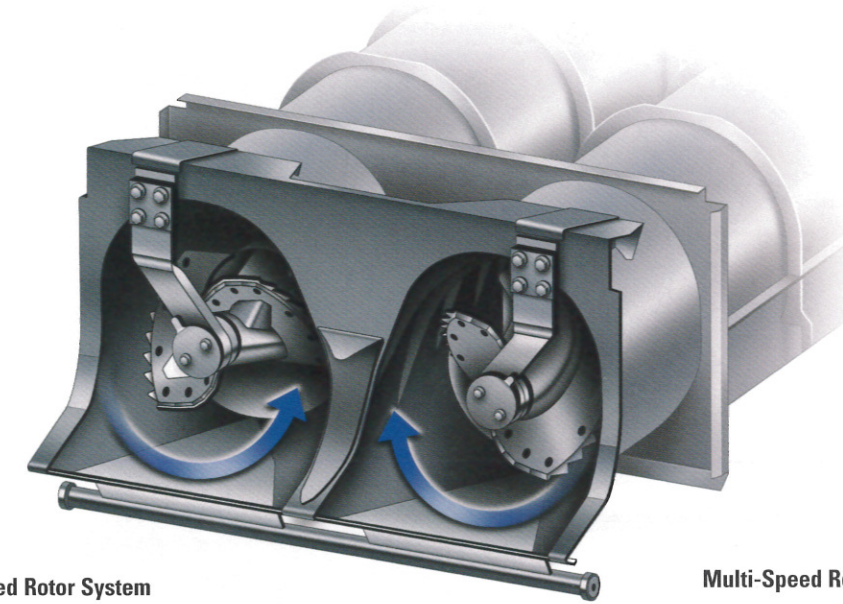
Rotor Cover Plates

You can tailor MOG (Material Other than Grain) volumes by adding or removing rotor cover plates. This ability to balance combine systems gives you the ultimate flexibility in all harvest conditions.



Two Counter Rotating Rotors

Small diameter rotors generate more centrifugal force than combines with large single rotor systems. The larger the rotor, the less the force. Greater centrifugal force translates into better separation. Lexion combines maximize efficiency and capacity.



Variable Speed Rotor System

Optional

A rotor speed variator is available that allows you to fine-tune rotor speeds from the cab ranging from 360-1050 rpm. If you want an even slower rotor speed, a 300-rpm kit is available.

Multi-Speed Rotor System

You can set rotor speeds at 500/640/800 rpm on corn version combines or 640/800/962 rpm on small grain and rice version combines. These speed settings let you optimize separation performance.

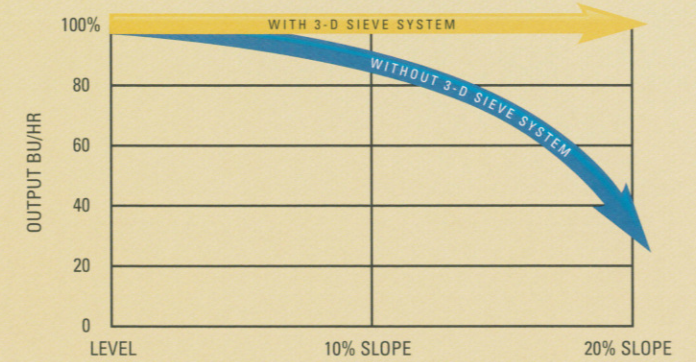


An Intensive Cleaning Process Protects the Quality of Your Crop

The cleaning system of the Lexion combine is designed to move grain quickly and smoothly through the process to deliver the highest quality grain you've ever harvested.

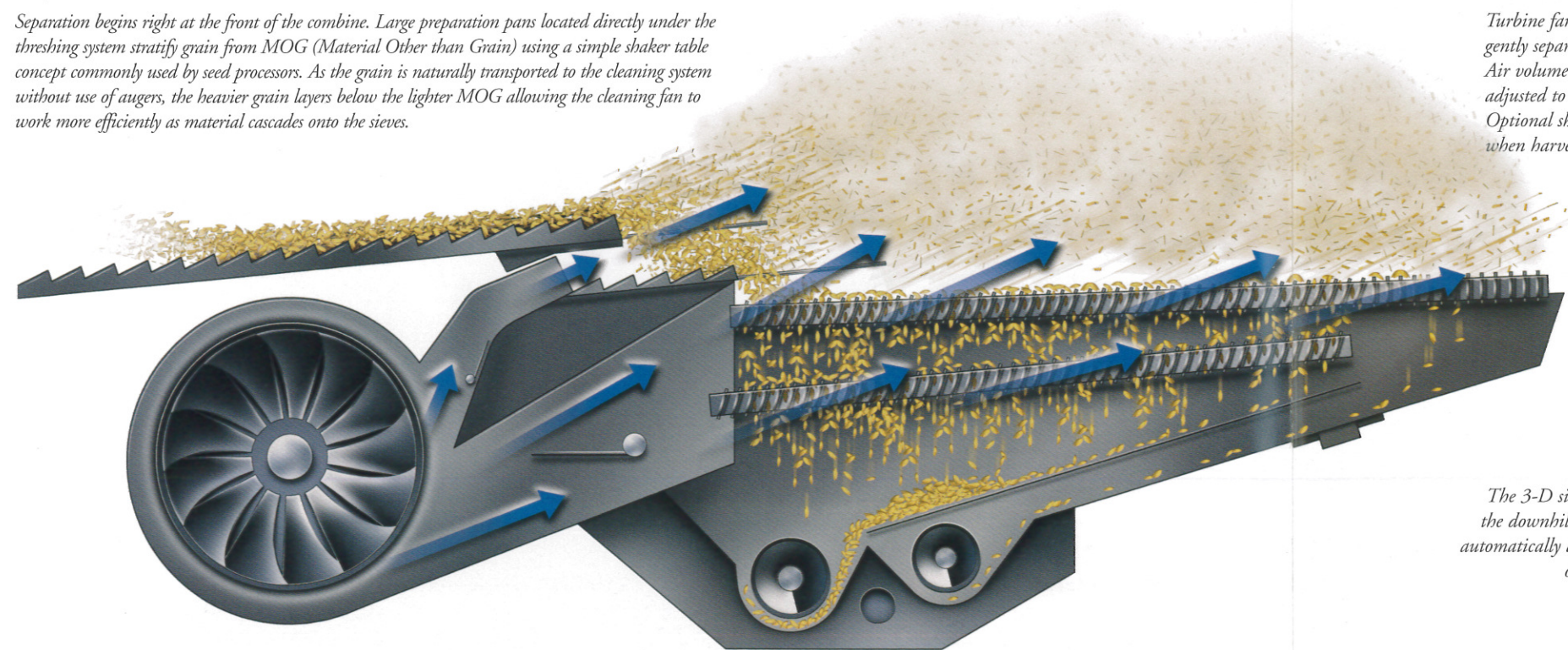


3-D SIEVE SYSTEM EFFICIENCY
HARVESTING ACROSS SLOPES



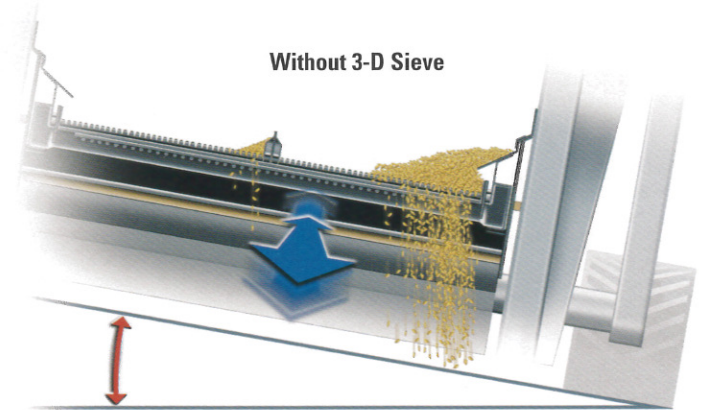
Preparation Pans

Separation begins right at the front of the combine. Large preparation pans located directly under the threshing system stratify grain from MOG (Material Other than Grain) using a simple shaker table concept commonly used by seed processors. As the grain is naturally transported to the cleaning system without use of augers, the heavier grain layers below the lighter MOG allowing the cleaning fan to work more efficiently as material cascades onto the sieves.

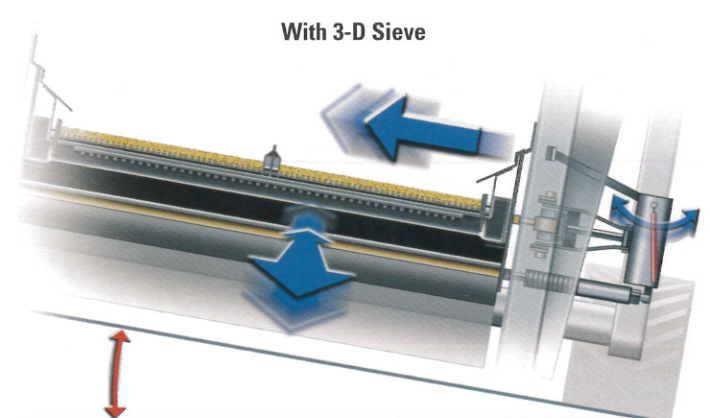


Ventilated Sieve System

Turbine fans provide the airflow to gently separate the chaff from the grain. Air volume and direction can be adjusted to assure a clean grain sample. Optional shutter plates help control loss when harvesting very light crops.



Without 3-D Sieve



With 3-D Sieve

3-D Sieve System Optional Lexion Exclusive

The 3-D sieve system keeps the grain from accumulating on the downhill side of the sieve when harvesting on a slope. By automatically adjusting lateral movement, it keeps the combine output at 100 percent on slopes up to 20 percent.

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Clean Grain Elevator

Lexion combines use nylon cord reinforced rubber paddles to move grain from the cleaning system to the grain tank. This conveyance method helps protect grain quality.

Electric Sieve Adjustment Optional

You can make changes to sieve openings and monitor the effects from your seat. (IMO shown.)

Returns Volume Indicator Optional

Keep an eye on the amount of returns going through the system with this monitor on the CEBIS screen.

Returns Elevator Window

In addition to the optional volume sensor, a window in the returns elevator allows you to see if the tailings are chaff-rich or grain-rich. You can make adjustments accordingly.

Grain Tank

The large capacity grain tank has few ledges so it unloads completely. Two adjustable sensors inform you of volume levels to prevent overfilling. Electric fold-down extensions help keep moisture out of the tank.

Full-Width Performance Monitor

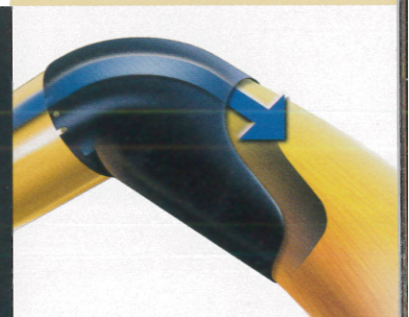
An acoustic sensor across the entire width of the cleaning system lets you know if you're experiencing any loss. Monitoring is performed by CEBIS or IMO.

Residue Disposal

The widespread chopper with high performance double knife drum and independent chaff spreader provides impressive spreading performance. Convert from chopping to windrowing by activating a single lever.

Unloading Auger

Grain in the Lexion combine's unloading auger follows a gentle arc as it exits, preventing damage that can occur in "drop out" augers. The auger features 13 ft of clearance to accommodate the tallest grain carts and trucks.





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Harvesting is Hard Work — Handling Your Lexion Combine Isn't

The precise engineering of the Lexion combine does more than move you through the field quickly; it provides a comfortable work environment. Most functions can be performed in the cab, on-the-go to save you time and effort.

Three-Way Adjustable Steering Column

The steering column tilts and telescopes so you can adjust it perfectly.



Multi-Function Control Handle

Control 14 functions, including header operation, unloading auger engage and combine speed. The handle is built into the right side armrest for convenience and comfortable operation.

Operator Comfort

Roomy, ergonomic air suspension seat, air conditioning, and right side controls keep you comfortably in reach of everything you need to operate the combine.

Instructional Seat

The instructional seat provides a comfortable, convenient place for a second person to observe the field, monitors and operation procedures.

Overhead Controls

Features like the cool compartment, sound system, electric mirrors and climate control make this cab the most comfortable you've ever experienced.

Operator View

The long feederhouse and large windows allow you to keep an eye on what's happening ahead of you.



Take the Guesswork out of Adjustments

Powerful in-cab computer systems provide you with the current information you need to make informed management decisions. That's the essence of a successful harvest.

Hillside Leveling System

Work efficiently on steep slopes with this system. This optional attachment is available from Hillco.



IMO Information Monitor

Using a combination of lights and liquid crystal displays, the IMO system gives you data from machine sensors. You can see how your machine is performing and make adjustments on-the-go.

IMO Functions

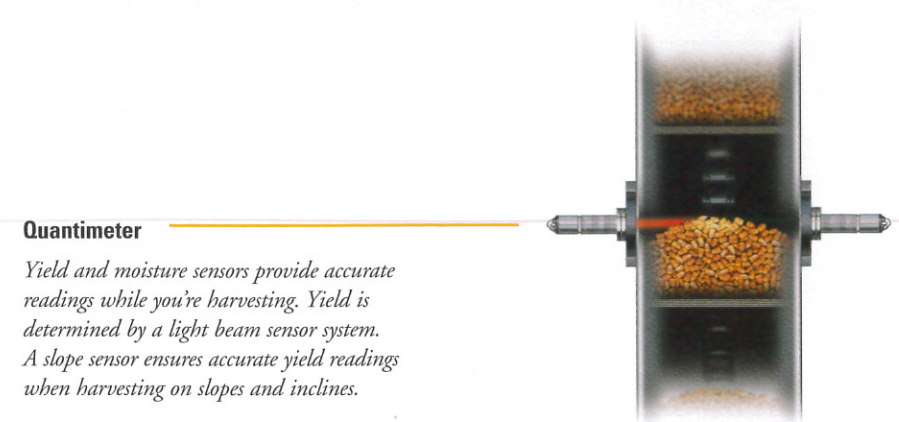
- Monitoring all machine functions
- Direct adjustment of individual components
- Eight automatic crop presets plus custom settings
- Performance monitoring
- Engine performance
- Service intervals and information
- Area meter
- Harvest data display
- Yield monitor (optional)

CEBIS Combine Electronic Board Information System Optional

More powerful than the IMO computer, CEBIS is the most advanced on-board system of any combine on the market. It displays performance, records harvest information and allows you to make function adjustments while you're harvesting.

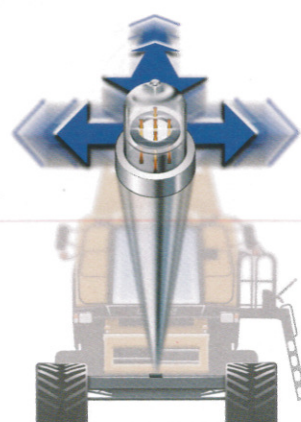
CEBIS Functions

- All the functions of IMO plus:
- On-screen operation and maintenance manual
 - Preset reel heights
 - 23 automatic crop presets plus custom settings
 - Optional printer
 - Optional PCMCIA card reader
 - Optional yield mapping



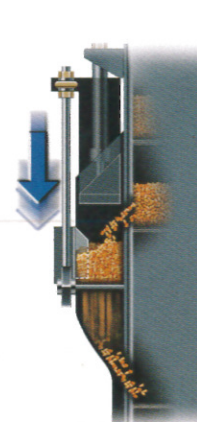
Quantimeter

Yield and moisture sensors provide accurate readings while you're harvesting. Yield is determined by a light beam sensor system. A slope sensor ensures accurate yield readings when harvesting on slopes and inclines.



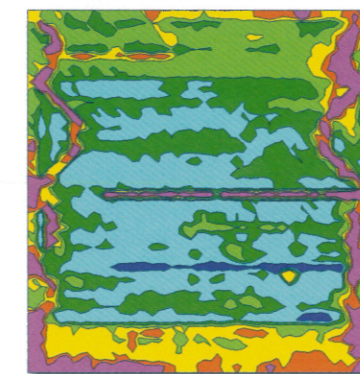
Slope Sensor

The Lexion combine's computer automatically compensates for slope when calculating yield.



Continuous Moisture Meter

Accurate crop moisture readings ensure precise dry yield calculations and provide you with useful information to make setting adjustments.



Yield Mapping

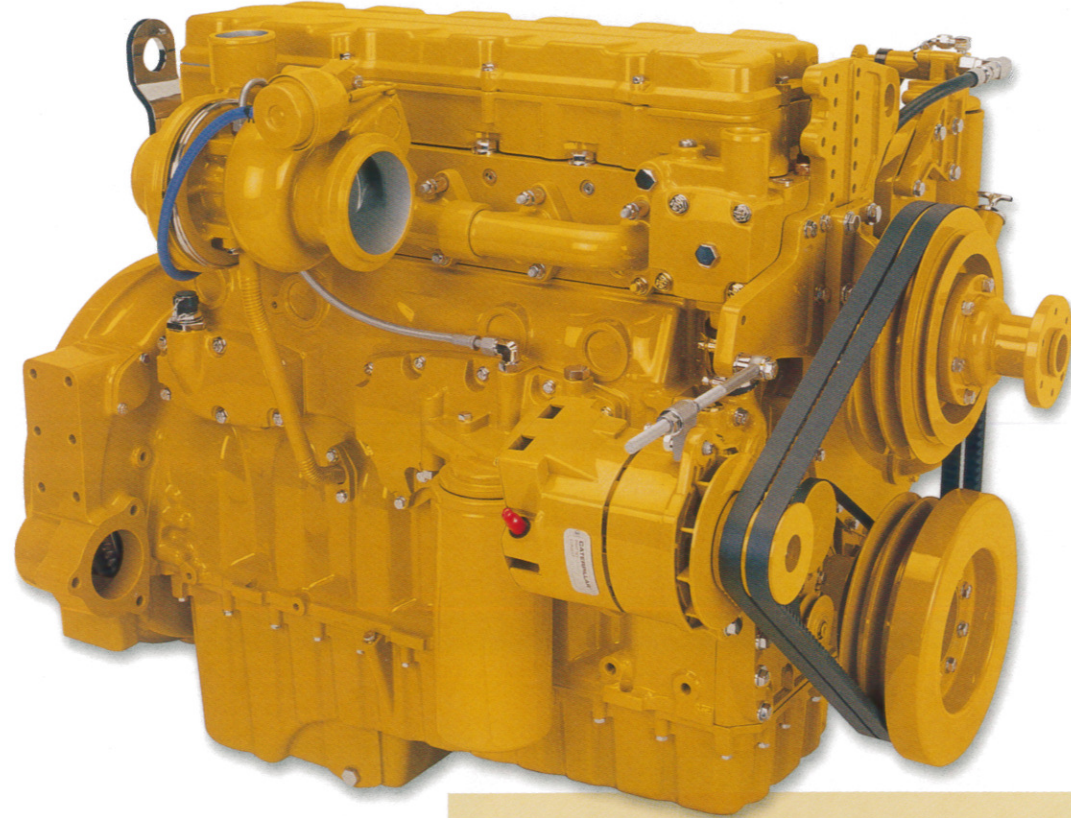
Data provided by the quantimeter and GPS system will help you determine which parts of the field provided the greatest yields.

The Power Behind the Lexion Combine is the Legendary Cat Engine

Caterpillar is famous the world over as the leader in diesel technology. Cat engines provide advanced electronics and rugged durability to give your combine the power to handle even the toughest conditions. At 400 hp and a power bulge up to 431 hp, the Cat C-12 diesel engine gives the Lexion 480 R/485 R the highest horsepower of any combine ever built. Right behind it, the Cat C-9 engine provides 340 hp and the Cat 3126B reaches 290 hp using the most advanced engine design.

Fuel Efficiency

You can count on Cat engines to get more horsepower from every gallon of fuel than any other engine. The Cat 3196 (C-12) engine was rated as the all-time fuel efficiency champion at the University of Nebraska Tractor Test Laboratory for a performance of 20.37 horsepower hours-per-gallon.



Cutting-Edge Technology

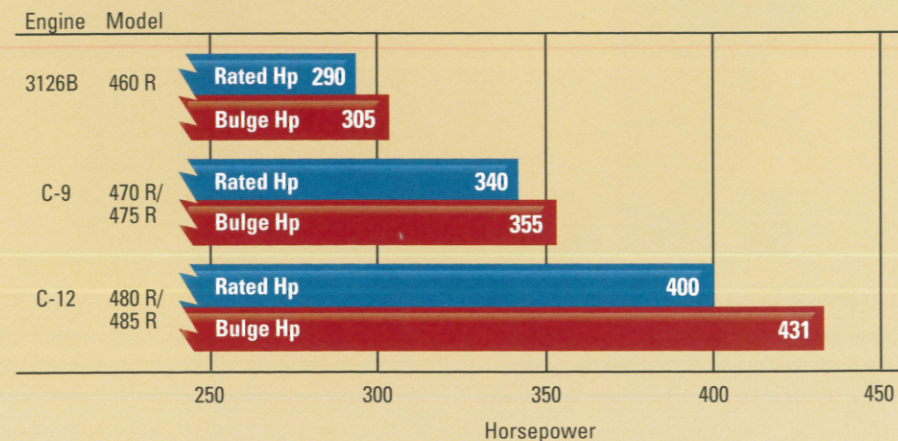
The C-9 and C-12 engines use ADEM III (Advanced Diesel Engine Management) technology to ensure smooth operation. Among other things, microprocessors make temperature-sensitive adjustments, cold start adjustments and changes to the fuel:air ratio.

Long-Lived, Worry-Free Operation

Caterpillar builds more high-horsepower diesel engines each year than any other company in the world. Cat engineers have pioneered reliability features like integrated oil and coolant lines to virtually eliminate leaks. The bottom line is year after year of reliable operation.

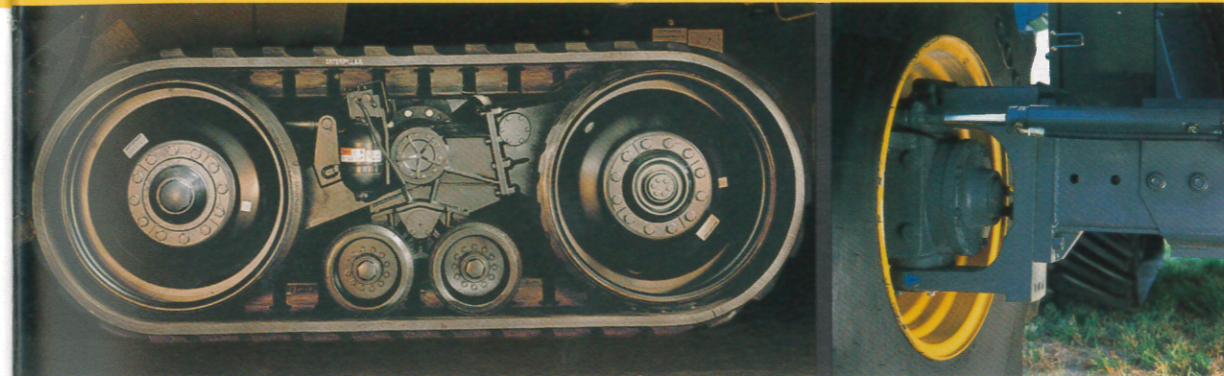
Power Bulge

Your Lexion combine has ample horsepower for tough conditions, but when you're maximizing capacity and need even more power, you'll appreciate up to a 31-horsepower increase.



Harvest When the Crop is Ready

Every day you can't get in the field because of wet conditions takes its toll on yield. With the exclusive Mobil-trac™ system you can harvest on your schedule, not the weather's. Lexion combines are the only combines designed specifically for tracks. The result is better performance and longer life.



Track Advantages

Compacted soil limits yields by reducing the space available for plant roots, nutrients, soil moisture and air. Tracks reduce compaction by distributing machine weight over a larger footprint. By exerting less PSI, the Mobil-trac system undercarriage maximizes soil health and reduces rutting.

Powered Rear Axle Optional

For added power in poor field conditions, this option will keep you going.

Wheels

A variety of tire sizes and tread types is available up to 20.8 R-42 (front duals) and 28.1 L-26 (rear).

Tire and Mobil-Trac Systems

Size (Metric):	800/65 R32	900/60 R32	900/60 32	480/80 R38	—	520/85 R42	Mobil-trac
Size (Imperial):	30.5 x 32	35.5 x 32	35.5L - 32	18.4 - R38	73 - 44.00 - 32	20.8 - R42	—
Tread:	R1, R1W, R3	R1W	Rice	R1 or R1W	High Flotation	R1, R1W, R2	Deep Lug
Dual:	N/A	N/A	N/A	Yes	N/A	Yes	N/A
Rim:	N/A	N/A	N/A	N/A	N/A	N/A	N/A
30" Row Tracking:	Excellent	Fair	Fair	Excellent	Poor	Excellent	Fair
Flotation:	Fair	Good	Good	Very Good	Excellent	Very Good	Excellent
Stability:	Good	Good	Good	Very Good	Good	Very Good	Excellent
Ride:	Good	Very Good	Very Good	Very Good	Excellent	Very Good	Very Good
Traction:	Very Good	Very Good	Very Good	Excellent	Good	Excellent	Excellent

High Performance Design in a Wide Array of Models Ensures Cutting Edge Performance in All Crops

Four types of heads in fourteen different models support every major Lexion combine's harvest.



Grain Heads – Rigid and Flexible

Description	Model G25 Rigid	Model G30 Rigid	Model F20 Flexible	Model F25 Flexible	Model F30 Flexible
Cutter Bar Cutting widths - ft (m)	25 (7.62)	30 (9.14)	20 (6.10)	25 (7.62)	30 (9.14)
Auger Pitch - in (mm) Diameter - in (mm) Speed - rpm	23 (580) 23 (580) 204*	23 (580) 23 (580) 204*	23 (580) 23 (580) 204*	23 (580) 23 (580) 204*	23 (580) 23 (580) 204*
Reel Bat reel Pickup reel Drive - rpm Diameter - in (mm) Reel lift Reel fore / aft	5 6 0 - 79* 41.5 (1054) Hydraulic Hydraulic	NA 6 0 - 79* 41.5 (1054) Hydraulic Hydraulic	NA 6 0 - 79* 41.5 (1054) Hydraulic Hydraulic	NA 6 0 - 79* 41.5 (1054) Hydraulic Hydraulic	NA 6 0 - 79* 41.5 (1054) Hydraulic Hydraulic
Knife Type Drive	Serrated Wobble box	Serrated Wobble box	Serrated Wobble box	Serrated Wobble box	Serrated Wobble box

*With 15T sprocket.

Pickup Heads

Description	Model P13
Cutter Bar Trough width - ft (m)	13 (3.96)
Auger Pitch - in (mm) Diameter - in (mm) Speed - rpm	23 (580) 23 (580) 204*
Pickup Drive - rpm Hyd. crop hold down	Hydraulic 0 Optional Hydraulic
Draper Belts - 19 in (483 mm) No. of belts	7
Overall Width to Tire Edges Belt pickup - in (mm) Rake-up - in (mm)	144 (3.65) 177 (4.5)

*With 15T sprocket.

Rice Heads

Description	R22	R25
Cutter Bar Cutting widths - ft (m)	22 (6.71)	25 (7.62)
Auger Pitch - in (mm) Diameter - in (mm) Speed - rpm	23 (580) 23 (580) 204*	23 (580) 23 (580) 204*
Reel Bate reel Pickup reel Drive - rpm Diameter - in (mm) Reel lift Reel fore/aft	NA 6 0-79* 41.5 (1054) Hydraulic Hydraulic	NA 6 0-79* 41.5 (1054) Hydraulic Hydraulic
Knife Type Drive	Double knife-serrated Wobble box	Double knife-serrated Wobble box

*With 15T sprocket.

Corn Heads

Description	Model 630	Model 830	Model 836	Model 838	Model 1222	Model 1230
General Number of rows Row spacing - in (mm) Divider type	6 30 (762) Polyethylene	8 30 (762) Polyethylene	8 36 (914) Metal	8 38 (965) Metal	12 22 (559) Metal	12 30 (762) Polyethylene
Dimensions & Weight Width - ft (m) Height - in (mm) Length with dividers - ft (m) Length without dividers - ft (m) Width in transport position - ft (m) Weight - lb (kg)	15.7 (4.8) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 3968 (1800)	21 (6.4) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 5071 (2300)	24.3 (7.4) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 5732 (2600)	26.0 (7.9) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 5952 (2708)	23.0 (7.0) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 6945 (3150)	30.8 (9.4) 44.5 (1130) 10.2 (3.11) 6.4 (1.96) 8.9 (2.7) 8025 (3640)
Specifications Knife stalk rolls Fluted stalk roll Weed knives Row unit drive Corn head drive speed (rpm) Auger diameter - in (mm) Auger tube dimensions - in (mm) Flighting pitch - in (mm) Reverse flighting Slip clutches - Row units - Auger drive Deck plates - Manual - Hydraulic Automatic header height control Auto pilot	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional	Standard with reversible knives Optional One piece adjustable Enclosed gearbox 484 - 700 15.75 (400) 5.9 (150) 20.5 (520) Yes 1 per row - coil spring jaw type 1 per auger - coil spring jaw type Single lever adjustment Optional Optional

Spend Your Time in the Field, Not in the Shop

Ease of maintenance is a major design feature of Lexion combines. The engine, radiator and internal components are easily accessible for maximum uptime.

Unbeatable Customer Service is the Foundation of Every Cat Dealer

Cat dealers earn their business by delivering responsive, skilled service to every customer. No matter where you are or what machine you own, your Cat dealer's main focus is keeping your equipment running.

Sieve Access
 An open cleaning system design with a hinged chaff spreader allows for easy access to the sieve area for easy clean-out and inspection.



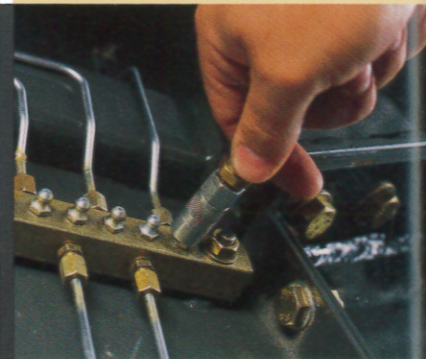
Rear Service Access
 The rear hood opens to allow for easy service of the rear of the machine.



Multitasking Ladder
 The rear ladder can be fixed to the machine at key service or inspection areas and allows for increased efficiency while servicing or inspecting components.



Grease Banks
 Centralized grease banks located in easily accessible areas of the machine allow for efficient service of the machine.



Service Doors
 Large service doors open wide on each side of the machine allowing for easy service and inspection of the machine. The service doors have a locking mechanism that keeps the doors open during servicing.



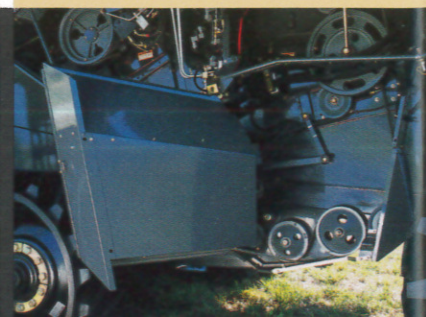
Extensive Clean-Out
 Clean-out between crops after harvest is made simple with an automatic clean-out setting and quick-release latches on the lower grain handling system.



Engine/Radiator Access
 The engine cover opens to reveal a clean engine compartment with easy access to key service areas. The cooling housing also can be accessed from the engine platform with full access to every cooling core for easy service.



Swing-Out Toolbox
 The integrated toolbox swings out easily to give you access to internal components that are often hidden in other machines. The toolbox is mounted at ground level, has ample room and houses the battery of the combine for easy access.



Mobile Service Fleet

If you need service on your Lexion combine, a trained service specialist will come to your farm quickly to provide on-site diagnosis and repair. Cat service trucks carry more specialized equipment than many repair shops. More than 95 percent of problems can be handled on-site, saving you valuable harvest time.



Parts Distribution Network

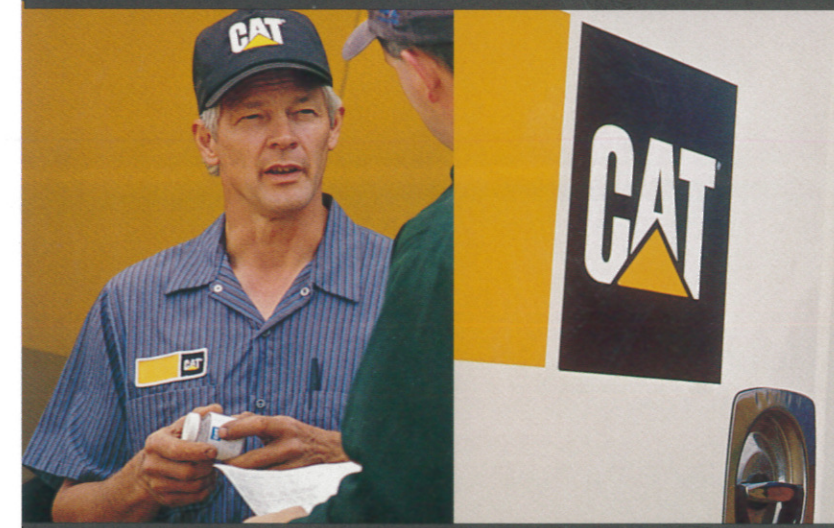
During the harvest, every Lexion dealer is connected to the 24/7 on-line parts network. Parts distribution warehouses are located regionally throughout North America.

Preventive Maintenance

Cat dealers use sophisticated methods including scheduled oil sampling to prevent problems from ever occurring.

Service is Never Far

Cat dealers have more than 75 years of experience providing the best possible support for customers.



Financial Services

Financing never has to stand between you and owning or leasing a Lexion combine. Competitive terms and flexible payment schedules, as well as add-on insurance and extended warranties are available.



1 Heads and headers

Corn:
Hydraulic deck plate
adjustment
Auto Contour
Auto Pilot

Grain, Flexible, Rice:
Hydraulic reel drive
Auto Contour
Auto reel speed and height
Laser Pilot

Pick-up trough:
Pickup attachment ready

**2 Variable-speed
feederhouse**

3 Drive tires:

800/65 R32
30.5L-32
900/60 R32
35.5L-32
73-44.00-32
18.4 R38
20.8 R42

**4 Dual-range threshing
cylinders with torque-
sensing variable drive
(standard on corn machines)**

5 Cab:

Air suspension seat
AM/FM stereo
Weatherband and CD
(optional)
Electrically adjustable
mirrors

6 CEBIS:

Automatic crop settings
Printer
Card reader
Yield mapping

7 Quantimeter:

Infrared yield sensor
Self-cleaning moisture
sensor



**8 Intensive Separation
System (ISS) available
on walker models only
(Lexion 450, 460/465R)**

**9 Unloading augers
(20, 22.6, 24.2 feet)**

**10 Variable speed rotor drive
*(optional on Lexion 460R,
470R/475R, 480R/485R)***

**11 Chaff spreader
Wide spread chopper**

12 Electric sieve adjustment

13 3-D cleaning system

**14 Powered rear axle
(up to 144 inches)**

15 Steering tires:

16.5/85-24
500/60-26.5
600/55-26.5
480/70 R28
28.1L-26

16 Wind reduction kit

17 Planetary final drives

**18 APS system with
interchangeable grates:**

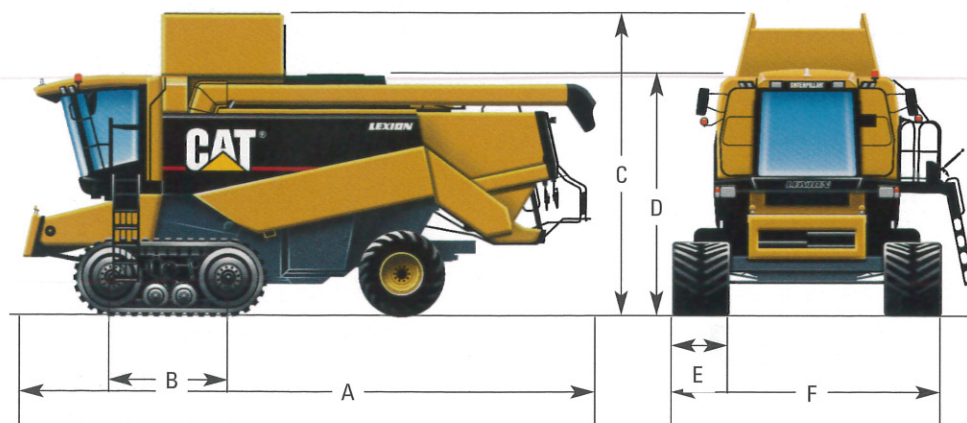
Small Grains:
6 mm x 40 mm
Intermediate:
12.5 mm x 40 mm
Corn/Soybeans:
19 mm x 40 mm

Lexion® Rotary Combine Specifications

ITEM	LEXION 460 R	LEXION 470 R/475 R	LEXION 480 R/485 R
Pre-Separation Type	APS (Standard)	APS (Standard)	APS (Standard)
Threshing			
Cylinder diameter	24 in (610 mm)	24 in (610 mm)	24 in (610 mm)
Cylinder width	56 in (1,420 mm)	56 in (1,420 mm)	67 in (1,700 mm)
Pre-concave grate area	572 in ² (0.37 m ²)	572 in ² (0.37 m ²)	685 in ² (0.44 m ²)
Main concave area	1,664 in ² (1.07 m ²)	1,664 in ² (1.07 m ²)	1,992 in ² (1.28 m ²)
Total concave area	2,236 in ² (1.44 m ²)	2,236 in ² (1.44 m ²)	2,677 in ² (1.73 m ²)
Separation			
Number of rotors	2	2	2
Separation area	4,607 in ² (3.00 m ²)	4,607 in ² (3.00 m ²)	9,641 in ² (6.22 m ²)
Total Threshing & Separation Area	6,843 in ² (4.44 m ²)	6,843 in ² (4.44 m ²)	12,318 in ² (7.95 m ²)
Cleaning System			
Total cleaning area	7,639 in ² (4.93 m ²)	7,639 in ² (4.93 m ²)	9,286 in ² (6.00 m ²)
Cleaning fan	4 turbine fans	4 turbine fans	6 turbine fans
Electric sieve adjustment	Optional	Optional	Optional
3-D sieve	Optional	Optional	Optional
Engine			
Caterpillar®	3126B	C-9	C-12
Horsepower (rated)	290 hp (216 kW)	340 hp (253 kW)	400 hp (299 kW)
Horsepower (bulge)	305 hp (227 kW)	355 hp (265 kW)	431 hp (321 kW)
Capacities			
Grain tank	280 bu (9,867 L)	280 bu (9,867 L)	280 bu (9,867 L)
Unloading rate	2.7 bu/sec	2.7 bu/sec	2.7 bu/sec
Fuel tank	170 gal (770 L)	170 gal (770 L)	170 gal (770 L)
Tracks/Wheels			
Mobil-trac™ system	35 in (889 mm) x 72 in (1825 mm)		
Front and rear tires	Variety of sizes and treads; optional powered rear axle available		
Transport Weight	31,970 lb (14,500 kg)*	32,190 lb (14,600 kg)*/ 38,800 lb (17,600 kg)	33,730 lb (15,300 kg)*/ 40,340 lb (18,300 kg)
Headers	Corn heads; rigid, flexible, rice, pick-up and draper headers		

*With 800/65 R-32 tires. Actual weight will vary depending upon machine configuration.

Dimensions



	Track Combines 475 R/485 R	Wheel Combines* 460 R/470 R/480 R
A	30' (9122 mm)	30' (9122 mm)
B	72" (1825 mm)	—
C	16' (4880 mm)	15' 10" (4840 mm)
D	12' 10" (3910 mm)	12' 8" (3870 mm)
E	35" (889 mm)	—
F	14' (4255 mm)	13' 9" (4200 mm)

*Dimensions calculated using 800/65 R-32 tires.

Lexion® Straw Walker Combine Specifications

ITEM	LEXION 450	LEXION 460/465
Pre-Separation Type	APS	APS
Threshing		
Cylinder diameter	23.5 in (600 mm)	23.5 in (600 mm)
Cylinder width	56 in (1,420 mm)	67 in (1,700 mm)
Pre-concave grate area	572 in ² (0.37 m ²)	685 in ² (0.44 m ²)
Concave grate area	1,664 in ² (1.07 m ²)	1,992 in ² (1.28 m ²)
Transition grate area	418 in ² (0.27 m ²)	501 in ² (0.32 m ²)
Total grate area	2,654 in ² (1.71 m ²)	3,178 in ² (2.05 m ²)
Separation		
Number of walkers	5	6
Length	172 in (4,367 mm)	172 in (4,367 mm)
Separation area	9,612 in ² (6.2 m ²)	11,507 in ² (7.42 m ²)
<i>Optional Intensive Separation System increases separation area up to 20 percent.</i>		
Total Threshing & Separation Area	12,266 in ² (7.91 m ²)	14,685 in ² (9.47 m ²)
Cleaning System		
Total cleaning area	7,639 in ² (4.93 m ²)	9,286 in ² (6.00 m ²)
Cleaning fan	4 turbine fans	6 turbine fans
Electric sieve adjustment	Optional	Optional
3-D sieve	Optional	Optional
Engine		
Caterpillar®	3126B, turbocharged, air-to-air aftercooled	3126B, turbocharged, air-to-air aftercooled
Horsepower (rated)	256 hp (191 kW)	290 hp (216 kW)
Horsepower (bulge)	—	305 hp (227 kW)
Capacities		
Grain tank	250 bu (8,810 L)	280 bu (9,867 L)
Unloading rate	2.0 bu/sec	2.7 bu/sec
Fuel tank	100 gal (500 L)	170 gal (650 L)
Tracks/Wheels		
Mobil-trac™ system	465 – 35 in (889 mm) x 72 in (1825 mm)	
Front and rear tires	Variety of sizes and treads; optional powered rear axle available	
Transport Weight	29,300 lb (13,315 kg)*	32,000 lb (14,515 kg)*/ 38,000 lb (17,237 kg)
Headers	Corn heads; rigid, flexible, rice, pick-up and draper headers	

*With 30.5 R-32 tires. Actual weight will vary depending upon machine configuration.



Standard Equipment

Standard and optional equipment may vary.
Consult your Caterpillar dealer for specifics.

Electrical

Alternator, 130 Amp, 12 volts
One auxiliary electrical circuit
Battery, maintenance free
Lights:
Halogen transport and field
Grain tank and unloading auger
Two rear lights, sieve light and returns
auger light
Warning and road tail lights with signal and
two rotating beacons

Operator Environment

Pressurized cab with air conditioner
and heater
Radio ready with two speakers
One large rotating windshield wiper and
windshield washer system
Electrically adjustable rearview mirrors
Tilting, telescoping steering column
Multi-adjustable operator seat with air
suspension and seat belt
Storage compartment under the seat
Instructional seat with seat belt
Cooling compartment for food and beverages
Pivoting operator access ladder
Cup holder, lighter, ashtray
Courtesy lights (inside cab)
Tinted glass
Horns, front and rear warning
Floor mat
Controls and instrumentation
All controls for header and separation as
electric or electro-hydraulic controls in
the cab
Hydrostatic ground speed control with
multi-functional handle integrated in the
r/h armrest of the operator seat
14 functions at fingertip control in the
multi-function handle

IMO Information Monitor system

Clear view monitor in the r/h panel with
display of all major combine functions,
alarm system for all combine functions,
integrated diagnostic system
Grain loss monitor
Independent hydraulic brakes
Foot-operated parking brakes

Powertrain

CAT 3126B, 290 hp (216 kW) (460 R)
CAT C-9, 340 hp (253 kW) (470 R/475 R)
CAT C-12, 400 hp (299 kW) (480 R/485 R)
Turbocharged, air-to-air aftercooled,
six-cylinder diesel engine
Electronic fuel shut-off
170-gallon (650 L) fuel tank
Rotary screen air intake cooling system with
dust extraction
Rotary screen suction fan
Air cleaner with dust ejector
Variable hydrostatic ground drive with
three-speed Servo-Shift transmission

Undercarriage

Mobil-trac™ System undercarriage with 35"
(889 mm) Caterpillar low-vibration
belts (475 R/485 R)
Front tires: 800/65 R-32 172 A8 Radial
(470 R/480 R)
Rear tires: 16.5/85-24 8PR

Other Standard Equipment

Header guidance: Contour
Variable speed feederhouse (corn version)
Fixed speed feederhouse (small grain and
rice versions)
Threshing
APS threshing system with:
Accelerator cylinder
Threshing cylinder
(continued)

(APS threshing system continued)

Multi-crop concave
Stone trap with manual remote dump
Separation
Straw walker separation
(450, 460/465)
Twin-rotor separation system
(460R, 470R/475R, 480R/485R)
Cleaning
Mechanical sieve adjustment
Four fluted turbine fans (470 R/475 R)
Six fluted turbine fans (480 R/485 R)
High performance cleaning shoe
Ventilated pre-cleaning step
General purpose chaffer and sieves,
infinitely adjustable at three levels
Removable preparation pan
Regular cleaning fan air intake screen
Grain handling
280 bu (9,867 L) grain tank
20' unloading auger
2.7 bushels per sec. unloading rate
Heavy-duty grain handling system
(corn version combines)
Electrically folding grain tank covers
Adjustable covers for grain tank
cross auger
Serviceability
Flip open side shields
Central lube charts
Easy access lube banks
Hydraulic diagnostic quick disconnect
Central electric compartment
Electronic diagnostic receptacles
Hydraulic reel drive
Hydraulic fore/aft reel control
Three feederhouse lift cylinders and
single accumulator header shock-
absorbing system
Multi-link header coupling system
Slow moving vehicle emblem
Fire extinguisher bracket
Toolbox with assorted tools and parts

Operator Environment

Header guidance
 Auto Contour
Operator controls
 CEBIS – Combine Electronic Board
Information System
Reel control
 Auto speed
 Auto speed/height
Operator environment
 Quantimeter with infrared yield sensor
and self-cleaning moisture sensor
 Yield mapping
 Auto Pilot
 Laser Pilot
 Automatic climate control
 Printer
 Cardreader
 Radio with weatherband
 Radio with weatherband and CD
 Electronic tailings monitoring
 Fuel consumption monitoring

Undercarriage

Variety of tire sizes and tread types (470 R/480 R)
Rear axle
 Non-powered, fixed or adjustable
 Powered, adjustable to 120"
 Powered, adjustable to 144"

Other Attachments

Unloading auger lengths
 22.6'
 24.2'
Residue disposal
 Straw deflector
 Straw chopper
 Straw spreader
 Variable speed feederhouse (small grain and rice versions)
 3-D sieve system
 Chaffer fan and elevator guards
 Electrical sieve adjustment
 Spike tooth threshing system (rice version)
Cylinder/concave conversion kits
 To small grain
 To corn
 To rice
Cylinder drive
 Single range
 Dual range
Separation
 Rotor cover plates
 962 rpm rotor drive kit
 500 rpm rotor drive kit
 300 rpm rotor drive kit
 Variable 360 – 1050 rpm rotor drive kit
Miscellaneous attachments
 Small seed wind reduction kit
 Chaff spreader



LEXION[®]



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