

# FARM FORUM

**CASE IH**  
AGRICULTURE**+ EVEN CLEANER****CASE IH MEETS  
TIER 4B WITH SCR ONLY**

PAGE 4

## PRODUCT FOCUS

**NEW 5 SERIES PLANTERS  
ADVANCE CASE IH  
AGRONOMIC DESIGN**HIGHER LEVELS OF METERING  
ACCURACY, FASTER TENDERING

PAGE 12



PAGE 20

**NEW STEIGER AND MAGNUM  
TRACTORS BRING MORE  
POWER, COMFORT  
AND TECHNOLOGY**





# THE MATH THAT GIVES YOU HIGHER YIELD POTENTIAL: $4 > 2$

The all-new Steiger® Rowtrac™ Series is built on four equal-sized, independent, oscillating tracks and a narrower suspension system straight from the factory. Four tracks mean you get proven Case IH Quadtrac® technology, giving you the most horsepower available when tackling row crop applications — resulting in more productivity. The Steiger Rowtrac Series, with the Efficient Power of our exclusive SCR engine technology, puts you at the forefront of farming innovation. Visit your local dealer or go to [caseih.com/4isgreaterthan2](http://caseih.com/4isgreaterthan2).



BE READY.





## CONTENTS

4	<b>ADVANCES IN PRODUCTIVITY</b> Even cleaner
8	<b>CASE IH OWNER PROFILE</b>
11	<b>PRECISION FARMING &amp; GUIDANCE</b> New options for section control and correction signals
12	<b>PRODUCT FOCUS</b> New 5 Series planters advance Case IH agronomic design
14	<b>CASE IH OWNER PROFILE</b>
18	<b>CASE IH INITIATIVE</b> Shared knowledge
19	<b>PRODUCT FOCUS</b> Faster, autoguidance-ready windrowers
20	<b>PRODUCT FOCUS</b> Power, comfort and technology
22	<b>CASE IH OWNER PROFILE</b>
25	<b>MONEY MATTERS</b> Sizing up lenders
26	<b>CASE IH FIRST OWNER REPORT</b>
28	<b>PARTS COUNTER</b> Keep DEF clean and pure
30	<b>CASE IH OWNER PROFILE</b>
32	<b>EQUIPMENT SHOWCASE</b>
34	<b>CASE IH UPDATE</b>

The new digital issue of *Farm Forum* is available online at [caseih.com/farmforum](http://caseih.com/farmforum). You can be notified by email when new digital-exclusive editions of *Farm Forum* are posted. Sign up at: <http://farmforum.questionpro.com>.



Also available as a **FREE iPad App**.

Search for *Farm Forum* at the Apple iTunes App store and download your iPad edition today!

### OUR MISSION:

To provide you with information about Case IH equipment, trends in agriculture and producers' experiences to help you successfully manage your farm business.

**FARM FORUM** is published on behalf of Case IH and Case IH dealers by Cygnus Custom Marketing, a division of Cygnus Business Media. Editorial office: 1233 Janesville Ave., Fort Atkinson, WI 53538. Phone (920) 563-6388. Printed in the U.S.A. Copyright 2013 CNH America LLC. All rights reserved. Volume 40, Number 3, 2013.

**FARM FORUM** is sent free of charge to qualified producers courtesy of Case IH dealers. Address changes should be sent to FARM FORUM Circulation, CNH America LLC, 700 State St., Racine, WI 53404. Please include the address label from this magazine along with your new address.

**FARM FORUM**, Case, IH, CASE IH, Puma, Early-Riser, Cyclo Air, CNH Capital, Axial-Flow, Steiger, Quadtrac, Earth Metal, Ecolo-Tiger, Tiger-Mate, Farmall, Hy-Tran, AIM Command, crumbler, Concord, Tyler, Isomount, Maxxum, Vibra Shank, Ecolo-Til, Systemgard, Uptime Service logo, Cotton Express, Conser-Till, AFS logo, Agri-Logic, Flex-Air, Patriot and Microloc Protection System logo are registered trademarks of CNH America LLC.

Magnum, AFS AccuGuide, AccuSteer, Hy-Tran Ultra, Hy-Tran Ultratractor, Skip-Shift, SynchroShift, Maxxi-Width, Diamond Finish logo, Auto-Trip II, No. 1, Instant Yield Maps, Titan, Cross Flow, Surround, Solid Row Crop, Surveyor, Availability MAXX, Thirty Plus, CNH Capital Ag Resource, CNH Capital Ag Resource Express, Module Express, Optima, Diesel Saver, Gold Value, ProID, True-Tandem, TerraFlex, Nutri-Placer, Nutri-Tiller, Robo-Sharpener, Case IH Scout, AFS Connect, Precision Disk, BaleKeeper, AccuDrive and Efficient Power are additional trademarks of CNH America LLC.

Any trademarks referred to herein, in association with goods and/or services of companies other than CNH America LLC, are the property of those respective companies.



**ON THE COVER:** At 682 maximum hp, the new Quadtrac 620, shown with a Tiger-Mate 200 field cultivator, and its wheeled counterpart are the most powerful agricultural tractors on the market. All Case IH high horsepower tractors meet Tier 4B emissions requirements with SCR only, avoiding the need for exhaust gas recirculation, diesel particulate filters and regeneration.

## FARM FORUM COMMENT

### Meeting your challenges

**W**e all know agriculture has had an exciting several years. In fact, in my 35 years working in agriculture, I have never seen producers enjoy such an extended period of increasing net farm income as we have experienced over the last four years or so.

This growth period in ag has coincided with the new vision for Case IH which we set forth in 2007. In this column, I've referred to this business model based on innovative products, supported by value-added knowledgeable people highly engaged in the marketplace, and delivering an extraordinary customer experience through the industry's best dealer network. This "Producers First" attitude underpins everything we do at Case IH.

I hope you have personally seen the results of this consistent focus in the quality and performance of Case IH equipment you have purchased, and in your relationship with your Case IH dealer.

Certainly, the overall marketplace has noticed. From 2006 through 2012, the North American industry dollar volume for the core products of high horsepower tractors, combines and field equipment has roughly doubled.

During this period, our Case IH business has tripled. We have gone from a little over \$1 billion in sales to recently hitting \$4 billion. We increased machine population and market share faster than our competitors have.

For you, as a producer, this success means Case IH and our dealers have more resources available to further strengthen our abilities to serve you. Examples include the growing number of product specialists ("red shirts in red trucks") deployed in the field to support dealers and customers alike, and the continuous improvement by Case IH dealers in their facilities, personnel and parts inventories.

Of course, innovative products are at the core of our mutual success, and on that front, the progress continues with our industry-leading Tier 4B SCR-only Efficient Power solution for our high horsepower equipment that's simple, smart and proven. We are increasing the width and breadth of the Case IH product line, with more choices across the board. New Farmall utility tractors and an expanding line of commercial hay products are examples.

Looking ahead, we see producers asking us for more of the innovations such as Agronomic Design plus the performance and support that have helped them prosper through several years of challenging crop production conditions. That's a challenge we are ready to meet.

From our perspective, when you see your way forward, the path is marked in Red.

**Jim Walker**

Vice President, Case IH NAFTA



# Even cleaner

CASE IH CONTINUES EMISSIONS LEADERSHIP WITH A POWERFUL, SIMPLE, SMART AND PROVEN SOLUTION

**T**he second round of Tier 4 diesel engine emissions regulations takes effect beginning January 1, 2014 for off-road equipment rated at 175 hp and over.

The first round, Tier 4A, covered this category of engines beginning January 1, 2011. It required significant reductions in nitrogen oxides (NOx) and particulate matter (PM). The emissions solutions included Selective Catalytic Reduction (SCR) using Diesel Exhaust Fluid (DEF) and Cooled Exhaust Gas Recirculation (CEGR).

## INNOVATIVE FEATURES WARRANT MULTIPLE PATENTS

The technology Case IH sister company FPT Industrial developed to meet Tier 4B emissions standards using SCR-only has led to numerous significant patents. They include:

- The “closed” control to allow precise dosing of DEF in order to reduce the level of NOx emissions.
- The adaptive DEF dosing system based on control technology using NOx and ammonia sensors to provide accurate information on the composition of the exhaust gases.
- Thermally insulated high turbulence mixing which allows homogeneous hydrolysis of urea and its correct distribution in the exhaust flow.
- Improved thermal management to speed up SCR light-off in the cold part of the emission cycle.

The Tier 4B regulations call for an additional 80 percent reduction in nitrous oxide (NOx) beyond the Tier 4A requirements while maintaining the same particulate levels.

This dramatic reduction has required diesel engine manufacturers to adopt another round of new emissions technologies.

As it did for Tier 4A, Case IH will meet Tier 4B on its high-horsepower tractors and powered equipment using Selective Catalytic Reduction exclusively – no Cooled Exhaust Gas Recirculation (CEGR).

In fact, other manufacturers, including those who labeled the use of DEF as being too complicated, will be using SCR with DEF plus CEGR to meet Tier 4B. And, as the experience of the past few years has shown, SCR has advantages over CEGR because of its unaltered combustion process.

Case IH is able to meet Tier 4B with efficient SCR-only thanks to the extensive resources of sister company FPT Industrial. This global leader in diesel engine technology and production invested more than \$133 million in research and development of this solution.

The Case IH Tier 4B solution is based on the SCR-only system Case IH introduced in December, 2010 with engines branded as Efficient Power. Since then, more than 35,000 Case IH Efficient Power engines have logged more than 17 million hours of reliable, clean-burning and fuel-efficient operation.

Tier 4B-compliant Efficient Power engines continue to use this familiar and proven system,



with the addition of components designed to allow greater interaction between DEF and the exhaust to further reduce NOx to the new compliance levels.

Building off Case IH's Tier 4A strategy, the Tier 4B compliant system developed by FPT Industrial utilizes an all-new diesel oxidation catalyst (DOC) featuring a proprietary design that helps maximize SCR performance, especially at low temperatures.

To achieve this high level of efficiency, this new system is designed to maintain minimum exhaust temperatures at all times regardless of the load on the engine. Sensors monitor ammonia and NOx to ensure efficiency and overall emissions compliance of the engine.

To improve the DEF delivery efficiency in the exhaust stream, FPT Industrial developed software to predict NOx production of the engine based on engine speed, load and operating temperatures. Predicting NOx generation allows the engine control unit to add the precise amount of DEF required, adapting to the current conditions and saving DEF for the operator.

This new Tier 4B system does not recirculate DEF, which keeps the fluid cooler and more effective at high ambient temperatures.

DEF usage will increase modestly in the new Efficient Power Tier 4B equipment. For example,





**+** Operators of current Case IH Tier 4A equipment will see little difference in operating new Tier 4B models which continue to use SCR only. Inside the new larger diesel oxidation chamber, exhaust and DEF interact in a proprietary and patented process.

of high-horsepower equipment? “We have a simple, smart and proven system here,” says Ryan Schaefer, Manager, High Horsepower Tractor Marketing, NAFTA, for Case IH. “It requires nothing from the operator beyond adding DEF, which is an operation no more complicated than adding fuel. The advantages of 600-hour oil service intervals continue.

“These are clean-burning fuel-efficient engines. In fact, the Case IH Tier 4A models have set new fuel efficiency standards in Nebraska Tractor Test Lab tests. We expect these Tier 4B models will show similar performance, especially in high-load operations where the SCR-only system shows its greatest advantage over CEGR.

“And,” Schaefer says, “let’s not lose sight of the environmental significance of these new engines. They meet the most stringent emissions guidelines ever developed, with no compromise of performance.

“The overall progression of environmental stewardship by North American agricultural producers has been impressive. Case IH equipment powered by Tier 4B Efficient Power engines provides one more step forward in agriculture’s environmental leadership.” ■

a tractor working in conditions that consume about 5 percent of DEF per amount of fuel used in Tier 4A will consume about 7.5 percent of DEF in the new Tier 4B system. As with Tier 4A engines, DEF usage will continue to be affected by factors including engine horsepower, ambient temperatures, humidity and engine load, among others.

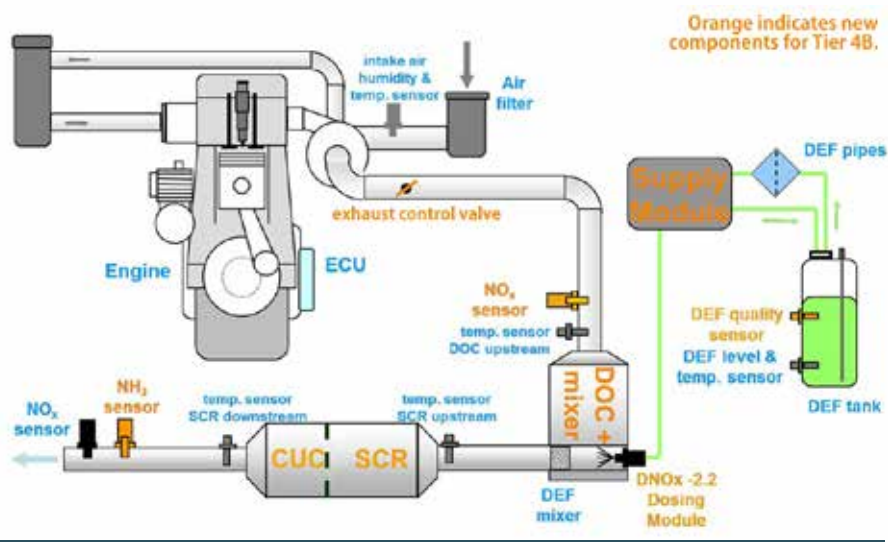
Fuel efficiency will be similar to what users of current Case IH Tier 4A Efficient Power equipment are experiencing, as there is nothing with this new system that affects the intake and combustion process, other than an exhaust control valve which comes into use only in low-load situations where the engine might not otherwise maintain optimum operating temperatures.

This new system has been extensively tested. More than 133,000 test hours have been logged, many of them at the CNH Technology Center at Burr Ridge, Illinois. Named an Agricultural Engineering Historic Landmark

as the site for the development of the Farmall tractor, this has been the setting for the design and testing of many IH and Case IH product innovations.

The design and technology allowing this desirable and exclusive SCR-only technology is protected by eight new patents.

So what does all this mean to you, as a user



**+** Innovations including new sensors and software allow Case IH to avoid Cooled Exhaust Gas Recirculation to meet Tier 4B emissions requirements in its high-horsepower engines. All emissions management takes place outside of the engine and post-combustion.



# OUT WHERE THE WORK IS

As more and more reports come in from the field, all across North America, one story emerges again and again: The Case IH Be Ready promise is backed up by much more than innovative, advanced equipment. It all comes down to people, working face-to-face, to supply the support and expertise producers need to meet the growing demands of today's agriculture.





# CASE IH HAS THE MOST SUPPORT PEOPLE OUT IN THE FIELD

## CASE IH DEALERS: MORE THAN BEST-IN-CLASS; IN A CLASS BY THEMSELVES

Case IH dealers are the backbone of the Case IH network. They're the ones who understand your part of the country and your operation. They're the ones ready to help you find the right equipment, with the best options, along with the tools and attachments to fit the demands of your operation. These aren't folks who ask, "What can I sell you?" They're more likely to start with, "What do you need to do?"

And Case IH dealers support their customers with a full line of Case IH parts and components. Plus full-service maintenance programs and industry-leading warranties. You'll find expertise applied by skilled, factory-trained service professionals committed to providing you maximum uptime, season after season.

## THAT FAMILIAR RED PICKUP MEANS THE CASE IH FIELD TEAM IS ON THE JOB

It's easy to spot the Case IH field team at work. For one thing, they show up in red shirts, in red Ram trucks. And more important, they're easy to spot because there are simply so many of them. In fact, more than two-thirds of Case IH North American staff work not in an office or cubicle, but out in the field where the work gets done.

## BECAUSE YOU GROW MORE THAN CROPS

CNH Capital's extensive experience in the agriculture industry has created a deep understanding of your unique needs. Competitive equipment financing with flexible payments can be timed to your cash flow. Or, conserve capital and reduce upfront payments with operating and finance leases. For other needs, choose credit cards specific to the agricultural industry, or let us help you finance crop-input products or land rental. CNH Capital helps you find financing options that fit the way you farm.

## EQUIP, ADVISE, SUPPORT: CASE IH PROFESSIONALS ARE ON YOUR TEAM

Case IH puts more professionals in the field than anybody in the industry: a network of dealers along with Case IH Field Specialists provide expertise to equip you, advise you, support you every way they can. Parts and service technicians ready to assist you before, during and after the sale. CNH Capital to work with you to customize financing solutions to identify what works best for your situation.

It's an integrated system, with equipment, maximum service and financing options in one package – all focused on getting you ready for whatever comes next for you and your operation.



©2013 CNH America LLC. All rights reserved. Case IH is a registered trademark of CNH America LLC. [www.caseih.com](http://www.caseih.com)





# Just add water

## AFS RTK GUIDANCE MAKES UNDERGROUND IRRIGATION POSSIBLE ON CORN GROUND

**“We farm, and we have fun doing it,” says Todd Boughner. The fun part, a visitor soon learns, is finding ways to do things better.**

Boughner, manager of Judge Family Farms in Simcoe, Ontario, and Derek Hill, who oversees field operations, spend a fair amount of their time sharing “what if” scenarios. Boughner is quick to run a cost/benefit analysis, and if an idea passes that test, chances are they’ll adopt it.

“We do a lot of research and development work here,” Boughner explains.

Judge Family Farms is a poultry, pork and grain business. It finishes out about 100,000 broilers annually and is a large-scale hog producer with farrow-to-finish operations and a focus on breeding and selling breeding stock.

Farming operations of 2,600 acres include 1,600 acres of corn, all of which is sent through a mill to feed the poultry and hogs.

About four years ago, several factors converged that set Boughner on a path of looking for a new way to boost corn yields.

That’s when they began irrigating some corn ground, using a traveling gun and drag hose system. With it, they saw yields approaching 300 bushels on some sandy ground that typically produced corn yields in the low 100s.

That yield boost started their “thought wheels” turning. They saw land prices escalating

and the outlook for higher crop prices beginning to strengthen. And, their local weather patterns were tending toward dry spells at critical yield-determining times, if not all-out drought.

If reliable water is all it takes to assure higher yields, they reasoned, they should find a way to bring it. “We’re a progressive company,” Boughner says. “We’re not going to be hampered by seasonal weather patterns.”

A fair portion of Judges Farms’ acreage lies on what’s known as the Norfolk Sand Plain. The coarse-textured soil has limited water-holding capacity. There’s ample groundwater for irrigation, but to Boughner and Hill, the overhead

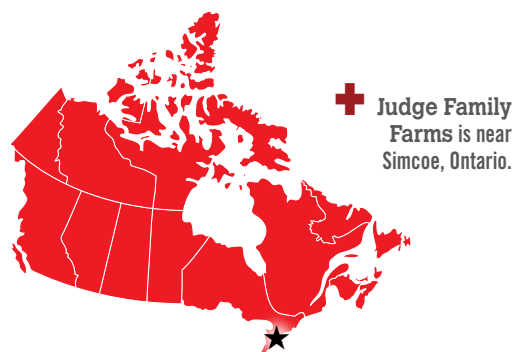
water systems, either traveling guns or centerpivots, have inherent shortcomings including high water and energy use, and lack of timeliness.

“We try not to be the old school of ‘getting by,’” Boughner says. “We started looking for a better way.”

An underground irrigation system in a lawn, with zone control, caught their interest. “We thought, ‘Wouldn’t that be nice to do on a farm scale?’” Todd recalls.

This concept of subsurface irrigation using buried tape has commonly been used for high-value crops such as orchards and vineyards where deep tillage isn’t practiced and soils don’t freeze. Applying it to Ontario corn ground was unheard of, as Boughner and Hill learned as they looked for subsurface irrigation resources.

“We talked with people who did subsurface irrigation in Florida, but the tape is gathered up







every year." Boughner and Hill wanted a longer lasting solution. A friend and neighboring producer, Dave Blake, provided additional insight and support.

Based on the potential for efficient water use, low energy cost and minimal labor requirements compared to overhead systems, Boughner and Hill decided to install subsurface irrigation tape on a 75-acre field with a nearby pond as the water source.

RTK guidance, with its sub-inch accuracy, is the technology that made this investment possible, Boughner and Hill say, and they adopted it as part of the installation process. Their local Case IH dealer helped them during the installation by providing them with a Magnum tractor equipped with an AFS Pro 700 display receiving an RTK signal.

"We're in a learning mode with RTK," Boughner says. "Our dealer helped us greatly in getting the maps set up and showing how the information can be transferred to our equipment."

Using the resources of their farm's shop, Boughner and Hill designed and fabricated their own drip tape applicator that's based on three Case IH ripper shanks. They buried seven-eighths inch diameter irrigation tape 14 inches deep, and 44 inches apart.

Why 44 inches? "We tried a plot with tape buried 60 inches apart and it worked well. We figured we had one shot at this so we settled



**+** The irrigation drip tape is buried 14 inches deep on 44-inch spacings. A Magnum tractor equipped with the AFS Pro 700 display provided the RTK autoguidance and mapping. The excavation photo shows the main line with rigid risers hooking to the dripper lines. Boughner and Hill show a completed field, with risers in place to take in water pumped from a nearby pond.



on 44 inches. We think this will work better. With more water going to it, we'll run the system less," Boughner explains. Their tape is warranted for 15 years.

He says their goal is an "overall wetting of the field" rather than trying to place water under or beside rows.

The 44-inch spacings also allow ample clearance for subsoiling, if needed. "Based on the map of the irrigation tape, we just move over 22 inches and go.

A 15-hp electric motor pumps water into the system at 16 psi. A sand filtration system protects the tape from sediment, and a flow meter is in place to monitor and measure water flow. They also have the ability to add nutrients into the water flow for fertigation.

The system is set up into six zones of approximately 12.5 acres each. "I can water two zones at one time, and put one-quarter inch of water into the root zone in six hours. So in 18 hours, I can water the whole field with one-quarter inch of water, which is huge," Hill says.

Boughner and Hill see the benefits of this new irrigation system going far beyond simply having higher yields. For example, not only was last year's drought-affected crop short, the corn test weight and quality was reduced which in turn affected their feed quality and the productivity of their poultry and hogs.

With predictable water, they will get full benefit from the fertilizers they apply.

In the broader environmental perspective, they note the benefits of minimal drawdown of groundwater, as they are relying on surface water. They will significantly increase yield from

a fixed amount of ground, without breaking new soil or consuming more fuel and other resources. They'll see higher returns from the cost of land, which is the farm's largest investment.

And, with water removed as a variable, they can work with other agronomic factors toward Boughner's goal of more than doubling the yield on land that has averaged 100 bushels. "I know we can gain way over 100 bushels," he says. "I want to see 250 or I won't be satisfied."

"We love fertility and corn science. Now, with water, we can put everything together," he adds.

As an overall farm mission, Boughner and Hill apply new technologies whenever possible. They use wireless cameras to monitor their multiple livestock locations, which they can view on their iPads wherever they have Internet access. They're planning to add a camera focused on their newly irrigated field to view "real time" corn and anticipate adding wireless subsoil moisture monitors.

Case IH AFS Precision Farming systems fit well into their technology vision. "Most everything is red on this farm, and we're using AFS and the AFS Pro 700 display on our new Magnum tractors," Hill says. "We get more new technology every time we get new equipment. AFS is definitely a system we can grow with." ■

**“**  
**AFS is**  
**definitely**  
**a system**  
**we can**  
**grow**  
**with.”**

**Todd Boughner  
and Derek Hill.**







# FULLY INTEGRATED, OPEN-ARCHITECTURE TECHNOLOGY THAT ISN'T AFRAID TO GET ITS HANDS DIRTY.

Case IH Advanced Farming Systems is dedicated to helping producers be ready. AFS delivers an integrated, less complex precision farming solution, built right in to our equipment using a single display across machines. Built on open architecture, AFS can interface with your existing equipment, no matter what color it is. And our specialists in the field, AFS Support Center engineers and AFS Academy trainers, are there to help you maximize your operation's potential and keep you rolling 24/7/365. Visit an AFS Certified Dealer or go to [caseih.com/AFS](http://caseih.com/AFS) to learn more.

**AFS**



**BE READY.**

**CASE IH**  
AGRICULTURE







# New options for rate and section control and correction

## AFS PRECISION FARMING SYSTEMS EXPAND AS A SINGLE-SOURCE SOLUTION

**W**orking with multiple brands of equipment can be a bit easier with the new Case IH AFS AccuControl. It works in conjunction with an application implement and the AFS Pro 700 display to provide the same user-friendly interface that the AFS Pro 700 display provides for Case IH equipment.

Specifically, AFS AccuControl can be used to record as-applied maps, control sections and vary application rates for planters, sprayers, liquid applicators and anhydrous toolbars.

You can activate coverage logging (site verification) on the display to keep as-applied records of varieties or rates.

As-applied mapping, variable rate and automatic section control can be managed with AFS AccuControl. For planters, you can control and monitor both seed (four sections) and liquid application (two sections).

When using the seed monitoring feature of AFS AccuControl, advanced information such as singulation information is displayed and mapped for up to 48 rows. Up to 48 sections can be controlled via Automatic Overlap Control for added versatility.

AFS AccuControl is also compatible with Rawson drives, allowing up to four different rates for variable-rate seeding and the independent variable-rate control of two liquid products.

For sprayers and liquid applicators, AFS AccuControl can provide auto shut-off for up to 48 boom sections and provide single-product rate control to bring additional value to AFS

Pro 700 displays that may already be installed in another piece of Case IH equipment.

Similarly, rate control and up to 48 sections of anhydrous ammonia applicators can be managed.

### **CenterPoint RTX for direct highly accurate correction; no base station needed**

The CenterPoint RTX correction signal provides some unique new advantages. It's available throughout much of the U.S. Corn Belt, Great Plains and Canadian Prairie Provinces.

CenterPoint RTX delivers GNSS enabled, repeatable 1.5-inch (4-cm) corrections via satellite directly to the built-in receiver in compatible displays including the AFS 372 receiver working with the AFS Pro 700 display, as well as the FM-750 and FM-1000 displays. There's no need for a base station, additional radio hardware or cellular data plans.

Initialization is fast. In core areas of the U.S. Midwest, it can be as fast as one minute. In other areas, initialization can converge to a 30-cm position in approximately 10 minutes, with full accuracy in less than 40 minutes. Starting the CenterPoint RTX equipped vehicle in the same spot where it was turned off reduces initialization to less than three minutes.

GLONASS satellite access is free. With CenterPoint RTX subscriptions, GLONASS satellite access is unlocked for free throughout the duration of the subscription.

CenterPoint RTX is a good choice for row crops and other applications that can work with 1.5-inch accuracy.

It's best suited for farms in the central section of the U.S. and Canada, outside of RTK base station areas or where robust cellular coverage is lacking. ■

### **+** ACCURACY TO MEET YOUR NEEDS

Case IH AFS AccuGuide autoguidance systems are compatible with the leading correction signals.

Your Case IH dealer AFS sales specialist can advise you on the best solution for your area and cropping systems.

BROAD-BASED	MID-LEVEL	MICRO-LEVEL
Accuracy (6 to 8 inches)	Accuracy (2 to 5 inches)	Accuracy (1.5 inches and under)
WAAS	OmniSTAR G2	CenterPoint RTX
OmniSTAR VBS	OmniSTAR XP	CenterPoint VRS
	OmniSTAR HP	CenterPoint RTK



# New 5 Series planters advance Case IH agronomic design

HIGHER LEVELS OF METERING ACCURACY, FASTER TENDERING

**C**hallenging spring planting conditions of the past several years have highlighted the crucial role planter performance plays in getting crops in the ground as quickly and efficiently as possible.

## **+** EARLY RISER 1200 SERIES PLANTER CONFIGURATIONS

The new 5 Series Early Riser planters feature sizes and configurations to meet all popular row-crop applications.

- **1215 Rigid Mounted**  
6- and 8-row, wide or narrow
- **1225 Rigid Trailing**  
6- and 8-row, 30-inch
- **1235 Mounted Stackerbar**  
8- and 12-row wide  
12- and 16-row narrow
- **1245 Pivot Transport**  
12- and 16-row 30-inch  
12/23 and 16/31 15- and 30-inch split-row  
24-row 20-inch
- **1255 Front Fold**  
12-, 16- and 24-row 30-inch
- **1265 Front Fold**  
32-row 30-inch  
36-row 20-, 22- and 30-inch

Innovations and updates in the new Case IH Early Riser 5 Series planters are designed to help these planters deliver their long-standing qualities of metering accuracy and early emergence while providing new levels of planting information, and reducing tendering time.

“Year after year, we see that Case IH planters perform in nearly all conditions without

requiring aftermarket modifications,” explains Bill Hoeg, Case IH planter marketing manager for North America. “The agronomic design of the Early Riser row unit has proven to be extremely effective in planting to the moisture and assuring firm seed-to-soil contact for quick, even emergence.”

All new Case IH 5 Series planters feature a new AccuDrive seed meter drive system which seamlessly transfers power from the hex drive shaft to the seed meter. Completely enclosed with no exposed moving parts, this new drive system eliminates the need for chains, tensioners and sprockets. Extensively tested for durability, the AccuDrive system delivers a smoother meter drive for even higher levels of metering accuracy and consistent performance.

The AccuDrive system interacts with the optional AFS AccuRow row clutches. Now electric, the row clutches are managed by the AFS Pro 700 Display to control single rows on planters up to 20 rows, and two rows on planters with 21 rows, with single-row control optional. LED lights on the clutches confirm their operation.

AFS-equipped 5 Series planters are equipped with new AccuStat Seed Sensors. These provide the same high accuracy as the previous Smart Seed Sensors, along with improved reliability,





## ✚ SLOW-TURNING METER ACCURATE AT FASTER PLANTING SPEEDS

Faster planting speeds are one component of increased productivity. The large-diameter single-disk meter in Early Riser planters turns up to four times slower than other planter meters. As a result, it maintains accurate metering at faster planting speeds. For example, it can plant corn populations of up to 60,000 at 8 mph.

The new AccuDrive seed meter drive system on Early Riser 5 Series planters further aids meter accuracy at faster planting speeds.

monitoring and diagnostics. The AccuStat Seed Sensors include the optional activation capability to view and record singulation, multiples, skips, and spacing coefficient of variation (CV) data. This information is presented in the AFS Pro 700 display in new easy-to-read formats including color-coded bar charts, and can be recorded for further viewing analysis as part of the as-applied mapping.

Tendering time is an important component of planter efficiency. The bulk fill tanks on the 1245 and 1255 planters have a new profile that lets them be more completely filled without needing to “hand push” seed into the corners. The tanks and the surrounding platform have new features that allow easier access to the bins, both for the operator and for bulk augers. New segmented cleanout doors allow fast cleanout.

The bulk fill tanks feed into a new linear inductor box where the seed and airflow meet to move the seed into the mini hoppers on the row units. Thanks to intensive testing, the new inductor box has been proven to handle thousands of combinations of seed types, sizes and coatings. This allows the new bulk fill system to

## UNIFORM EMERGENCE DELIVERS PHOTOCOPY PLANTS

Uniform emergence is increasingly being identified as a primary contributor to maximum corn yield, playing a greater role than in-row spacing.

When all plants emerge uniformly, the result can be coined “photocopy plants” where the entire stand is identical in height and stage of development.

Purdue University research reports that uneven emergence can reduce corn yields by 9 to 22 percent. In-row spacing – the “picket fence” stand – continues to be significant, with yield reductions of 2 to 4 percent from irregular spacing.

Uneven emergence results in the early-emerging plants overshadowing the later plants and limiting light interception and leaf growth. These plants, which are one to two leaves behind, have reduced potential compared to the early plants yet they consume nutrients that limits the potential of the first-to-emerge plants. And, plants that become three or more leaves behind have minimal yield contribution.

This variability of plant growth can be measured to determine Net Effective Stand Percentage (NESP):

$$\text{NESP} = \frac{\text{Total plant population} - \text{late emerging plants} - \text{poorly spaced plants}}{\text{Total plant population}}$$

High NESP numbers result in large measure from planter performance. Case IH planter specialists have identified agronomic factors controlled by planters that impact NESP, and ultimately, yield. In order of importance, they are:

- ❶ Plant to the proper depth.
- ❷ Plant to a uniform depth.
- ❸ Provide good seed-to-soil contact.
- ❹ Provide uniform soil pressure around the seed.
- ❺ Maintain accurate seed populations.
- ❻ Maintain accurate in-row seed spacing.

The Case IH Early Riser row units deliver points 1 through 6, consistently and in a wide range of field conditions without costly aftermarket modifications.

The 1200 Series ASM meter continues to build a reputation for providing industry-leading performance on points 5 and 6, with the added advantage of handling multiple seed shapes and sizes without changing seed disks or vacuum adjustments.

handle an expanded range of crops including sunflowers, sweet corn and cotton, and accommodate the expanded use of seed treatments. The 1265 planters have an optional factory installed bin fill scale system; a dealer-installed scale is available for both the 1255 and 1265. The scale can be read and operated from the bulk fill platform and the tractor cab with the

AFS Pro 700 Display.

Overall, the new 5 Series planters continue the agronomic advantages of the Early Riser row units and the high-speed accuracy of the ASM meter, with new features providing improved productivity, reliability and detailed analysis of planting performance. ■

Learn more about Agronomic Design and photocopy plants in this video: <http://www.youtube.com/watch?v=U3x3cqT0DZo#at=13>







THIS PRODUCER PUTS A  
PREMIUM ON FASTER PLANTING  
AND A QUALITY HARVEST



**Kirk Martin** grows  
corn and soybeans and  
feeds cattle near  
Mason City, Illinois.

# Constant improvement





**+** Kirk Martin traded a 16-row planter for a 24-row planter to get more crop planted at optimum times. With it, a Magnum 315 tractor and AFS Autoguidance, he and his two employees planted 1,200 acres of corn in three and a half days, averaging 30 acres per hour. AccuRow row clutches control every two rows on the planter to reduce row overlap.



**K**irk Martin, of Mason City, Illinois, is continually looking for ways to make his cash-crop operation more efficient. Recently, investments in larger equipment and upgraded precision farming technology have helped him deal with weather-challenged planting conditions, and increase his overall productivity.

Martin and two full-time employees farm about 3,000 acres of corn and soybeans, and feed out about 270 steers. Growing soybeans for seed has been part of the operation from the time Martin was a youngster. Today, seed beans account for about one-third of his total crop acreage.

Martin follows a typical crop cycle that includes no-till soybeans, and corn planted into a mulch-till surface after fall chiseling and running a field cultivator ahead of the planter.

However, he's recently made adjustments to respond to new agronomic challenges. For example, in the fall of 2013, for the first time, Martin sprayed every acre, post-harvest, with a glyphosate/2,4-D combination. "Doing so," he says, "has paid huge dividends."

That's because the application stopped the growth of henbit and chickweed winter annuals. They have become aggressive weeds in recent years, partly, Martin believes, as a result of wider use of no-till in the area.

"These weeds end up causing a huge mat over the fields that's a problem to deal with in the

spring. Spraying them has helped the fields dry down faster and be easier to work. It's kept these fields under control," he says.

His land includes about 600 acres of heavy black ground that responds well to fall-ripping with a Case IH Ecolo-Tiger 870 disk ripper. The implement's shanks lift, twist and roll the heavy soils to restore pore space and allow faster drying come spring. Its disk gangs size and incorporate residues. "I could almost plant behind it," he says. "It's a good tool."

Martin planted his 2013 crops using a new-to-him planter, a 24-row Case IH 1250 Early Riser front-fold model. He traded his 16-row Early Riser planter for this larger planter, which had been used for two planting seasons, through his Case IH dealer.

He wanted the larger planter for its higher capacity and the ability to get more crop planted at optimum times. The trade proved timely, as the wet weather in his part of the Corn Belt allowed only a few good planting days in April.

"We planted 1,200 acres in three and a half days. That planter made a big difference for us this year," he says.

Moving from the 16- to 24-row planter was an easy upgrade, as he had a good seed tendering

ent





**+** Martin uses this Steiger 535 for tillage, running an Ecolo-Tiger 870 disk ripper and a 50-foot Tiger-Mate 200 field cultivator (shown above). He says the AFS autoguidance assures that they gain the most productivity from the tractor by taking full consistent swaths with the 50-foot cultivator, even in dusty conditions.

system already in place to efficiently fill the planter's 120-bushel bulk-fill hoppers.

He pulls the 24-row planter with a Magnum 315 tractor with 265 PTO hp, which he says is a good match. His field cultivator, a Case IH 50-foot Tiger-Mate 200, is hooked to a Steiger 535 tractor. "With that 50-foot field cultivator and 60-foot planter, everything balances out pretty well," he says.

After the rush of corn planting is completed, Martin turns his attention to planting his seed beans. As a contract grower, his role is to plant, manage and harvest the various varieties his seed company provides. Most of the crop's management is his call, unless the seed company's agronomists make specific requests during their frequent crop scoutings. In fact, he plants the soybeans on 30-inch rows to make it easier for the agronomists to move throughout the fields.

Crop segmentation is key. Each year, he plants about a dozen varieties in fields ranging from 10 to 40 acres. After each variety, the planter must be thoroughly cleaned. "Two of us can clean that 24-row planter in 30 minutes," he says.

That same segmentation and cleaning applies at harvest, where the combine must be cleaned out after each variety. That's a bigger job. He says his current combine, an Axial-Flow 7230, has better access for cleaning compared to his prior Axial-Flow 6088 combine, but the task still takes about an hour and a half "after we get good at it," he adds.

Martin says Case IH AFS precision farming systems help greatly in managing the various plots, with each field identified and mapped. As a longtime user of AFS systems, being able to stay with one system has been helpful for mapping and guidance. "We started with an EZ-Steer, and now we're using fully integrated RTK autoguidance," he says. Having a common platform in tractors and combines – currently the

AFS Pro 700 display – makes it easier for him and his two employees to use the technology.

As technology plays a bigger role in the equipment, Martin says it's made the relationship with his Case IH dealer more valuable. "With this equipment changing from mechanical to electronic, it's important to have the dealer and the company behind you," he says.

Several features of Case IH equipment help meet the higher agronomic demands of Martin's seed production. For example, he is a longtime user of the Case IH Early Riser planters.

"It's the row unit," he explains. "The crop comes up earlier. I see it when I plant next to a field planted with a different planter."

Another example is his long history with Axial-Flow combines which he runs because of their clean, whole samples. "A split bean is worthless for seed," he notes.

He further assures seed bean quality and overall harvesting efficiency by running a Case IH flex draper header which greatly reduces bean shatter and improves performance in tough harvesting conditions.

Now, Martin sees opportunities to add seed

corn to the mix. He's taking advantage of ample groundwater in his area by adding center pivot irrigation, and has 240 acres under pivots for dependable seed corn production.

Growing seed beans has given Martin higher returns in return for the additional management required. It also gives him an early look at new varieties.

Based on his experience, agronomic competence and his planting and harvesting systems, he now grows valuable pre-foundation varieties that may be several years away from public introduction. Based on their performance, he's optimistic about potential future soybean yields.

"I get to see a lot of new varieties, including new regulated beans," he says. "There are going to be some nice options for soybean growers over the next few years." ■

**+** For years, Kirk Martin has fed out about 270 steers annually on about 300 acres best suited for pasture. The cattle arrive in the spring at about 600 pounds and stay on pasture throughout the summer.







# WHEN YOUR COMBINE RULES THE INDUSTRY, IT'S ONLY FITTING THE CAB IS MADE FOR A KING.

Thanks to your input, Case IH Axial-Flow® 30 series combines are better than ever. Now the AFS Pro 700 control center has an adjustable slide rail that puts it right where you need it. The slim MultiFunction Propulsion Handle has all your controls in one convenient location, now with raised and backlit buttons. An industry-exclusive pivoting spout provides increased control during unloading. There's even a portable cooler for your lunch. The combine that defined the industry has redefined operator comfort, convenience, and productivity. To learn more, see your Case IH dealer or visit us at [caseih.com](http://caseih.com).



**BE READY.**



©2013 CNH America LLC. All rights reserved. Case IH is a registered trademark of CNH America LLC. [www.caseih.com](http://www.caseih.com)







# Shared knowledge

## “AG PhD” RESEARCHES AND REPORTS

**T**wo brothers addressing agronomic topics have become a familiar part of the Case IH display at major farm shows such as Ag Connect. Darren and Brian Hefty turned their passion for growing better crops into “Ag PhD” in 1998 with Ag PhD television carried nationwide, a one-hour live call-in radio show weekdays on Sirius XM Rural Radio Channel 80, and a newsletter.

Their enthusiasm for crop production and their use of Case IH equipment led to them being invited to participate in Case IH events, sharing their insights on preparing an ideal seed environment, managing fertility and controlling weeds, insects and diseases.

*Farm Forum* recently spoke with the Hefty brothers, of Baltic, South Dakota.

### FARM FORUM WHAT LED YOU TO WANT TO DO RESEARCH AND SHARE IT?

**Darren:** We both grew up on the farm, and have had a passion for farming; it's in our blood, there's no doubt about that. From an early age, we've also focused on helping people. It seems that a lot of farmers want to keep everything they have learned, secret. They say, “That's my competitive advantage.”

But I think we can move things forward so much faster if we all just share a little bit. I don't view us as competing against the farmer next door. I view us as farmers competing against the whole world. And if we don't raise good crops here, somebody else will. I think we have the potential to easily double our yields.

**Brian:** Helping farmers do better on their farms is our mission at Ag PhD. A challenge in agriculture right now is that farmers are overwhelmed with the amount of work they have to do. They are getting pulled a million different directions. As agronomists, we are trying to help them understand some of the extra things they can do in their operation to increase yields, increase profits, and improve the environment at the same time.

### FARM FORUM “EASILY DOUBLING YIELDS” IS AN AGGRESSIVE GOAL. WHAT WILL IT TAKE TO DO THAT?

**Brian:** We won't be close to that, nationally, in 20 years. Individually, there is no reason why a farmer can't double his yields in the next 10 to 20 years, but it will take a lot of effort, investment, dedication and commitment.



**Darren:** There are a lot of great investments you can make on the farm right now. Precision ag, and all the things we are doing with variable-rate seeding and fertility, grid sampling and precision placing nutrients. These all show a good return on investment.

**Brian:** Those are huge, yes. And, there are all the things we're doing with weed, insect and disease control. There are some neat biological products out there that actually work, and we'll be seeing more of these bacteria, fungi and plant growth hormones.

### FARM FORUM YOU'RE RESEARCHING THESE THINGS ON YOUR FARM ...

**Brian:** Research has to be done at all levels. It's great when we have universities doing research, and we follow all that. Each individual ag input company is certainly doing research. And, we think research needs to be done on the farm level. You need to see it on your own ground, with your own farming practices, to see how things work before you make an investment on a large scale.

So, we do a lot of trial work on our farm. We farm about 2,700 acres, and in nearly every field we have a trial of some sort such as variety comparisons, starter fertilizer rates, planting populations or post-emerge treatments. And, we also do small replicated trials.

### FARM FORUM HOW DID YOU GET STARTED WITH CASE IH EQUIPMENT?

**Brian:** Our dad was a big believer in, “I don't care what the color of equipment is; I just want something that works.” We were combining soybeans one night, and it was solid dust. We saw other

people with Axial-Flow combines, and there was no dust at the head. We tried one, and we've bought Case IH combines ever since.

Then, I ran a friend's Magnum tractor, and it only took about five minutes for me to say, “This is awesome,” and I talked Dad in to getting a Magnum tractor.

We still hold to that “whatever brand is best” philosophy, but every time we test things, it turns out to be in Case IH's favor. The Early Riser planter is an example, as is the strip till machine (Nutri-Tiller 5310). I like using the shank rather than coulters because we want that fertilizer placed deeper.

### FARM FORUM WHAT DO YOU THINK MOST FARMERS COULD DO BETTER?

**Darren:** I think they could do a better job with fertility. I don't think we understand soils and reading soil tests well enough. Trials around the country show that farmers are not using enough plant nutrients; we are actually removing more from the soil than we are applying. Yields have gone up so much in recent years and fertility programs have not kept up.

On our farm, for example, we used to see corn that was not as green as it could have been, so we thought that it must have been short of nitrogen. Then we did plant tissue analysis and found it was low in something else such as sulfur or potassium.

For many farmers, it's not that they need to spend more on fertility; they just need to allocate those dollars differently to get a better return on their investment.

**Brian:** Try something new on your farm every year. If you're not, you're falling behind. ■



**+** Case IH WD3 Series II windrowers have improved steering control and a 38-kph transport speed. They can be equipped with autoguidance ready to maximize the capacity of big headers including this new Case IH 40-foot DH403 draper header.



# Faster, autoguidance-ready windrowers

**N**ew Case IH WD3 Series II windrowers have an all-new hydraulic steering system that makes them ready for fully integrated autoguidance using Case IH AFS AccuGuide autoguidance controlled by the AFS Pro 700 display.

The new steering system provides tighter control while retaining light-touch steering. Overall drivability is improved, and maintenance is reduced with fewer linkages and the elimination of wearable pivot joints.

The rear axle has been redesigned for improved control and stability, and independent suspension is now standard on all models. These new features, including a new rear wheel

fork design, allow for transport speeds up to 38 kph (24 mph) – the industry's fastest.

The Pro 700 display allows for easier machine adjustments and serves as a performance monitor.

Other features include a simplified header flotation system and easier header installation and removal. WD3 Series II windrowers with the draper package have two 40-gpm header drive pumps to handle Case IH draper headers including the new 40-foot DH403 model. ■



**+** WD3 Series II cabs have features common to other Case IH models such as the MultiFunction propulsion control and an instructional seat. These new models are autoguidance ready with fully integrated control through the optional AFS Pro 700 display.

WD3 Series II models include the WD1203 (126 hp), WD1903 (190 hp) and the WD2303 (225 hp).







# Power,

**BIG POWER  
CVT  
TALL TIRES**

## comfort and technology

**N**ew models of Case IH Steiger and Magnum tractors include new higher horsepower and new comfort and technology features in addition to the proven and efficient Tier 4B emissions solution described on pages 4 and 5.

The new Steiger and Magnum models include the most powerful tractors ever to carry the Case IH brand: the Steiger 620 – offered in both wheel and Quadtrac versions – at an industry-leading 620 rated engine hp delivering up to 682 maximum hp, and the new Magnum 380 rated at 315 PTO hp and 435 maximum hp.

All include an updated MultiControl Armrest with backlit controls and buttons that are raised and redesigned so that you can identify them more easily. Operator

comfort is enhanced with options such as a heated and ventilated leather seat.

### **CVT available on all Magnum models**

The ease, convenience and productivity of the Continuously Variable Transmission (CVT) is now available on all Case IH Magnum tractors, and is the exclusive transmission on the new Magnum 380, rated at 315 PTO hp and 435 maximum hp.

Case IH CVT transmissions were introduced in the mid-range Magnum and Puma models in 2009. They have become favored for their ease of operation and durability consistent with the reputation Case IH has established with Magnum powershift transmissions.

Now, a new version of this proven CVT transmission has been developed and proven to

handle the horsepower and torque loads of the high-horsepower Magnum tractors.

CVT transmissions provide smooth stepless power from barely crawling creeper speeds to maximum transport speeds by simply moving the MultiControl handle forward or back.

The engine connects to a compound planetary gear set and a hydrostatic drive pump. The gears, the pump and a CNH-exclusive heavy-duty double-clutch system work together to give seamless gear changes with the mechanical efficiency of a traditional gear-on-gear transmission.

Four forward and two reverse gear ranges make the Case IH CVT transmission the most efficient variable transmission in an ag tractor. This higher number of gear ranges increases the likelihood of the Case IH CVT operating in full





### NEW STEIGER MODELS

MODEL	RATED ENGINE HP	MAXIMUM ENGINE HP	PTO HP	ROW CROP NARROW FRAME	HIGH POWER WIDE FRAME	HEAVY DUTY WHEEL	AG ROWTRAC	AG QUADTRAC	SCRAPER HEAVY DUTY WHEEL	SCRAPER QUADTRAC
370	370	429	312	●		●	●			
420	420	462	356	●		●	●			
470	470	517	407	●		●	●	●	●	
500	500	550	441		●	●	●	●	●	●
540	535	605	478		●	●		●	●	●
580	580	638	478		●	●		●	●	●
620	620	682	478		●	●		●	●	

mechanical mode at any given ground speed for maximum fuel efficiency. Other makes of tractors with variable transmissions have only two or three forward mechanical gears which significantly limits mechanical efficiency.

The CVT transmission includes an “active stop” feature which holds the vehicle in place, even on grades, without using the service brakes.

This choice of CVT and powershift transmissions presents the opportunity to select the transmission best suited to your application. The new CVT transmission gives the best balance of pure mechanical power and infinitely variable speed control, including seamless power transfer at any speed and automatic control of the engine and transmission for optimal fuel efficiency in the field and during transport. It's a highly productive choice for speed-sensitive tasks such as planting and seeding, to fast-cycle operations including loader work and running grain carts.

The powershift transmission continues to lead in pure mechanical power for heavy tillage and continuous high draft loads. The Case IH Diesel Saver Auto Productivity Management (APM) system included on all powershift models adds another dimension of control and efficiency. With it, you set your desired ground speed and maximum engine rpm; the APM interacts with the transmission to select the most fuel-efficient combination of engine rpm and transmission gear ratio to meet the load. And, it responds immediately as loads vary.

### NEW MAGNUM MODELS

MODEL	RATED ENGINE HP	MAXIMUM ENGINE HP	PTO HP
180	180	225	155
200	200	245	170
220	220	260	185
240	240	270	205
250	250	320	205
280	280	350	235
310	310	380	265
340	340	410	290
380	380	435	315

New features and refinements make these latest models of Magnum tractors easier to service and operate. Daily service points are ground-level accessible. New right-hand service steps and handrails make it easier to reach cab windows for cleaning.

### Industry-exclusive tall tires

Both Magnum and Steiger row-crop models can be equipped with 480/95R50 r1W tires. These ultra-tall tires have a rolling circumference index (RCI) of 49 to provide a bigger

footprint for improved traction and reduced compaction. This is an industry exclusive tire size for tractors of these sizes and horsepower ratings.

Throughout, both the new Magnum and Steiger tractors have enhancements to increase productivity and improve operator comfort. All models are equipped with fully integrated Case IH AFS precision farming systems, making them ready for autoguidance and other precision farming applications using the AFS Pro 700 display. ■





“I have a lot of confidence in this planter.”

# Faster planting

AN IOWA FARMER PLANTS FASTER WITH CONFIDENCE

**I**rwin farms about 1,000 acres of corn and soybeans on the rolling contoured loess hills near Arthur in western Iowa. He's interested in new types of technologies and practices but wants to see them proven in his operation before he adopts them.

When he purchased a Case IH 1200 Series Early Riser planter in 2004, he heard talk about it being able to plant consistently at faster ground speeds. “Well, I wondered, how much faster?” he says.

Intrigued by the thought of planting faster than the traditional 5 to 5.5 mph, Irwin added “planting speed” to the variables he checked in his test plots.

He began including test sections at 6, 7 and 8 mph with the new planter, and a curious pattern began to form: Yields increased as speeds increased. In fact, the 8-mph test showed more than 7 bushels per acre higher yield, compared to 6 mph.

“It really surprised me that 8 mph won by nearly 8 bushels the first year. I couldn't make sense of that, but the next year, 8 mph won again,” he says. “I would think that one year, 8

mph would lose to 6, but I haven't seen it yet.”

Part of the reason Irwin purchased the 1200 Series planter was the likelihood of maintaining consistent populations at faster ground speeds. “The planter I had before this one had a 30-seed count plate, and this one has a 48 count. So right there, I'm thinking I can go one and a half times faster than 5 mph and still not turn the plates any faster. That's 7.5 mph, why not try 8?” he says.

The 1200 Series planter has the largest diameter seed disk in the industry and turns up to four times slower than seed disks on other planters for more consistent seed release, especially as ground speeds increase.

Irwin says he sees proof of that consistency in the reach tests in his plots, which are based on 34,000 populations on 30-inch rows. “I want to see 12 plants every 70 inches, and that's what I'm getting. I don't see any difference between 5 and 8 mph.”

Accurate seed spacing is only one component of yield. Consistent depth control and firm seed-to-soil contact are keys, too. The Case IH Early Riser row units have long been recognized for good performance on these points, and Irwin's tillage practices may add to the consistency he sees at higher ground speeds. He has been strip-tilling for more than 15 years, so he is planting into a very smooth

seedbed. For that reason, he sees minimal row-unit bounce, which helps maintain consistent seed depth at faster speeds.

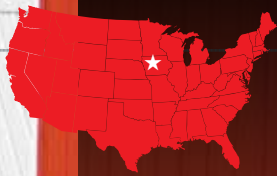
“I dig in a few places to check, and the depth

is always right where I want it. I have a lot of confidence in this planter,” he says.

But what about the higher yields as speeds increase? There's less of a clear answer here. “Maybe there's better seed-to-soil-contact and

“I don't see any difference between 5 and 8 mph.”





**+** Jim Irwin's test plots have shown that his 1200 Series planter produces yields that are sustained – or even increase – at higher planting speeds.

means I'd have to unload before the end rows. I'd need a grain cart, and another tractor, and another person ... for my operation now, everything works."

His 1200 Series planter is a 1240 pivot transport split-row model, able to plant 12 rows of 30-inch corn and 23 rows of 15-inch beans. With it, he can use one planter instead of two, and this rig transports at less than 13 feet wide, an advantage over his previous 15-foot soybean planter.

Irwin's move into strip-till came after first trying pure no-till. "I sat and waited into May for the ground to warm while everyone else was planting corn," he says. "I wasn't happy about that."

Strip-till has proven to be a good fit for him. All his ground is on a corn-bean rotation. In the fall, after bean harvest, he tills 8-inch strips, 4 to 5 inches deep, and applies dry fertilizer in the strip. Using rolling coulters, he runs close to 9 mph. "I like speed," he adds. In spring, he plants corn in the strips.

Fall-harvested corn fields are left untouched until it's time to plant beans. He goes in with the planter, set up to plant the 15-inch beans, and plants on either side of the corn row.

His adoption of the Case IH AFS AccuGuide autoguidance system has made his strip-till operations much easier. Through a local supplier, he has added a "swinging drawbar" type of hitch that is hydraulically powered to move right or left, based on autoguidance signal input, to keep his trailing strip-till rig, planter and side-dress rig following true to the tractor's path.

This implement guidance system takes two receivers: one for the tractor's guidance and one mounted on the implement to control the drawbar. Both are managed through his FM-1000 receiver, with the AFS Pro 600 display managing the planter and other precision farming functions, including his recent move into variable-rate planting.

Using the new CenterPoint RTX correction signal, Irwin says he's seeing high levels of accuracy and signal stability. "Even on terraces and contours, the passes are perfect. I just sit there and watch. It's amazing."

Along with strip-till and autoguidance, Irwin describes several other contributors to keeping his operation simple and efficient. As a no-tiller, he has avoided anhydrous ammonia, but he says side-dressing 28 percent nitrogen using a rolling coulter applicator when the corn is about a foot tall is one of the best moves he's made. "Earthworm activity seems to jump overnight."

One tractor – a Magnum 235 at 195 PTO

## ➤ MORE ACRES, SAME TIME

The 1200 Series planter's ability to maintain population and yield at higher ground speeds is a benefit to consider when choosing planters. Running in the 6- to 8-mph range, as conditions allow, gives these 12- and 16-row planters a capacity advantage that approaches larger planters running at the traditional 5 to 5.5 mph.



hp – handles all the field work. It's a Tier 4 model, which replaced a 175-hp Magnum 215. The performance of the Efficient Power engine has been just that, he says – noticeably more power with similar fuel economy compared to the 215, and minimal DEF consumption. "I can strip-till nearly 500 acres on one fill of DEF. It's not inconvenient."

He runs an Axial-Flow 2577 combine equipped with EZ Steer assisted steering, the six-row corn head and a 30-foot flex draper head. "This is an impressive machine."

And then there's the planter, which he keeps pushing – and testing – at higher speeds. While he continues to plant in the 6-mph range, he says he doesn't hesitate at all to run 8 mph, as he did a year ago to plant 300 acres in a day in advance of incoming rain.

"With that GPS guidance, and the speed, I can get a lot done in a hurry." ■



**+** Irwin uses a front-mounted toolbar designed to knock down corn and bean stalks and protect tires from stubble damage.

fewer air pockets; that's my opinion," he says.

For Irwin, the ability to plant faster, with the confidence of not sacrificing yield – let alone increasing it – fits well into his operation.

That type of efficiency is important to him as he farms by himself, hiring help only at harvest. He says running the 12-row planter, faster, gives him similar capacity to a 16-row planter running at traditional planting speeds. And, the 12-row planter is indexed to his six-row corn head, although his use of autoguidance makes that less of an issue. "A bigger corn head would fill the combine faster, which



**+** Irwin uses an Early Riser 1240 pivot-transport split-row planter for both corn and soybeans. In his strip-till conditions, he says there's minimal row-unit bounce which helps maintain consistent seed depth at faster planting speeds.





## OUR EQUIPMENT DOESN'T JUST MEET THE STANDARDS, IT SETS THEM.

With our proven, industry-leading SCR engine technology, Case IH gives you more power while still meeting tough Tier 4 B/Final regulations. In fact, the Steiger® 620 has more horsepower than any tractor on the market. Ever. All Case IH equipment is agronomically designed to help you maximize your yield potential and your profits, with fully integrated AFS precision farming technology and 24/7/365 support. Now with **0% financing** from CNH Capital on select new Case IH equipment, your bottom line is more secure than ever. To learn more, visit your local Case IH dealer or [www.caseih.com/efficientpower](http://www.caseih.com/efficientpower).



## 0% FINANCING\*

ON SELECT NEW CASE IH EQUIPMENT

See your local Case IH dealer or visit [caseih.com/SpecialOffers](http://caseih.com/SpecialOffers).

## BE READY.



\* For commercial use only. Customer participation subject to credit qualification and approval by CNH Capital America LLC or CNH Capital Canada Ltd. See your Case IH dealer for details and eligibility requirements or visit [caseih.com/SpecialOffers](http://caseih.com/SpecialOffers). Down payment may be required. Offer good through December 31, 2013. Not all customers or applicants may qualify for this rate or term. CNH Capital America LLC or CNH Capital Canada Ltd. standard terms and conditions will apply. Taxes, freight, set-up, delivery, additional options or attachments not included in suggested retail price. Offer subject to change or cancellation without notice.

©2013 CNH America LLC. All rights reserved. Case IH and CNH Capital are registered trademarks of CNH America LLC. [www.caseih.com](http://www.caseih.com)

Form #75756P





# Sizing up lenders

## FOR EQUIPMENT FINANCING, CAPTIVE LENDERS HAVE DISTINCT ADVANTAGES

There is no shortage of lenders who want to be your one-stop source for financing. As capital requirements in agriculture become higher and specific financial expertise becomes more valuable, it makes sense to size up lenders based on how well they match your needs. You must ask yourself, “What unique advantages does each lender provide for my specific lending situation?” When it comes to financing equipment, captive lenders offer key advantages that no other lender can provide.

Traditional lending sources include small independent banks, larger regional or national banks, government agencies, and the financing arms of equipment companies commonly referred to as captive lenders.

Each has its own attributes that offer advantages in specific situations. Local independent banks offer personal involvement and personal service but have limitations in services, expertise and potentially constrained credit limits.

Larger regional or national banks offer a broad suite of services and deeper financial resources. However, they may lack the direct personal involvement of the local bank, possess limited knowledge of your business needs and have less latitude for local decision making.

Government agencies can serve specific financial needs consistent with their mission, while functioning strictly within their guidelines.

Captive financial providers (like CNH Capital) exist primarily for one purpose, to help facilitate equipment sales. No other lending source focuses more on the various financial aspects of equipment acquisitions, and the needs of customers purchasing equipment.

This focused expertise gives CNH Capital, along with other captive lenders, unique advantages for equipment financing compared to the other sources listed above.

- **Competitive rates.** Your money matters and captive lenders are highly competitive with rates compared to commercial banks.

- **Promotional rates.** Due to a direct partnership with the equipment manufacturer, captive lenders can offer promotional financing rates, or other purchase incentives that other lenders cannot. This can reduce the total acquisition cost of buying equipment.

- **Simplified transactions.** Typically, financing through captive lenders takes place at the selling dealership, or through a contact referred by the dealership. In either case, details of the transaction are in place, reducing the need for added paperwork and administration in establishing the loan.

- **Equipment familiarity.** While most reputable ag lenders understand farm equipment, captive lenders work with it exclusively. This knowledge helps make equipment valuations more accurate, and documentation easier.

- **A variety of options.** Captive lenders provide a broad range of acquisition options including traditional loans, revolving accounts as well as leases and rentals.

- **Additional products.** As an extension of their focus on equipment, captive lenders offer additional products such as equipment service contracts, extended warranties and insurance coverage for farm equipment. This can also extend to financing for parts and service work at branded dealerships.

- **Flexible terms.** Agricultural production can pose unique cash-flow demands and challenges. Captive lenders understand the producers they serve, and are able to offer terms and programs built around specific needs.

- **An independent source of financing.** While producers should make equipment purchase decisions based on their overall financial soundness, financing through



captive lenders provides another financing source – independent of other loans.

But perhaps, the largest advantage of working through a captive lender is a streamlined transaction process. When working with CNH Capital, all documentation stays “in-house” without the need to review purchase details such as equipment model descriptions and serial numbers with a third party. This is especially helpful when trading multiple units, or trading frequently.

Relationships with all lenders are important, but captive lenders bring a unique perspective because of their link to the selling dealer. Both parties – the dealer and the lender – are interested in keeping you as a long-term customer.

“The captive lender is a direct link from the dealer to the end user, and both have a vested interest in the customer’s overall experience,” says Terry Miller, Marketing and Communications Manager for CNH Capital. “It’s a unique relationship that provides more service to the customer in terms of matching the most cost-effective equipment solution with the specific needs.” ■

*This article was developed in cooperation with CNH Capital. CNH Capital provides a comprehensive range of services, including wholesale and retail financing, leasing, insurance, asset management, and revolving lines of credit for the global marketplace. Building on more than 50 years’ experience in the equipment finance industry, CNH Capital is helping Case IH dealers and well over half a million customers throughout North America, Latin America, Europe and Australia.*

“The captive lender is a direct link from the dealer to the end user, and both have a vested interest in the customer’s overall experience.”



# A new drill for new crops

AN ARKANSAS PRODUCER ANTICIPATES MORE WHEAT AND SOYBEANS; A NEW CASE IH DRILL PROMISES CAPACITY AND AGRONOMIC ADVANTAGES



“A few years ago, this farm was predominantly cotton, with some corn in rotation. Now, we’re growing more wheat than cotton, and who knows where things are headed from here?”

That’s how Heath Adkisson, of Osceola, Arkansas, describes the cropping challenges he faces. Together with his stepfather, Randy Reynolds, Adkisson manages a farming operation called Farmers Farms that encompasses land on both sides of the levee that keeps the Mississippi river at bay in northeast Arkansas.

While cotton may or may not have been “king” for Adkisson, it had long been a primary crop in the operation. But the past few years have been challenging for the fiber crop. It’s expensive to grow, and recent market prices have pushed returns to breakeven at best.

With the future outlook for cotton unclear, Adkisson decided to grow more soybeans and add wheat. The only problem: He didn’t own a drill.

Adkisson introduced wheat into his rotation beginning in the fall of 2013, broadcasting the wheat with a fertilizer truck, then incorporating it with a True-Tandem 330 Turbo vertical tillage tool.

“We knew that broadcasting wheat wasn’t the

way of the future,” he says.

Adkisson and Reynolds had ample planting capacity for row crops, with two Case IH 1230 12-row stacker planters for corn and cotton, a Case IH 12-row twin-row planter, and a 1240 16/31 pivot/transport planter. They had been using the 16/31-row planter exclusively for soybeans in 15-inch rows; their corn and cotton are on 38-inch rows.

With more soybean acreage planned, and the intention for wheat, Adkisson sought new planting options. Additional considerations, he says, are their wide range of soils that include heavy clay soils vulnerable to compaction, along with smaller irregular-shaped fields where maneuverability matters.

The new Case IH Precision Disk 500T single-disk air drill met his objectives, and he put it to work with 2013’s crop, spring-seeding soybeans with plans for fall-seeded wheat.

The ability to do an agronomically sound job of planting multiple crops was a big part of this implement’s appeal to Adkisson. Along with soybeans and wheat, he may consider rice as a future crop, and the Precision Disk 500T can handle it, as well as milo and other small grains.

As its name implies, the Precision Disk 500T

**+** Randy Reynolds and Heath Adkisson selected a Case IH Precision Disk 500T single disk air drill for its ability to plant multiple crops and accurate depth control.





Farmers Farms  
is near Osceola, Arkansas.



uses a single 18-inch diameter disk opener set at a 7-degree angle on each row unit. These single-bevel disks slice through residues to open a high-quality seed trench – even at shallow depths – while minimizing “hair-pinning” of residue in the trench.

Accurate depth control, which is vital for even emergence, is maintained by a gauge wheel that runs alongside each disk opener. Double-edge closing wheels feature an indented center to provide excellent seed-to-soil contact with reduced compaction over the row. A progressive-rate spring controls down pressure of up to 100 pounds on each closing wheel; a single-point hydraulic control system maintains consistent down pressure across all row units.

Each row unit is attached to the frame using a parallel-link design to allow each one to move independently over varying terrain.

“It’s hard to beat the double-disk opener on a planter, but I was amazed at the amount of down pressure that this drill can have,” Adkisson says.

He used the Precision Disk 500T on last year’s corn ground which had been disked in the fall, and says it did a “fantastic job” of cutting through the residue.

“The pressure this drill can put on the disk openers is impressive, and it’s adjustable from the cab. It’s all very user-friendly,” Adkisson says.

“Early in the season, we always have issues with closing when the soil is damp and wet. But it did a fairly good job. I was impressed with the furrow that it was opening, and the seed to soil contact. Seed placement is as good as I’ve ever



**+** Adkisson and Reynolds have the optional high-flotation version of the 40-foot Precision Disk 500T single disk air drill. They say the near-equal weight distribution across all 16 tires is an advantage in softer soils. The onboard grain tank holds 100 bushels. In its transport mode, the drill folds to 18.5 feet.

#### **+** TWIN ROWS FIGHT RESISTANT WEEDS

Adkisson experimented with a narrow-row planter in 2013, and liked the results. In 2013, he planted about one-third of his corn acreage in twin rows using the new Case IH 12-row twin-row planter, with the twin rows of corn staggered on 8-inch spacings, and 38 inches between the rows.

He says twin rows have become popular in his area because of yield gains proven in university research, and as a way to overcome weeds in corn and especially in soybeans.

“Resistant weeds are becoming more of a problem every year. With the twin rows, the canopy closure on our 38-inch rows is 10 to 14 days quicker than the canopy on a single row, and residual herbicides can run out before we get a good canopy. Once that canopy is closed, we are less likely to have weed escapes.

“Also, with corn, the plants are spread apart so they’re not in as much competition for nutrients and sunlight.”

The smaller planter they used in 2013 worked, but lacked the capacity Adkisson wanted. “Case IH came along with this twin-row 12-row planter on 38-inch rows, and that fits us perfectly,” he says.



**+** Adkisson’s planting systems include a Case IH 12-row twin-row planter like this one.

seen behind a drill.”

Adkisson’s Precision Disk 500T is a high-flotation version that rides on 16 wheels (standard models have 12). In the field, he sees that weight is distributed and carried fairly evenly across the implement, empty or loaded.

“Our heavier clay soil can look dry at the surface, but it can be extremely soft underneath. The weight of the seed doesn’t seem to affect the machine as far as cutting into softer soil. And, most of the weight is carried on the drill, not as much on the tractor.”

Adkisson pulls the 40-foot drill having 7.5-inch row spacings with a Magnum 290 tractor rated at 240 PTO hp, running about 6 mph. “I wouldn’t recommend anything much smaller

than that,” he says. “That’s a pretty good load when we are running a lot of down pressure on those row units.”

Fully loaded, the drill holds 100 bushels of seed. “It’s easy to fill, with a good wide lid on the hopper,” Adkisson says. Daily maintenance, basic adjustments, and transporting between fields have all been simple and efficient. “There aren’t many things to worry about with this drill,” he adds.

Seed rate is managed through the Case IH AFS Pro 700 display. A bar graph shows target rates and seeding flow, and GPS speed inputs provide accurate seeding rate information.

This marks another step toward fully integrated precision farming using Case IH AFS systems. Adkisson has gathered site-specific yield information for several years, and has all fields mapped with A-B lines for their RTK autoguidance. “We’re running a constant row every year,” he says.

As an operation with multiple operators and equipment, Adkisson says having one system – AFS – with full capabilities is an advantage. “We’ve been using the AFS systems for four or five years now and my employees are comfortable with it. It’s very user-friendly.

Over the past several years, Farmers Farms’ equipment has become nearly exclusively Case IH. The reason, Adkisson says, is “Case IH has been good to us. It’s good equipment, and the dealer support we get here in northeast Arkansas has been exceptional.”

Equipment financing through CNH Capital is part of this package. “It’s always been ‘better than competitive’ financing and good support back to us,” he says. “We’ve developed a good working relationship.”

Adkisson had seen drills with large-capacity seed hoppers, either towed behind the drill, or between the tractor and the drill.

“I was never intrigued by those carts; I didn’t like the idea of having equipment so strung out. But this drill with the seed hopper mounted sparked my interest,” he says. All the other features, notably the ability to tread on softer ground thanks to the even weight distribution, the ability to handle multiple crops, and accurate depth control, helped put the Precision Disk 500T on Farmers Farms.

“This is a versatile tool for us because it can plant more than one crop, without losing any productivity. We needed something that will plant wheat, and in the future, if we want to plant rice, we’ll be ready.” ■

#### First Owner Comments

“The pressure this drill can put on the disk openers is impressive.”

“Seed placement is as good as I’ve ever seen behind a drill.”

“It’s easy to fill, with a good wide lid on the hopper.”

“Most of the weight is carried on the drill, not on the tractor.”

“We needed something that will plant wheat, and if we want to plant rice, we’ll be ready.” ■



# Keep DEF clean and pure

## MAINTAIN ITS QUALITY FOR PROPER MACHINE OPERATION



**D**iesel exhaust fluid (DEF) was introduced to Case IH equipment in 2010 as a key component of Selective Catalytic Reduction (SCR), the company's solution to meeting Tier 4A emissions requirements.

It has proven to be the right choice. Using SCR exclusively instead of the other option to meet Tier 4A emissions requirements – Cooled Exhaust Gas Recirculation (CEGR) – allows Case IH engines to do what they are designed to do: Generate power in the most efficient manner possible, and treat emissions after the exhaust has left the engine.

The Case IH Efficient Power system using SCR with DEF is simple. Avoiding CEGR eliminates the need for complex heat-generating components under the hood. Nor is there the diesel particulate filter CEGR requires, with its frequent regeneration and additional fuel consumption.

DEF, which is 32.5 percent high-grade synthetic urea and 67.5 percent ultra-pure deionized water, is safe and easy to handle. It's classified as a non-hazardous material by the EPA and is non-flammable.

However, the fact that DEF requires no special safety precautions in handling may have led to a

**+** Case IH dealers offer a variety of DEF handling systems. These include the convenient skid-mounted totes with 12- and 110-volt pumps.



perception that it can be very casually managed. The fact is that the quality and integrity of DEF must be maintained for proper machine operation.

Specifically, DEF must be protected against evaporation and temperature extremes, and kept free of solid and liquid contaminants.

Per EPA guidelines, vehicles using DEF must include sensors to continually analyze the quality of the DEF being consumed. These sensors will trigger a fault code whenever an imbalance is detected. Most commonly, this results from a higher percentage of water as a result of foreign matter, condensation or rainwater in the DEF storage container or during transfer.

The injectors that meter DEF into the exhaust stream are precision instruments with tight tolerances similar to fuel injectors. Case IH SCR systems have a cartridge filter inside the pumping module to protect these injectors, with a recommended 1,200-hour service interval. Keeping DEF free of contaminants will help attain maximum filter life.

The storage life of DEF varies. Its urea is vulnerable to degradation from sunlight and higher temperatures. In favorable storage conditions (proper container, away from direct sunlight, and temperatures between 12 and 86 degrees F) DEF can maintain its qualities for about 12 months. Temperatures above 86 degrees F will reduce its storage life.

DEF begins to freeze at 12 degrees F, although freezing and thawing does not adversely affect its performance or storage.

DEF is mildly corrosive, and should be stored in containers of HDPE plastic or stainless steel. Other metals may corrode in contact with DEF and cause contamination.

### Treat DEF like diesel

DEF is going to be more widely used as more manufacturers of diesel powered vehicles and equipment adopt it to meet more stringent Tier 4B emissions requirements.

"Here at Case IH, our experience with the Efficient Power engines using SCR-only has been very positive. Our customers report having more powerful and more fuel-efficient engines, and appreciate the extended oil service intervals of up to 600 hours, thanks to the cleaner combustion.

"They've also seen that the DEF sensors

### HERE'S WHAT DEF DOES

DEF, as a component of the Selective Catalytic Reduction emission control system, is injected into the hot exhaust, initiating a chemical reaction that transforms the nitrous oxide (NOx) in the hot exhaust into ammonia and carbon dioxide. These gases pass into the SCR chamber and react to form harmless nitrogen gas vapor and water.

This entire process takes place outside of the engine, in the SCR chamber. DEF is not injected into the engine or into any aspect of the combustion process.

A non-DEF option to reduce engine emissions is to use EGR. EGR reduces the amount of NOx produced, while using a diesel particulate filter to control particular matter.

However, EGR also reduces the efficiency of the combustion process resulting in poorer performance and reduced fuel efficiency. Another detriment to EGR is the additional heat introduced into the engine and engine compartment caused by returning a portion of the exhaust into the engine's intake air. Typically, this hot recirculated exhaust goes through a cooler prior to entering the intake air stream, requiring additional components and controls. (Thus the title Cooled Exhaust Gas Regeneration- CEGR.)

This recirculated exhaust also places higher demands on engine oil with more soot and higher temperatures.

Because the CEGR combustion takes place at a lower, less efficient temperature compared to engines using SCR only, the CEGR exhaust includes particulates which must be reduced using a diesel particulate filter. It must be cleaned periodically in a process called regeneration which uses injections of diesel fuel to burn the particulates at temperatures of 1,200 degrees F or greater.



perform well, and will signal when there are quality issues with DEF," says Doug Page, CNH Parts Marketing Manager for Fluids.

"The simplest way to think about DEF might be to handle it as you would diesel fuel in terms of keeping it totally free of any contaminants and moisture, and storing it in a proper container kept in a cool, shaded place." ■



# IN-THE-FIELD SOLUTIONS MADE EASY.

Your job requires dependable, hard-working machines. Our job is to help you enhance and maintain them. Run your operation longer and stronger with Case IH harvesting kits. Premium OEM parts offer you unmatched compatibility. Repair, replace or rebuild parts as needed with these popular kits.



## ONE-PIECE CONCAVE KIT

**Part No. B96127**

**Application:** 80 Size Rotors (1680 Series and later)

This small wire/Extenda-Wear concave kit allows for higher capacity and throughput in tough or high-yield conditions. Proven to be stronger than two-piece concaves, its one-piece design eliminates the extension, improving durability.



## STALK ROLL REPAIR KITS

### 4 CORN HEAD KNIVES

**Part No. B95583A**

**Application:** 2200/2400 Series Corn Headers

### 8 CORN HEAD KNIVES

**Part No. B94532**

**Application:** 900/1000 Series Corn Headers

These kits allow you to rebuild one corn head row. The corn head knives are made with superior alloys and coated with tungsten carbide for longer wear. Each kit includes all necessary hardware (Grade 8).



▼ Part No. B95583A



▼ Part No. B94532

For more information, see your local Case IH dealer  
or visit [partstore.caseih.com](http://partstore.caseih.com) today.





AN ILLINOIS FATHER AND SON ADOPT  
SIDE-DRESSING FOR MORE EFFECTIVE USE  
OF NITROGEN. A NEW CASE IH APPLICATOR  
ENABLES FAST AND EFFICIENT APPLICATIONS.



Mike and Daniel  
Lundeen grow corn and  
soybeans near Altona, Illinois.

# Better NITROGEN management





## “We needed a way to mitigate our nitrogen risk,” says Daniel Lundeen, as he explains why he and his father, Mike, purchased a Case IH Nutri-Placer 920.

“We want to be environmentally sound, we want to be good stewards of the environment, and we want to make sure we are maximizing our investment in nitrogen,” he says.

All those factors came into play as the Lundeens looked for a way to move corn yields beyond the yield plateau they had experienced the past several years.

As a certified crop adviser and seed agronomist, Daniel identified nitrogen as a potential primary limiting factor. “We need to continually supply the plant with ample nitrogen throughout the season, and it’s becoming increasingly difficult to do that through one or two applications,” he says.

The Lundeens grow corn and soybeans near Altona, Illinois. They had followed the common practice of applying anhydrous ammonia with a stabilizer in the late fall, and a spring pre-plant application of liquid nitrogen and a herbicide.

The downside of this process, Daniel notes, is the potential for nitrogen from these early applications to leach out prior to the plants using it, wasting money through the fertility loss and potentially degrading water quality. And even with the spring pre-plant liquid application, there might not be enough nitrogen available at peak plant growth periods.

Adding a third application, post-emerge, is a way to give an effective dose of nitrogen at a crucial stage of growth. It’s not so much about applying more nitrogen as it is about using it more effectively and reducing the risk of nitrogen loss, Daniel notes.

The Lundeens had done some side-dressing several times in the past, and generally liked the results. They decided to make it a consistent part of their program with the 2011 crop, using an applicator from a local co-op.

They quickly realized availability of the shared equipment could be an issue. “Crop conditions

at that stage can change quickly,” Mike notes.

“If side-dress was going to be part of our nitrogen plan, we needed our own applicator to work when the time is right.”

Intent on buying their own, they went to a Fall 2011 farm show and looked at every applicator on site. They chose the Nutri-Placer 920 based on its overall rugged design, its ability to flex on rolling terrain, and its ease of folding into a transport-friendly width. Their past experience with DMI equipment, the predecessor brand for several models of Case IH tillage and application equipment, gave them additional confidence in the purchase. “Really, the workmanship on this is far superior to anything we saw,” Mike says.

The Lundeens put the Nutri-Placer 920 to work in their 2012 crop. Mike says with 24 rows running at 9.5 mph, the capacity is impressive. For each row, the applicator uses single, spring-loaded 20-inch coulters running directly ahead of liquid knife injectors.

Mike and Daniel have the Nutri-Placer 920 set at 3 inches deep, running down the middle of their 30-inch rows. “We’re in there at the V5 to V8 growth stage when the corn is about 12 to 18 inches tall,” Daniel says. He notes that their pre-plant nitrogen application meets the crop’s needs up to that stage. And, he says, in-field nitrogen applications beyond the V8 stage are more likely to damage nodal root growth and miss key periods of nitrogen uptake.

The Nutri-Placer 920 has a 1,650-gallon tank. Mike says he rarely fills it completely, opting not to carry that additional weight through the field. They purchased an 8,500-gallon semi-tanker trailer for tendering through a 40-foot hose, replacing a 1,000-gallon tank they had previously used with the applicator from the co-op.

“We’re able to get things done faster with this bigger tank,” Mike explains. He says the implement is well balanced overall, regardless of the amount of product in the tank.

Although the Lundeens pull the Nutri-Placer 920 with a non-Case IH tractor, they say the controls, including depth control and folding, and the hydraulically driven centrifugal pump were easily compatible with their tractor’s monitor. Their monitor also runs the rate controller they added to manage the Nutri-Placer 920’s pump.

In fact, the Nutri-Placer 920 is the only piece of red equipment on their farm, because they saw it as the tool best suited to meet their agronomic needs. Help from their salesperson,



**+** The Lundeens use a Nutri-Placer 920 like this one. The 60-foot implement flexes with five sections and has active down pressure for consistent depth control.

who is a friend and former engineer who worked with the Nutri-Placer 920, helped solidify their confidence.

The Lundeens see several advantages from making side-dressing liquid nitrogen a core part of their fertility plan. Knowing they will have three applications gives them more latitude to make decisions about the first fall application; most likely, reducing it which in turn reduces the chances of nitrogen loss through leaching.

Having the opportunity to vary rates of the side-dressed application will help them better tailor nitrogen expense to the potential of the crop. “We don’t want to be sitting in June with a nitrogen deficiency we can’t correct because we’ve invested all our resources in earlier applications,” Daniel explains.

Mike points out that side-dressing gives him the chance to visually examine every acre of corn at a critical time of crop development. “I can spot, and maybe cure, problems we might not otherwise know about. It’s another scouting trip,” he says.

With nitrogen applications better aligned with the crop’s needs, the Lundeens initially anticipate reducing overall nitrogen use. “Our goal for this year is a reduction in total number of nitrogen units because we should be more efficient with it,” Daniel says. “From 2012 to 2013, total units of nitrogen applied will decrease by a planned 11 percent because of the side-dressing.”

The bottom line, Daniel says, is having better control over this important and expensive crop input.

“By being able to better manage nitrogen with multiple applications including side-dressing, we will be using it efficiently, and it should not be the limiting factor to our yield goals.” ■

“Really, the workmanship on this is far superior to anything we saw.”



**+** Spring-loaded 20-inch diameter coulters deliver fertilizer into the root zone. The Lundeens use the liquid knife injectors; straight stream injectors are also available.



# NEW PRODUCTS

CASE IH CONTINUALLY INTRODUCES NEW AND UPDATED EQUIPMENT. HERE'S A LOOK AT SEVERAL NEW PRODUCTS THAT CAN BRING NEW EFFICIENCIES TO YOUR FARMING OPERATION.

## NEW HEADERS DESIGNED FOR HIGHER HARVESTING SPEEDS

**\$60 million invested in header development and production**

New Case IH draper heads and corn heads have been designed to operate at higher speeds, cover more acres in a day, produce maximum yields, reduce grain loss and provide the best grain quality. "They bring a new level of innovation and productivity to the Axial-Flow combine family," says Kelly Kravig, Case IH Marketing Manager, Combines & Headers.

Case IH invested \$30 million in the research and development of these new headers which included in-depth customer input, extensive benchmark testing against other headers, plus intensive testing in the lab and on customers' farms.

"These headers have been put through the paces in all kinds of harsh, real-world conditions on today's toughest crop genetics," Kravig says.

The company invested an additional \$30 million to establish the new Combine Header

Center of Excellence in Burlington, Iowa. There, manufacturing improvements have resulted in a world-class production facility.

"This new upgraded facility represents a great opportunity for Case IH to showcase its cutting-edge manufacturing and demonstrate its dedication to the header business," Kravig explains. "It will serve as the heart of our header business in North America. Plus, almost a quarter of what we will be producing in Iowa will ship out for sale all over the world."

New draper heads, models 3152 rigid and 3162 flex, have an exclusive center-mounted knife drive called CentraCut that improves header balance as the header is driven from the center. This increases performance and minimizes vibration across the cutterbar. It's a simple and efficient design that also allows for narrow end dividers which reduces crop knockdown and improves grain savings.

"Typically, larger headers have heavier, more complex drives on the header's left side, or both sides," Kravig notes.

These headers are designed for superior crop flow with less susceptibility to crop moisture. The 3162 flex draper offers an easy-to-use in-cab cutterbar control option; both models have robust fully welded construction.

New corn heads, models 4400 and 4200, meet customer requirements including picking cleaner, harvesting at faster speeds, saving more grain and being easier to service.

New heavy-duty drives, high-capacity gathering chains and matched capacity stalk-roll-to-gathering-chain speeds for superior feeding all contribute to efficient harvesting at higher speeds. Larger stalk roll knives provide a wider operating range, and new patented corn saver louvers maximize grain savings.

For easier maintenance and reduced downtime, new poly dividers are more durable and include gas struts for quick, easy access for cleaning.



New Case IH draper headers and 4400 and 4200 corn heads handle tougher higher-yielding crops and faster harvesting speeds. They are built at the new Case IH Combine Header Center of Excellence in Burlington, Iowa.



## Patriot sprayers gain nozzle-by-nozzle spray control

The new AIM Command PRO spray system, optional on new Case IH Patriot 3240 and 3340 sprayers, provides individual nozzle control. This allows nozzles to turn on and off individually rather than by entire boom sections, and automatically compensates for turns. This advanced spray technology minimizes overspray and overlaps, preventing overapplication. These new Tier 4B models also have higher horsepower ratings, 250 hp for the Patriot 3240 and 285 hp for the Patriot 3340.



## Six new Puma models

Ranging from 150 to 240 hp, six new Case IH Tier 4B Puma models continue to be available with CVT or powershift transmissions. Cab controls have been updated including a redesigned MultiControl handle with raised and ergonomically shaped backlit buttons. New cab features include a redesigned headliner with relocated air-conditioning controls and three additional storage slots, split view-wide angle electric and heated mirrors, a tinted rear windshield, and a storage net below the instructional seat with elastic straps on top. A Bluetooth radio is also available.



# SUNRISE TO SUNSET AND THEN SOME.

Cut through tough field conditions all day long with the rugged, commercial quality Case IH Nutri-Placer 930/940 applicators. Working widths up to 65 feet and compact transport means you cover more ground with less effort. And, the agronomic design delivers consistent depth and sealing, and that saves you money. Durable and tough, these applicators go the distance. To learn more, see your Case IH dealer or visit us at [caseih.com](http://caseih.com).

**BE READY.**

**COMMERCIAL QUALITY FRAME**  
designed for the demands of custom applicators

Compact transport and sizes up to 65 ft  
**MAXIMIZE PRODUCTIVITY**

Field proven attachments provide  
**CONSISTENT DEPTH AND SEALING**

**AGRONOMIC DESIGN™**

©2013 CNH America LLC. All rights reserved. Case IH is a registered trademark of CNH America LLC. [www.caseih.com](http://www.caseih.com)



**CASE IH**  
AGRICULTURE



# Tomorrow's farmers see the latest technology

## CASE IH AG INFORMATION CENTER PART OF NEW CENTURY FARMER TOUR

In mid-July, a group of around 50 college students and recent grads experienced an insider's view of some of the latest ag production technology along with management and leadership training.

They were participants in the Collegiate FFA New Century Farmer conference. This annual five-day program is targeted to young people who are currently enrolled or are recent graduates of two-year or four-year colleges or universities and intend to pursue a career in production agriculture.

Participants are selected through an application process that includes reviews by representatives from FFA and the conference sponsors: Case IH, DuPont Pioneer, CSX Transportation, Farm Credit, and media sponsor Successful Farming.

"We look for young people who have a genuine interest and passion for farming," explains Dan Danford, Case IH Public Relations & Sponsorship Manager, and one of the applicant reviewers. Thanks to the sponsors,



« The New Century Farmer group discussed topics including agronomic design and precision farming with Case IH product managers at the Case IH Ag Information Center in Nevada, Iowa.

there is no cost for those who are selected.

The Case IH Ag Information Center in Nevada, Iowa, was one of several Des Moines-area stops for the tour. At the Center, students learned about Case IH advances in precision farming and agronomic design, and how these

technologies can help them be more productive, lower cost producers.

Other sessions included presentations on entrepreneurial leadership, global perspectives and personal growth, and visits to Dupont Pioneer and Meredith Publishing facilities.

Learn more about the FFA New Century Farmer program at [www.FFA.org/newcenturyfarmer](http://www.FFA.org/newcenturyfarmer).

# Magnum owners share why these tractors are special

2013 marks the 25th anniversary of the Magnum tractor. Introduced for the 1988 model year, the 7100 Series Magnum models represented a giant step forward in farm tractor design and performance. Throughout the years, these tractors have become an important part of many North American farm families.

Case IH has extended the opportunity to share your "Magnum story" on its Facebook page. Here are four recent selections; there's still plenty of time to add your photo and story to this special compilation of Magnum owner insights.

### SHARE YOUR MAGNUM STORY

What have Magnum tractors meant to you? Share your "Magnum story" and Case IH may feature it on its Facebook page or as part of the Be Ready blog.

Go to the Case IH Facebook page and click on the 25th Anniversary Magnum logo to submit your Magnum story.



“

We really like our 305 - it has been a very good tractor. We also have a 7120 mfw. Have also had 7130 and MX240 over the years and have never been let down. We think the Magnums are some of the most reliable tractors around.”



Ken S.  
Magnum 305 - 2006

“

We bought this tractor in 2000 with 1800 hours and could not be happier with the performance of this machine.”



Justin S.  
Magnum 7250 - 1997

“

The Magnums we've had have always been very low maintenance tractors.”



Randy J.  
Magnum 8920 - 1989, Magnum 8930 - 1989, MX270 2001

“

This Magnum took the place of our 1986 7130, that had 14,000 hrs on it. This Magnum pulls our Turbo Till, grain cart, and our Houle 7300. Magnums are very reliable, fuel efficient, and comfortable.”



Jacob P.  
Magnum 275 - 2010



#### ONLINE VIDEO:

View a video of Andreas Klauser's Case IH global update in this issue's online edition at [www.caseih.com](http://www.caseih.com).



## Case IH Global Update



**Andreas Klauser is President and Chief Executive Officer of Case IH Agricultural Equipment and has full responsibility for the Case IH business worldwide.**

**In this report, Andreas shares his insight into the current state of Case IH and growth prospects outside of the North American markets.**

Welcome from sunny Racine, Wisconsin. Most of 2013 has already gone and I think it's appropriate to reflect on what has happened so far and what was ongoing throughout this year.

Our vision continues: to be the preferred partner in bringing innovative products and market leading agricultural solutions and services to customers around the world. We want to be the preferred partner for you. We want to add value for you, our customer. That's Case IH; that's Case IH agriculture.

We are investing in our products, our services and in our dealer network to make sure that you are being served in the best way and that you get the dedicated service you expect from a Case IH product.

The latest examples of Case IH innovation and investment are the new Efficient Power Tier 4B models including the new Steiger 620 with its mas-

sive 682 maximum horsepower, the new Magnum models with their highly productive CVT transmissions, and new Axial-Flow combines and Patriot sprayers, all meeting the new emissions standards with the simple and proven solution of SCR-only.

It's not only about the products – the Quadtrac and Magnum tractors, the Axial-Flow combines – it's about AFS, Advanced Farming Systems, provided by Case IH. Long established in the North American marketplace, our AFS technology is well known and well used all across the world.

Let's consider all the markets we are in. North America is still the biggest and most important market to Case IH, and the Case IH presence keeps growing beyond this region. We are opening new markets in Eastern Europe. Specifically, we are completing our strategy in Ukraine where, quite similar to North America, strong service, parts supply and reliable dealer network support is needed.

In Western Europe, Case IH technology is respected. We are leaders in technology but we should never forget that it means a lot to the European farmers that Case IH is made in the U.S. and sells solid, robust products. A big portion of Case IH business is coming from Europe. We were able to grow our Axial-Flow combine market share there in a market which is primarily non-conventional combines now, and rotary combines coming from Case IH are unique. Hitting this market point in these days is a great

**+** Producers from countries including Australia, Brazil and Argentina joined Midwestern U.S. farmers at the 2013 Farm Progress Show in Decatur, Illinois. Case IH highlighted new equipment including the Steiger Quadtrac 620 and the Magnum 380 CVT tractors.

story of success. Again, we supply a robust, solid U.S.-built product that serves customers' needs.

This leads us back to Eastern Europe. They need to increase their efficiency so they can produce more acres; they need to do more work in a shortened period of time. So to me this means our products and our technology fit very well into these marketplaces. This will help us to grow and help us to further support customers in these areas.

All these technologies that are driving our success in Europe are also hitting in Australia. There, Case IH is growing and has a strong presence with our rotary combines, and with the Magnum and Steiger products. We hosted many Australian customers at this year's Farm Progress Show, and their farming areas are very similar to the farming communities in North America.

And we can't forget about Latin America – another area of great success for Case IH. The farmers are getting more sophisticated, but they need to be more efficient. They are fully relying on our products – on our tractors and our combines. Latin America is another location where our technology plays an important role. They want to see AFS and adopt precision farming. They want to work with our products so they can increase their efficiency in the local marketplace. All this is driven by the fact that Case IH is adding value to our customers so those who are in the field daily can be even more successful in the future. Here again, many customers from Latin America visited Case IH at the Farm Progress Show, particularly customers from Brazil and Argentina.

So far, the harvest went well, and I'm confident that Case IH was fully supporting you to help you make the most of it. So continue having a successful year. We appreciate the opportunity to be working with you.

**“Our vision continues: to be the preferred partner in bringing innovative products and market leading agricultural solutions and services to customers around the world.”**



Farm Forum is sent to you  
compliments of your  
Case IH dealer

PRSRT STD  
U.S. Postage  
**PAID**  
Lebanon Jct., KY  
Permit #246

# CASE IH

## ShopCaseIH.com

### ALL RED MERCHANDISE, ALL IN ONE PLACE.

New items and seasonal promotions are continually added to the site.  
So sign up to receive special offers and promotions and check back often!  
Use the promo code shopcaseih30 when you check out to **SAVE 30%.**

