

Ag Equipment Intelligence

News, Information & Analysis for the Ag Equipment Marketer

- GP to Close UK Plant
- LS Mtron Eyes Iran
- First Cut: Equipment

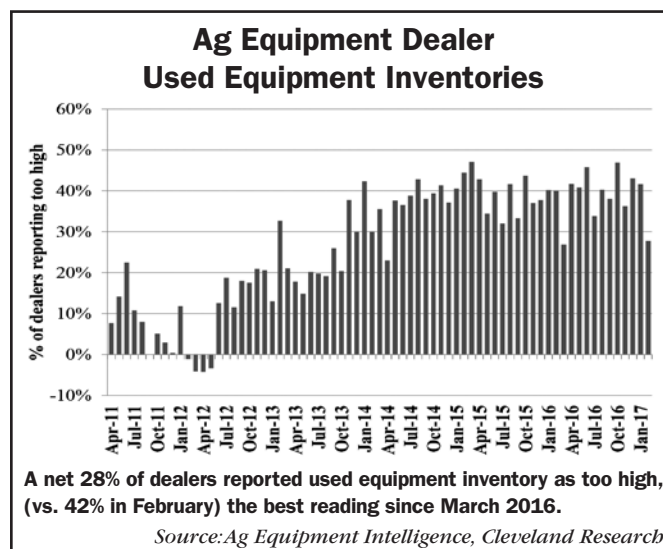
Improving Used Equipment Inventories, Pricing Helps Dealers' Outlook

There have been signs that dealers are starting to feel better about their improving used equipment inventories over the past few months. But now we're starting to get more positive comments via *Ag Equipment Intelligence's* monthly Dealer Sentiment's & Business Conditions Update survey.

Comments in the most recent report released the last week of March included, "Our 100 horsepower tractor inventory is too low, but our total inventory is in good shape" ... "Our margins on used equipment have improved and we expect that trend to continue for the balance of the year" ... "Interest rates and residual values are increasing, while incentive programs are decreasing."

The one dark cloud that's still hanging over the industry is the impact that growth in equipment leases could have on the used machinery situation. One dealer commented, "Customers have grown accustomed to leasing programs

Continued on page 8



Landscapers Expect Revenue Growth in 2017; to Increase Equipment Spending

Landscape contractors, one of the prime market segments for rural lifestyle and outdoor power equipment dealers, continue to show strong growth potential in 2017.

According to the results of an exclusive survey by investment bank Seaport Global Securities, more than 80% of U.S. landscapers they surveyed are forecasting revenue growth in 2017.

Summarizing the survey results, Michael Shlisky, machinery analyst at Seaport Global who conducted the survey and analyzed the results, said, "39% of landscape contractors expect to see revenue growth of 10% or more in 2017, up from 33% in the SGS December survey.

"About 31% expect to see revenue

growth of 5-10% this year, relatively unchanged from the last survey, while 14% expect growth of 2-5%, which is down from 18% 3 months ago. Roughly the same percentage of respondents, about 18%, expect a flat or down year vs. 3 months ago."

Shlisky adds, "Landscapers continue to expect to spend more on equipment in 2017 vs. 2016."

Employment in landscaping services has also showed solid growth during the past 3 years.

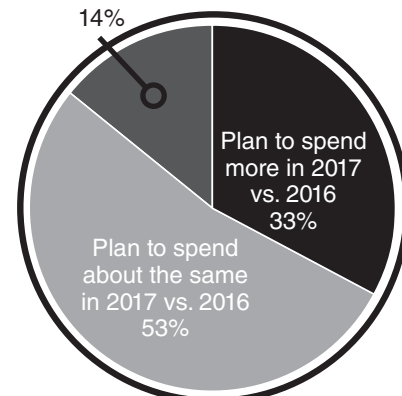
After peaking at 681,000 in 2007, the housing bubble took its toll on landscape employees. By 2010, the number of employees dropped by nearly 10% to 616,000. Since that time, employment levels have shown

Continued on page 2

Landscapers Outlook for Equipment Purchases 2017 vs. 2016

Plan to spend less in 2017 vs. 2016

14%



According to a survey of U.S. landscapers by Seaport Global Securities, 33% plan to spend more on equipment in 2017 than they did last year, while 14% plan to spend less.

Source: *U.S. Bureau of Labor Statistics*

consistent growth, reaching 756,000 landscape employees by 2016.

Shlisky also noted that sentiment in the sector also improved

slightly since the previous survey in December 2016, with 44% of respondents "feeling better about their business than 3 months ago." **AEI**

Increasing Landscaping Employment Another Positive Signal for Dealers

Rising employment levels are almost always a positive sign indicating a business is growing. That being the case, landscape contractors are on a roll — again. And this is also a positive sign for retailers, particularly outdoor power equipment dealers, who supply the equipment needs for those maintaining parks, corporate facilities and homeowners with lawn and turf services.

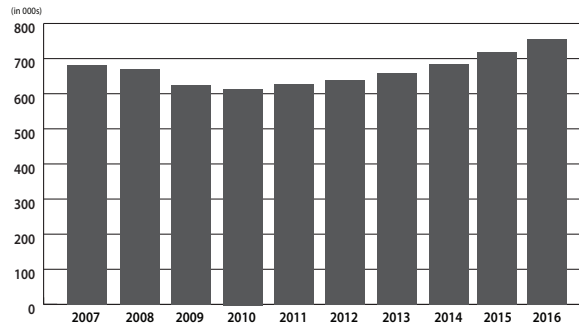
Between 1990 and 2007, employment in landscaping services expanded for 17 straight years. According to the U.S. Bureau of Labor Statistics, jobs in this sector more than doubled, from about 300,000 in 1990 to 681,500 in 2007.

After peaking that year, the housing bubble burst, taking the stock market and nearly every U.S. market segment, including landscaping services, with it.

By 2010, the number of employees in that sector dropped by nearly 10% to 616,000. Since that time, though, employment levels have consistently increased. By 2016, for instance, employment in landscape services had risen by nearly 11% to 756,000 landscape service employees.

With increased new home building in 2017, it's expected that landscape hiring trends will follow suit.

Landscaping Services Employment 2007 – 2016



After bottoming out in 2006, landscape contractors have added 74,000 employees, an increase of 11% between 2007 and 2016.

Source: U.S. Bureau of Labor Statistics

Deutz Looking to Increase Ag OEM Business

Diesel engine maker Deutz is stepping up efforts to win business from agricultural vehicle OEMs as part of a strategy to even out demand at its factories.

In its 2016 annual report, Deutz managers note that with ag equipment demand following a different economic cycle than the group's other main segments — construction equipment and materials handling — expanding sales to farm machinery OEMs would help smooth manufacturing demand.

Last year, at €176.5 million (\$190 million), agricultural applications accounted for 14% of group net sales, which increased just 1% to €1.26 billion (\$1.36 billion). Materials handling accounted for 15% and construction equipment almost 28%. Automotive, stationary equipment, other applications and service operations accounted for the rest.

Despite a decline in retail sales of agricultural machinery in Europe, demand in the region for engines to power ag equipment increased 10.8% on a revenues basis last year and 7.7% in unit sales.

Having purchased large numbers of engines in 2014 ahead of emissions changes, OEM inventories are now running down and fresh stock is needed.

Last year, that helped push up total revenues from customers in EMEA (Europe, Africa, Middle East) by 3.3% while, in contrast, they fell 13% in North America.

At 17,173 units, Deutz sold more than 1,200 additional engines for agricultural applications last year than in 2015. More than 87% of those were of 8 liters capacity or less produced by the company's Compact Engines unit to power tractors, wheeled loaders, telehandlers and diet feeders. **AEI**

Carraro Tractor Sales Grew to \$88 million in 2016

Antonio Carraro of Campodarsego, Italy, a manufacturer of compact tractors for specialized agriculture (vineyards and orchards), closed its books for 2016 with a turnover of more than €83 million (\$88 million) with an EBITDA close to 10% and a net profit of €2 million (\$2.1 million).

Exports to France, the Iberian Peninsula, Turkey, Iran, South America, Canada, California and China made up more than 50% of Carraro's sales in 2016.

Year-to-date order bookings are up 30% compared to the same period in 2016. Sales growth of more than 5% is forecast for 2017 with a predicted EBITDA of more than 10%. **AEI**

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Investing in Dealers, Employees, Production Facilities Paying Off for Horsch

Investments in dealer and employee development, and on the production of machines tailored to individual markets, are credited with helping Horsch continue on its growth path in 2016.

The German manufacturer of small grain seeders, precision planters, tillage equipment and crop sprayers says it hit a record €300 million (\$324 million) in net sales last year. That figure is up 22% on 2015, an increase of €54.2 million (\$58.5 million), which is the same amount that Horsch achieved in total sales 10 years ago.

"Investments at our production sites in Germany and other locations has increased the company's competitiveness and is the basis for future growth," says Michael Horsch, CEO. "Horsch also continues to invest heavily in dealer and employee development, and market-specific machines."

The latter policy is evident at Horsch LLC, the group's North American opera-

tion based at Mapleton, N.D., where air seeders for U.S. and Canadian growers are built, in addition to versions of Horsch's European planters and cultivation implements.

Bruce Hart, vice president of sales, marketing & product support, explains, "We take products developed by Horsch in Europe that we think would have a place in North America, and trial them to see how they perform. If they are shown to have a role, we then modify them for production here according to the requirements and practices of growers in North America."

This formula, which is also practiced in Eastern Europe and is likely to be repeated as Horsch establishes a presence in China and Brazil, has contributed to steady growth in the U.S. and Canada, says Horsch, as well as in other markets.

Seed drills and planters remain the

group's most important product segment, accounting for 42% of sales in all, with single-seed planters gaining ground at 9%, while tillage equipment sales are consistent at 31% of the net total.

Parts sales comprise 15% of sales, while Horsch's trailed and self-propelled sprayer sales grew to 13% as they became available in more markets. There is no word yet on whether Horsch will add its sprayers to the North American product portfolio.

Kory Anderson, former CEO and president, who left Horsch LLC last summer after guiding the business from a joint venture to a standalone operation with an all-new assembly plant at Mapleton, N.D., is now focused on his Anderson Industries group.

Last October, the farm equipment, custom manufacturing and foundry group moved its own Mapleton engineering and production operations to existing facilities in Webster, S.D. **AEI**

FARM MACHINERY TICKER (AS OF 4/12/17)

MANUFACTURERS	Symbol	4/12/17 Price	3/13/17 Price	1-Year High	1-Year Low	P/E Ratio	Avg. Volume	Market Cap.
Ag Growth Int'l.	AFN	\$52.16	\$51.98	\$57.69	\$35.71	40.33	50,084	832.6M
AGCO	AGCO	\$58.87	\$59.26	\$64.90	\$44.68	29.90	626,327	4.66B
AgJunction Inc.	AJX	\$0.55	\$0.52	\$0.74	\$0.42	NA	69,431	66M
Alamo	ALG	\$72.94	\$73.55	\$79.59	\$52.82	21.08	40,933	839.9M
Art's Way Mfg.	ARTW	\$3.40	\$3.75	\$4.70	\$2.50	NA	7,500	14.13M
Buhler Industries	BUI	\$4.64	\$4.55	\$6.00	\$4.40	32.22	466	116M
Caterpillar	CAT	\$94.86	\$92.64	\$99.46	\$69.04	NA	5,292,437	55.63B
CNH Industrial	CNHI	\$9.88	\$9.66	\$10.05	\$6.26	NA	1,461,319	13.45B
Deere & Co.	DE	\$109.35	\$109.88	\$112.18	\$76.33	23.69	2,247,047	34.8B
Kubota	KUBTY	\$76.63	\$78.13	\$83.48	\$62.80	16.00	9,664	18.42B
Lindsay	LNN	\$86.01	\$80.49	\$89.98	\$65.78	39.44	93,296	917.12M
Raven Industries	RAVN	\$28.45	\$29.50	\$31.35	\$15.01	51.08	167,117	1.03B
Titan Int'l.	TWI	\$9.33	\$12.16	\$14.23	\$5.55	NA	528,450	556.48M
Trimble Navigation	TRMB	\$30.84	\$31.58	\$32.34	\$22.69	59.31	1,042,854	7.79B
Valmont Industries	VMI	\$147.95	\$153.15	\$165.20	\$119.05	19.39	158,909	3.34B
RETAILERS								
Cervus Equipment	CVL	\$12.65	\$15.20	\$16.52	\$10.85	8.86	7,608	23.24M
Rocky Mountain Equipment	RME	\$10.11	\$10.58	\$11.25	\$6.10	13.13	37,846	195.97M
Titan Machinery	TITN	\$14.99	\$13.75	\$15.95	\$8.68	NA	89,829	319.69M
Tractor Supply	TSCO	\$64.61	\$73.16	\$97.25	\$61.50	19.76	1,932,837	8.39B

Great Plains to Shutter UK Operation

A year after it reduced production staff at its UK operations, Great Plains Mfg., the Salina, Kan.-based tillage and seeding group has decided to close its British subsidiary.

Current production plans for the cultivators and seed drills will be completed by the middle of this year, while other functions — R&D, spare parts supply, sales and marketing — will be phased out later in the year, with a view to closing the facility in early 2018.

Great Plains said it will continue to provide parts and service for the UK-built products in Europe through Kverneland Group, a sister company also owned by Kubota.

In a statement, Linda Salem, president of Great Plains Mfg., said, “We examined many options before we chose this path. We know this affects the lives of our team members, their families and our customers, making it

a painful decision.”

Great Plains bought what was then Simba International at the end of April 2010, following initial discussions proposing a reciprocal trade agreement. The acquisition included a range of heavy and light cultivation implements popular in Britain and several export markets.

Over subsequent years the name and identity of the business and its products was changed to reflect Great Plains ownership and the UK subsidiary’s activities with selected U.S.-built products in Western and Eastern Europe. In the U.S., the UK-built X-Press compact disc harrow was added to the product portfolio.

Great Plains made significant investments expanding and improving manufacturing and assembly efficiency at the Sleaford works in England, and 3 years ago reported the plant was operating at full capacity, building not

only its UK products but also Yield-Pro planters for Europe.

But last year, most manufacturing was out-sourced to lower cost suppliers in Europe with the loss of 40 jobs. Ironically, the announcement was made a few months before Britain’s unexpected vote to leave the European Union, which led to a fall in the pound against other currencies, making imports significantly more expensive.

Salem commented, “Great Plains Mfg. is proud to have worked with our many committed dealers, distributors and suppliers for so many years. Together, we have provided quality products and outstanding service to our farming communities.

“After long and careful consideration, we have determined that the long-term weakness in the agricultural economy has made it no longer viable to keep the facility in operation.” **AEI**

Doosan Engines Making Headway with Off-Highway OEMs

Construction equipment giant Doosan Infracore is making headway with OEM orders for compact off-highway vehicle engines as it aims to increase annual sales from the 37,000 units shipped in 2015 to 100,000 units in 2020.

Doosan Infracore’s engines business unit has started supplying Daedong, the South Korean maker of Kioti brand tractors with the high-spec 3.4-liter D34 4 cylinder engine in a deal expected to total 6,300 units over 5 years. In addition to the current contract, Daedong has reportedly said it will prioritize Doosan whenever it needs an electronic engine of

3 liters or more.

Doosan is already supplying fellow South Korean tractor manufacturer Tong Yang Moolsan (TYM) and anticipates a similar arrangement with Kukje Machinery, the Branson-brand tractor maker that TYM acquired last year. (*See Ag Equipment Intelligence, April 2016*).

Doosan’s Bobcat compact equipment product line was the first recipient of the new G2 engine family, which also encompasses a 2.4 liter off-highway unit. The engines are produced in a dedicated facility opened less than 5 years ago.

The D34 used in larger models of Bobcat skid steer and tracked loaders is EPA Tier 4 Final emissions compliant without using a diesel particulate filter (DPF). The D34 has recently been introduced to Bobcat’s latest generation telescopic loader line built in France — and also distributed as a Massey Ferguson product in selected markets — including the V519 VersaHandler, which Bobcat refers to as a telescopic tool carrier, recently launched in North America. With outputs of 75, 100 and 130 horsepower, the Doosan engine replaces Deutz engines of similar power. **AEI**

Austrian Farmers Remain Brand Loyal

While the German brands score strongly in Germany, brand loyalty also runs deep in neighboring Austria.

There, tractors in Case IH colors gather a lowly 1.86% market share while the same models in local Steyr branding lead the 4,500 unit farm tractor market with a share of almost 21%.

Austrian manufacturer Lindner shared second place with New Holland with a 13% share last year, in a market down almost 5%.

Lindner manufactures around 1,500 conventional and small “transporter” tractors a year, built to cope with upland and Alpine grass farming, as well as the snow clearance and forestry work that many Austrian farmers undertake. Its latest model, the 102 horsepower Perkins powered Lintrac, features a ZF stepless transmission and steering rear axle for added maneuverability.

More conventional tractors from Deere, Fendt and Massey Ferguson complete the Austrian top six. **AEI**

Reducing Ag Equipment Purchases Tops Farmers' List for Cutting Costs

It's not a secret or surprising that farmers first look at reducing or totally eliminating purchases of equipment when they need to cut costs. This reality was further reinforced by a recent survey of more than 500 farmers by Farm Journal Media and posted on its AgWeb.com website on April 7. The media company has conducted the farmer cost cutting survey annually since 2012.

The list of the ways farmers economize during down times like the industry is currently undergoing include the following actions. (Note: respondents were able to offer more than one answer.)

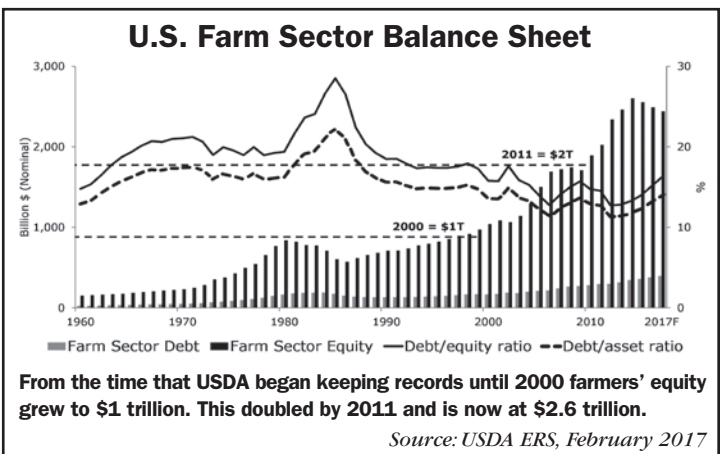
1. Reduce farm equipment purchases (67%)
2. Delay non-equipment capital purchases (46%)
3. Employ no-till or low-till farming practices (43%)
4. Purchase less treated seed to reduce seed costs (29%)
5. Negotiate lower land rents with landlords (26%)
6. Increase variable-rate application of fertilizer and crop protection inputs (26%)
7. Reduce energy consumption (through better equipment maintenance and/or power generation (20%))

Farm Balance Sheets. Luke Chandler, deputy chief economist for Deere & Co., also addressed the drop off in equipment purchase in the past 3 years during a presentation at the USDA Agricultural Outlook Forum in February.

"It's understandable that farmers have been cutting back on large or big-ticket items such as agricultural machinery. Machinery as a percentage of overall inputs has been declining in recent years. At the same time, we've actually seen seed increasing over the period and since 1995-2015. As a percentage of input costs, seed has actually doubled during this period," said Chandler.

Pointing to farmers' balance sheet, he says "It took from when USDA began keeping records until 2000 to grow equity in the U.S. farm balance sheet to \$1 trillion. It took only another 11 years to double that and then 4-5 years later to nearly triple it to \$2.6 trillion. In the past few years, some of that equity has begun to erode.

"In 2017 the USDA is forecasting that farm sector debt is expected to reach a record of about \$240 billion," Chandler added. "As a result we are starting to see those debt-to-equity and debt-to-asset ratios and also cash on hand to service



debt being squeezed because of this downturn. Obviously we are nowhere near where we were in the '80s, but clearly that trend is in the wrong direction."

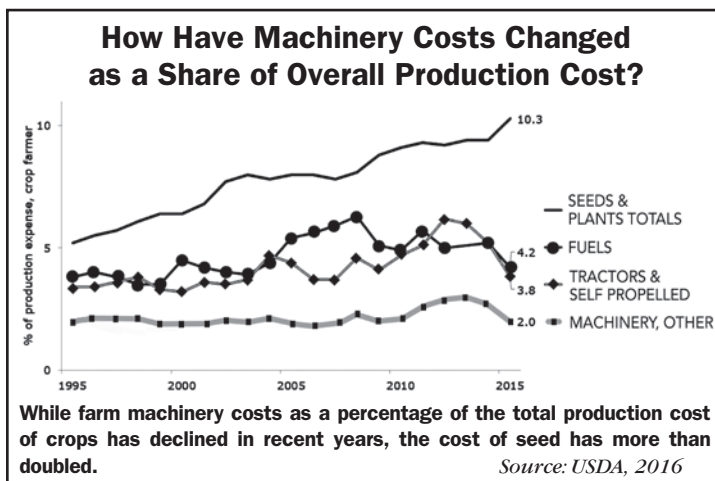
Farm incomes are forecast to stabilize in 2017, which Chandler calls a "really good sign. There are definitely better signs in the other commodity markets such as cotton and sugar where we're starting to see a better outlook. Grains still have a ways to go." (See table below for production and profit estimates.)

In the Long Term. Beyond 2017, Chandler sees the rebalancing in some grain stocks, which will help improve farmers' balance sheets as well.

"Looking longer term, tailwinds that are supporting our business and supporting the outlook for global agriculture, we believe are still very much in place," he says. "Over the last 15 years, despite the last couple of years of hardship, we have seen an unparalleled period of prosperity in global agriculture. We've seen record high prices, farmers' income at record all-time highs, global grain consumptions has increased by a third, global trade of grain and oilseeds has increased by around 70%.

"Food security has improved by about 28% over this period," says Chandler. "It's this combination of tailwinds driving the long run that we think are still very much in place and likely to drive our business over the long term."

AEI



2016 USDA Cost of Production & Profit Estimates for Corn, Soybeans & Wheat

	Corn	Soybeans	Wheat
Trend Yield (bu./acre)	166	45	48
Total cost per bu. at trend	\$4.11	\$10.65	\$6.50
USDA MYA* price estimate \$/bu.	\$3.77	\$8.63	\$5.21
Contribution margin per bu.	\$1.74	\$4.81	\$2.76
Contribution margin per acre	\$288	\$216	\$134
Profit (Loss) per bu.	\$ (0.34)	\$ (2.02)	\$ (1.29)
Profit (Loss) per acre	\$ (57.08)	\$ (90.70)	\$ (62.67)

*marketing year avg.

South American Ag Equipment News

John Deere Introduces New Grain Harvesters in Brazil

John Deere Brazil is launching the new S400 grain harvesters that will include two models: S430 and S440. According to the company, the S400 series cause less soil compaction, which is critical for machinery working in flooded terrains commonly seen on rice crops.

It brings Rotor TriStream technology, with three decentralized sections (feed, trail and separation), which allows better separation of grain and straw, along with a bulk tank with 6% more carrying capacity.

"S400 series was born in Brazil and is a 100% national project developed to meet the needs of farmers in our country," says Rodrigo Bonato, sales director of John Deere Brasil.

Infrastructure Projects Could Cut Brazil's Soybean Transport Costs by Half

According to a report by the UK's Agrimoney.com, work has started on several projects aimed at rerouting Brazilian soybean exports through the Amazon rather than overland to ports in the south. Currently, most of the country's exports travel from Brazil's row-crop region by road.

Quoting Dr. Michael Cordonnier, owner of Soybean and Corn Advisor Inc., by moving the supply chain north, to be barged along the Amazon, transport costs could fall by nearly half.

"With the United States pulling out of the Trans Pacific Partnership and threatening to undo the North American Free Trade Agreement, the Brazilian agricultural sector is anticipating a greater market share of the world's agricultural exports," Cordonnier said.

John Deere to Produce New Tractor Line in Argentina

John Deere has announced that it will start production of its 6J tractors, which includes 6 models from 110-205 horsepower, in Argentina. Deere CEO, Samuel Allen, told the Argentinian newspaper *La Nación* that the investment is possible because the country's new administration is now friendly to agriculture and trade.

"I can affirm that we could never announce a new line of production if we [believed] that the policies would change. If the government allows us to import advanced technology, the Argentinian farmer will implement it." For Allen, Argentina has a great future in agriculture if the policies continue to be "adequate."

The factory will be located in Granadero Baigorria in the Santa Fe province. The 6J tractors assembled in the unit will have an engine produced locally and several components locally supplied such as batteries, castings and tires. In Argentina, John Deere has 820 employees with 30 dealerships, 106 locations, and exports to Brazil and other markets.

Polish Tractor Maker Farmtrac Opens Factory in Brazil

In a partnership with the Brazilian company FMB, the Farmtrac tractors from Poland will be manufactured in a new factory in Anapolis, state of Goias. The goal of the new factory is to sell 150 tractors per month — three times more than current sales of imported units. "From Goias and Brazil, we want to project Farmtrac into all of South America," said FMB's CEO, Edson Casagrande, at the official launch of the new plant.

Claas to Use Rolls-Royce MTU Engines in Its Ag Machines

Harvest vehicles manufacturer Claas will continue to use Mercedes-Benz engines in its combines, forage harvesters and the Xerion 4WD tractors following an agreement signed with Rolls-Royce Power Systems.

The heavy propulsion solutions arm of the British engineering group builds MTU diesel engines for agricultural and other off-highway applications based on Daimler Benz OM series commercial vehicle motors.

Although Claas has used Mercedes-Benz branded engines built by MTU in its smaller combines for some years, the bigger Lexion models available in North America through the Claas Omaha operation started transitioning from Cat power only recently.

Claas says it plans to take between 4,000-5,000 engines a year under the new agreement to power its combines, the Jaguar self-propelled forage choppers and its large Xerion 4x4 tractors.

The MTU engines, spanning 135-640 horsepower, will meet European Stage V emissions rules, which clamp down on the number of particulates released in exhaust gases.

Stage IV regulations, which are equivalent to the U.S. EPA's Tier 4 Final requirements, dictate only the maximum size of particulates that may be emitted.

Engine manufacturers are using more efficient combustion and additional exhaust filtration to meet the new standard, due to be applied in 2019. (*See Ag Equipment Intelligence, December 2015.*)

Rolls-Royce Power Systems is headquartered in Friedrichshafen, southern Germany, and employs around 10,000 people in its marine, rail and off-highway propulsion operations.

MTU America, located in Novi, Mich., has facilities in 8 states and is responsible for engineering, manufacturing, sales and service of diesel engines and systems throughout North and South America.

It is the second largest unit (by revenues) of the Rolls-Royce engineering group, where aerospace is the largest segment, contributing 19% — £2.65 billion (\$3.3 billion) — to group revenues in 2016.

The MTU unit recently won a new client in JCB, the British manufacturer of agricultural and earth moving machinery, to power its new top-end wheeled loaders and its new 360 degree excavators.



Equipment Sales Rise Again in March

North American large ag equipment sales continued to improve in March, up 3%, after turning positive with 10% year-over-year growth in February, according to Mircea (Mig) Dobre, analyst with RW Baird. 4WD tractor sales increased 31% year-over-year in March, compared to a 10.4% decrease in February.

Combines sales increased 32.1% in March, following February's increase of 14.5%. "March accounts for higher share of sales than February; continued growth adds comfort to our expectations that Deere's guidance for North America ag down 5-10% in FY17 is achievable," Dobre said in a note to investors.

- U.S. and Canada large tractor and combine retail sales increased 3% year-over-year in March, after increasing 10% in February, declining 32% in January and 22% in December. U.S. sales decreased 9% year-over-year, while Canadian sales were up 76%. March 2017 marked the second month of growth after 36 consecutive months of year-over-year declines (March 2016 down 28% and March 2015 down 26%).

- 4WD tractor sales increased 31% year-over-year in March vs. a 10.4% decrease the month before. Last 3 months (L3M) sales dropped 5.4% year-over-year after decreasing 31.3% in February. U.S. dealer inventories of 4WD tractors decreased 6.8% year-over-year in February.

- Row-crop tractor sales posted a 6% year-over-year decrease, compared with the 12.7% increase in February; L3M sales decreased 10.8%. U.S. row-crop tractor inventories decreased 16.8% year-over-year in February.

- Combine sales increased 32.1% in March following February's 14.5% increase. U.S. combine inventories were 0.2% lower year-over-year in absolute terms in February.

- Mid-range/utility tractor sales increased in March, up 4.3% year-over-year after a 1.6% decrease the previous month. Compact tractor sales increased 12% year-over-year after a 22.4% increase last month.

AEI

MARCH U.S. UNIT RETAIL SALES



Equipment	March 2017	March 2016	Percent Change	YTD 2017	YTD 2016	Percent Change	Feb. 2017 Field Inventory
Farm Wheel Tractors-2WD							
Under 40 HP	13,063	11,892	9.8	26,480	23,252	13.9	76,478
40-100 HP	4,863	4,785	1.6	11,322	11,739	-3.6	35,779
100 HP Plus	1,452	1,706	-14.9	3,774	4,363	-13.5	9,169
Total-2WD	19,378	18,383	5.4	41,576	39,354	5.6	121,426
Total-4WD	229	190	20.5	457	524	-12.8	755
Total Tractors	19,607	18,573	5.6	42,033	39,878	5.4	122,181
SP Combines	300	270	11.1	715	851	-16.0	857

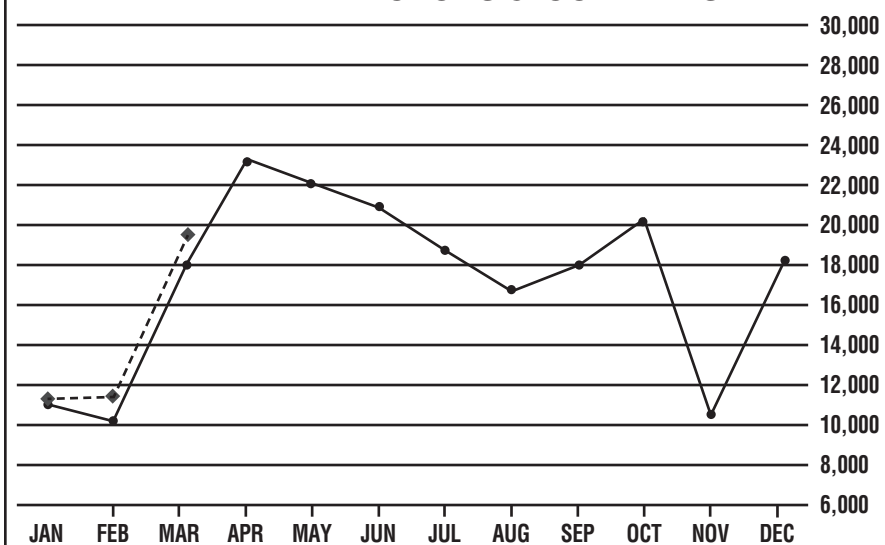
MARCH CANADIAN UNIT RETAIL SALES



Equipment	March 2017	March 2016	Percent Change	YTD 2017	YTD 2016	Percent Change	Feb. 2017 Field Inventory
Farm Wheel Tractors-2WD							
Under 40 HP	887	561	58.1	2,201	1,577	39.6	7,986
40-100 HP	465	325	43.1	1,160	994	16.7	3,880
100 HP Plus	338	199	69.8	744	708	5.1	2,523
Total-2WD	1,690	1,085	55.8	4,105	3,279	25.2	14,389
Total-4WD	109	68	60.3	227	199	14.1	350
Total Tractors	1,799	1,153	56.0	4,332	3,478	24.6	14,739
SP Combines	157	76	106.6	307	191	60.7	488

U.S. UNIT RETAIL SALES OF 2-4 WHEEL DRIVE TRACTORS & COMBINES

--- 2017
— 5 year average



— Assn. of Equipment Manufacturers

and it will take some time for customers to choose buying over leasing."

Results of the March survey indicated that a net 28% of dealers reported used equipment inventory as too high (38% too high, 51% about right, 11% too low), a notable improvement from the 42% reporting heightened inventory in January (52% too high, 39% about right, 10% too low), and the best reading since March 2016. Used combine inventory levels were reported as "too high" by a net 38% of dealers in February, compared to January's reading of 37%.

Pricing trends also saw an overall improvement in recent months. Large tractors were reported down 3% year-over-year, slightly better than the 5% decline reported in January. Combine pricing also saw improvement with values reported down 6% year-over-year vs. the 9% decline in January.

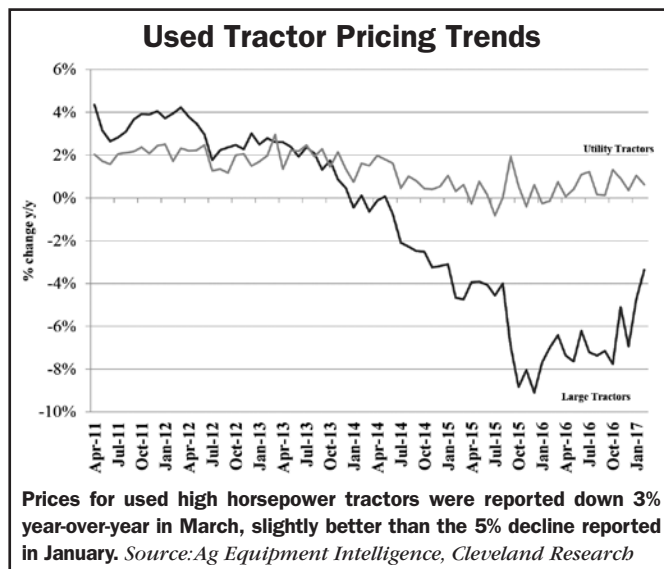
Auction Prices Up. In his Quarterly Used Values Index report for the first quarter 2017, Greg Peterson ("Machinery Pete"), also noted "very strong prices in late March."

"I couldn't believe the very, very strong auction sale prices I saw roll in from all points in North America, on a wide range of used equipment, but most notably on very large, very late model items. That's just exactly the segment of the used farm equipment market that has been under so much pressure going back to spring 2013 when commodity prices fell from their lofty perches," he said.

"Historically our auction price data has shown over the past 27-plus years that values tend to soften/fall a bit once we hit St. Patrick's Day in mid-March. That wasn't the case this year. It was just the opposite," Peterson said. "On March 30 alone, we saw a 2016 Versatile 500 4WD tractor sell for \$270,000 (USD) at a farm auction in Saskatchewan to a buyer from Australia, and a 2016 John Deere 8370R tractor sell for \$300,000 at an auction in west Texas."

Peterson also noted growing interest in used and away from new equipment. "We're 4 years into a cycle of low commodity prices. When folks aren't buying new, more buyer demand shifts to finding and acquiring very good condition used equipment. Hence the slight uptick in used values since November 2016."

Off-Leases. Regarding concerns about the impact off-leases will have on the used equipment situation, Peterson said, "So far we're not seeing used values affected materi-



ally by the wave of tractors coming off lease back into the used market."

He added that during his travels in the last several months he's "definitely noticed growing lines of off-lease tractors sitting on [dealer] lots. But it's somewhat strange, the dealer isn't, so to speak, 'on the hook' for all of them, and this of course affects how they are thought about, how they are marketed, how aggressively they are pushed."

In fact, he said, he's seeing growing volumes of used tractors being leased by dealers. "This plays well into the current profit-challenged environment for farmers. Finance companies are having success selling off-lease units back to dealers who are positioned to be aggressive buyers."

Peterson added, "So far I'm still not seeing a wave of off-lease units washing up for sale at auction."

All of this is contributing to the improved outlook dealers are expressing about their prospects for improving business levels in 2017. According to the results of the latest Dealer Sentiments & Business Conditions Update survey, the 2017 sales forecast improved to down 2%, better than the 4% declines forecast over the past several months. Cash receipt forecasts improved slightly, as well, and sentiment has grown more optimistic over the last 4 months or so.

AEI

LS Mtron Takes Aim at Iran's Farm Tractor Market

South Korea's second biggest tractor maker — the LS Mtron division of LS Group — aims to ship \$15 million worth of tractors to Iran this year with a view to expanding its presence in the Middle East and Africa.

The company has explored local manufacturing and assembly options with government officials in Iran, following a memorandum of understanding with the Iranian agriculture ministry and Arghavan Adineh, one of the country's largest importers of

agricultural equipment and LS tractor distributor since 2014.

LS Mtron says its 40-95 horsepower tractor shipments to Iran grew in value from \$2 million in 2014 to \$7 million in 2015.

It's estimated that Iran Tractor Mfg. Co. (ITMCO) holds 80% of the 20,000 unit tractor market with 50-150 horsepower models based on Massey Ferguson designs up to 30 years old powered by Perkins-license Motorsazan diesel engines.

Western manufacturers make little headway in what is the largest tractor market in the Middle Eastern and African regions.

Lee Gwang-won, LS Mtron CEO, notes that with 60% of potential arable land undeveloped, the outlook for the Iranian agricultural equipment market is bright with high growth potential. He adds that a stronger presence in Iran would have strategic value to LS Mtron as a steppingstone into other Middle Eastern and African markets.

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