

SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: JUNE 2016

EquipmentWatch remains the largest sales database on the planet with 20x the sales data of any other source.

\$31,398,014,239

RESALE

\$31,137,246,034

396,324 Assets

AUCTION

\$260,768,205

9,813 Assets

The EquipmentWatch Market Report™ is a monthly resource for the construction, lift/access, agriculture and commercial truck industries to make better-informed decisions by leveraging key equipment values, market activity, age and usage metrics.

How is the Price Stability INDEX calculated?

For more detailed articles, visit EquipmentWatch Intelligence online. **MARKET SUMMARY** MONTH OVER MONTH YEAR OVER YEAR MARKET ACTIVITY MARKET METRICS **MARKET METRICS** PRICE STABILITY INDEX TO **▼** 6.0% **7.6% 7** 2.4% **7** 2.3% CONSTRUCTION **VALUES VALUES** 99.05 FMV FLV FMV FLV 95 105 \$13,911,991,356 162.898 **7** 2.0% **T** 11.2% **27.8%** VOLUME **V** 0.7% **VOLUME** MARKET VALUE **ASSETS** STABLE DEFLATED INFLATED RESALE **AUCTION** RESALE **AUCTION 7** 5.3% **▼** 6.1% **T** 1.5% **V** 1.0% LIFT/ACCESS **VALUES VALUES** 98.70 FIV FLV FMV FMV 95 105 \$1,555,237,425 50,197 **T** 18.4% **25.6%** MARKET VALUE ASSETS VOLUME **VOLUME V** 10.4% **▲** 59.2% DEFLATED STABLE INFLATED RESALE **AUCTION** AUCTION **RESALE ▼** 8.1% **V** 8.4% **7** 2.9% **7** 2.8% **AGRICULTURE** 99.61 **VALUES VALUES** FMV FIV FMV FIV 105 \$13.958.912.877 151.088 **T** 12.5% **82.0% V** 38.5% **85.5%** MARKET VALUE ASSETS VOLUME **VOLUME** DEFLATED STABLE INFLATED RESALE **AUCTION RESALE AUCTION ▲** 0.6% **▲** 5.4% **V** 1.2% **VALUES V** 0.8% 98.50 **COMMERCIAL TRUCK VALUES** FMV FLV FMV FLV 95 105 \$1,971,872,581 41,954 **67.2% ▲** 76.4% VOLUME **40.4% ▲ 12.9%** MARKET VALUE ASSETS **VOLUME** DEFLATED STABLE INFLATED **AUCTION** RESALE RESALE **AUCTION**



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TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS

How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

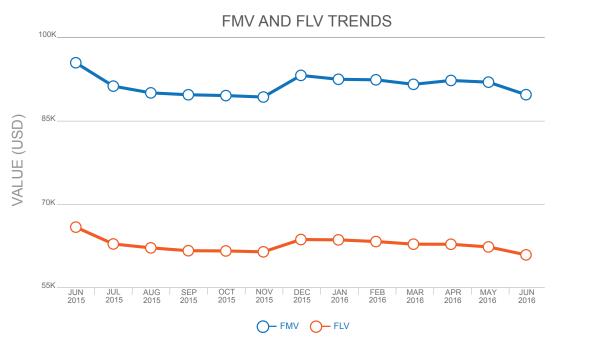
As expected, average FMV and FLV decreased significantly in June, with more than 2% drops on both channels. This was nearly enough to push the Construction market into a deflated reading on the Price Stability Index™, leaving it at 99.05 for the month of June.

MARKET HIGHLIGHTS

- Any concerns over the 11.2% decrease in resale market activity in June should be mitigated by seasonality; June's resale market for this equipment was only 0.7% lower than the same month last year.
- The average age of equipment on the resale and auction channels dropped from May to June, indicating a prevalence of slightly newer models on the market.
- Average usage on the resale market was much lower than the same month last year, registering more than 20% below recorded levels in June 2015.

MARKET FORECAST

As one can see from the trend lines, yellow iron values always tend to exhibit a steep decline between May and July each year. We anticipate values will generally follow the same trend in the months to come.







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TYPE TRENDS

APRIL 19, 2016 VERSION: PREMIUM | UPDATED MONTHLY

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MARKET PERFORMANCE

Auction activity increased almost 60% after decreasing last month. Resale activity saw a large drop of over 10% last month. Average age remained steady across both channels, while average usage decreased 13% in auction markets. Market value and assets both decreased due to the large drop in resale activity.

MARKET HIGHLIGHTS

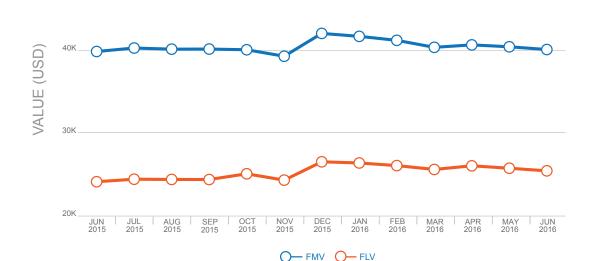
- Overall lift values are down over 5% over the past year.
- Average usage in the resale markets is up 24% over the past year, while average usage is down 17% in the same period.
- Values remained basically the same as compared to last month, with about a 1% overall decrease.

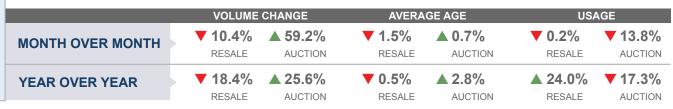
MARKET FORECAST

We expect to see a continuing slight decrease in values across both channels, while activity should remain about the same or see a slight drop.

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FMV AND FLV TRENDS





LIFT/ACCESS

NEXT TYPE TRENDS

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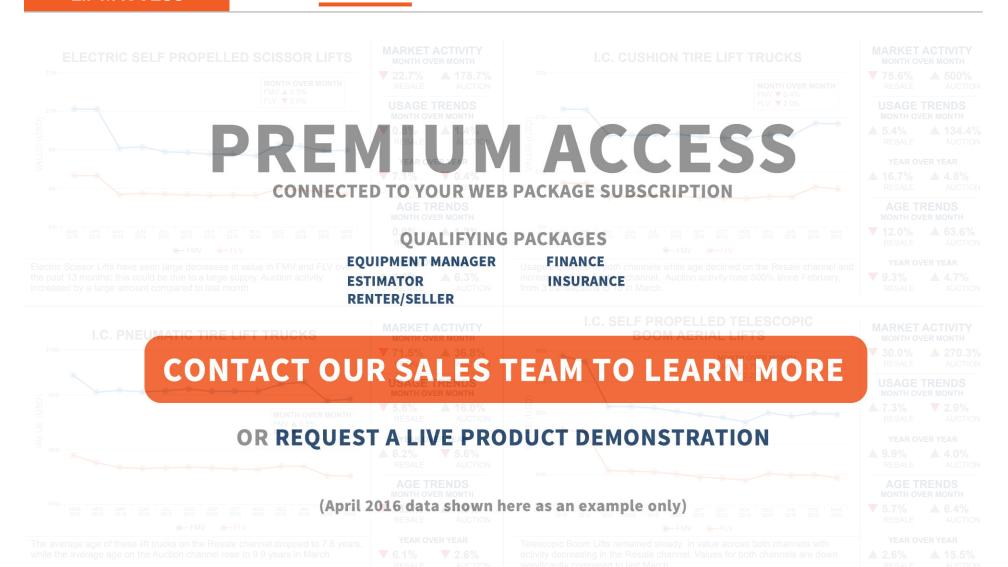
COMMERCIAL TRUCK

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How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

The consistent decline in FMV and FLV since January has continued into June with almost identical percentage drops within the resale and auction channels both year over year and month over month.

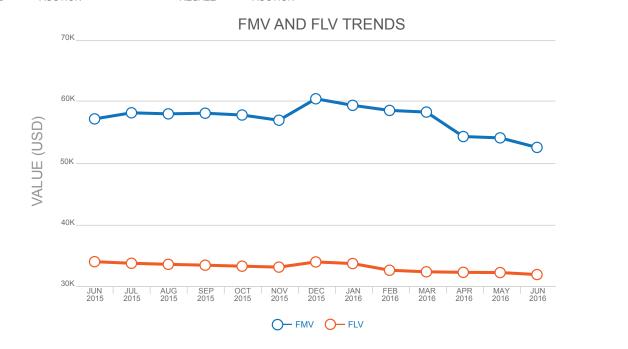
MARKET HIGHLIGHTS

- While the resale channel showed market activity decline from both May and last June, the auction activity has increased significantly.
- Now is a good time to buy agricultural equipment at auction as the average age declined for the month, volume is on the rise, and FLV's are dropping.
- Despite average usage dropping since May, both channels show large increases over June of last year even though the auction channel saw such a small increase in average age.

MARKET FORECAST

In 2015, both FMV and FLV increased after June remaining relatively high in comparison until the new year so if the markets follow the same trend, expect both FMV and FLV to increase in the coming months.

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	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▼ 38.5%	▲ 85.5%	2.2%	▼ 10.8%	T 11.5%	▼ 11.7%
WONTH OVER WONTH	RESALE	AUCTION	RESALE	AUCTION	RESALE	AUCTION
YEAR OVER YEAR	▼ 12.5%	▲ 82.0%	4.9 %	▲ 0.5%	▲ 46.7 %	▲87.8%
	RESALE	AUCTION	RESALE	AUCTION	RESALE	AUCTION

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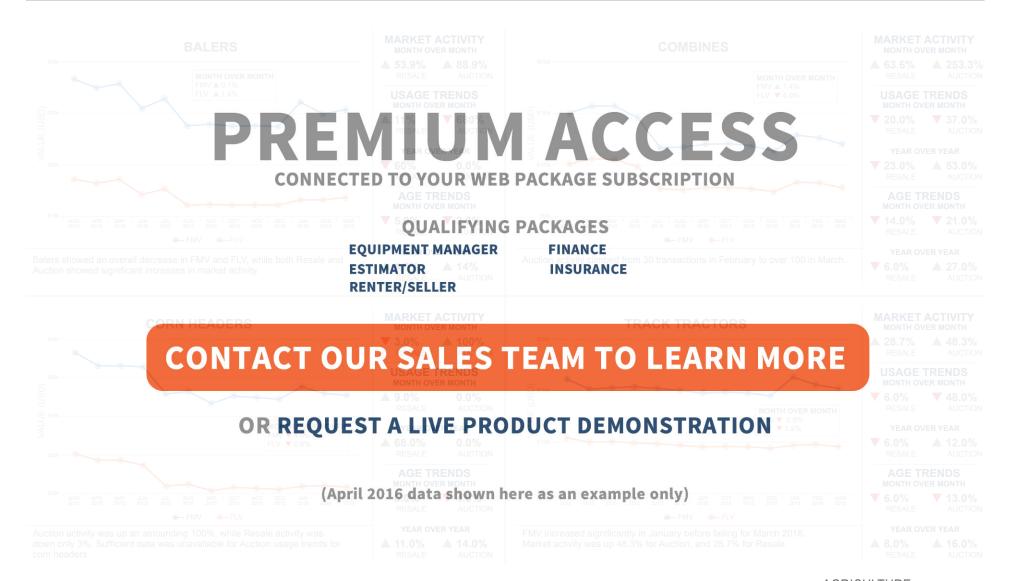
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How is the Price Stability INDEX calculated?



MARKET PERFORMANCE

FMV continued to drop in the commercial truck market as well as FLV, yet both channels showed prices above last year as volume increased for the two channels both year over year and month over month.

MARKET HIGHLIGHTS

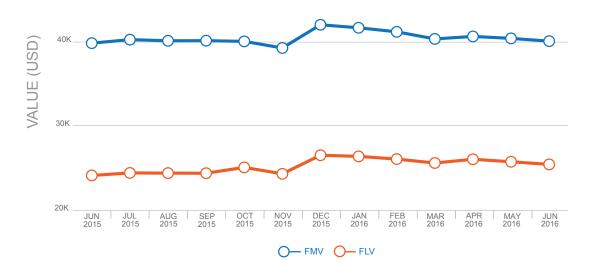
- Despite the drop in average age both month over month and year over year for the resale channel, the usage increased well above last June and this May.
- The auction channel showed opposite trends than resale as age increased from last June and this most recent May with usage dropping.
- While there were more commercial trucks for sale this June than last year at much lower ages, the higher usage has assisted in keeping the FMV from increasing much higher than last June.

MARKET FORECAST

After large increases in market activity that generally occur in June, July has historically shown drops well below the prior month.

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	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 40.4% RESALE	▲ 12.9% AUCTION	▼ 2.8% RESALE	▲ 24.6% AUCTION	▲ 11.5% RESALE	▼ 5.0% AUCTION
YEAR OVER YEAR	▲ 67.2% RESALE	▲ 76.4% AUCTION	▼ 11.6% RESALE	▲ 5.3% AUCTION	▲ 13.7% RESALE	▼ 22.1% AUCTION

COMMERCIAL TRUCK

NEXT TYPE TRENDS

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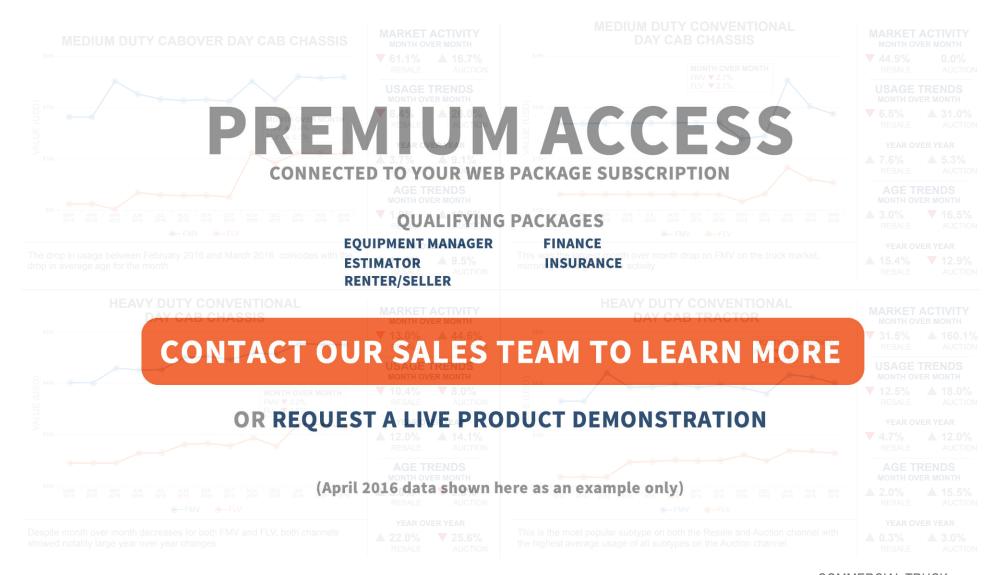
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APPENDIX

INTRODUCTION

The EquipmentWatch Market Report is a compilation of a wide array of EquipmentWatch's data, designed to bring you an in-depth look at used equipment markets over the last month.

This Appendix is designed to answer your questions regarding this report. Here we define and illustrate how we think about values, market activity, age, Usage, and regional influence for the most common types of equipment seen on used markets across North America.

OUR DATA

Selection Criteria for OEMs and Subtypes

EquipmentWatch tracks Resale and Auction prices and activity for over 15,000 models across 389 manufacturers throughout North America. With over \$800 billion in collected equipment transactions, EquipmentWatch is your primary source for intelligence regarding used equipment markets.

The data in this report is divided into four distinct equipment markets: Construction, Lift/Access, Agriculture, and Commercial Trucks. For each market, we selected the top equipment types based on their market share from January 2015 to December 2015. They're listed in the table to the right.

Construction Lift/Access		Agriculture	Commercial Trucks		
4-Wd Articulated Wheel Loaders	Electric Self Propelled Scissor Lifts	Track Tractors	Heavy Duty: Conventional - Sleeper (Heavy Tractor)		
Articulated Frame Graders	I.C. Pneumatic Tire Lift Trucks	Balers	Heavy Duty: Conventional - Day Cab (Heavy Tractor)		
Articulated Rear Dumps	I.C. Self Propelled Telescopic Boom Aerial Lifts	Combines	Heavy Duty: Conventional - Day Cab (Heavy Cab Chassis)		
Compact Track Loaders	I.C. Self-Propelled Articulating Boom Aerial Lifts	Corn Headers	Medium Duty: Conventional - Day Cab (Cab Chassis)		
Crawler Mounted Compact Excavators	Telescoping Boom Rough Terrain Lift Trucks	Wheel Tractors	Medium Duty: Cabover - Day Cab (Cab Chassis)		
Crawler Mounted Hydraulic Excavators	I.C. Cushion Tire Lift Trucks	Planters	Medium Duty: Crew (Cab Chassis)		
Large Generator Sets					
Single Drum Vibratory Compactors					
Skid Steer Loaders					
Standard Crawler Dozers					
Tandem Vibratory Compactors					
Tractor-Loader- Backhoes					



APPENDIX

We have also limited the scope of the EquipmentWatch Market Report to the following brands in each market:

Construction	Lift/Access	Agriculture	Commercial Truck	
Bobcat	Caterpillar	Deere	International	
Case	e Genie		Freightliner	
Caterpillar	JLG	New Holland	Volvo	
Deere	ere Sky Trak		Kenworth	
Komatsu	Skyjack	Challenger	Peterbilt	
Volvo	Hyster	Kubota	Hino	

THE EQUIPMENTWATCH PRICE STABILITY INDEX™

Academic justification

The EquipmentWatch Price Stability Index™ is a new metric for understanding used equipment markets for used heavy equipment. It measures resale price capacity based on the movement of market prices and market activity among the equipment types and manufacturers presented above.

Methodology and Calculation

The EquipmentWatch Price Stability Index™ is based on the Laspeyres Index, one of the many economic indices used to monitor changes in prices over time. To calculate it, we use the framework provided by the Laspeyres Index:

$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

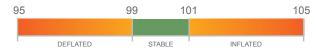
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This equation sums the product of prices in the current month and quantity of the previous month and divides that by the product of prices in the previous month and quantity in the previous month.

We have modified this method to track the change in prices for each equipment type from month-to-month against the change in market activity for each equipment type month to month.

Interpretation

The EquipmentWatch Price Stability Index[™] can be thought of as an index of price capacity. In more formal terms, it measures how efficiently used markets adjust to equilibrium given previous adjustments in prices and market activity. There are three primary ranges in the EquipmentWatch Price Stability Index[™], as noted below:



When the EquipmentWatch Price Stability Index™ is higher than 101, that indicates that equipment is valued at a higher level than expected, given last month's prices and amount of market activity. We categorize this range as "Inflated".

When the EquipmentWatch Price Stability Index[™] is lower than 99, it indicates that equipment is valued at a lower level than expected, given last month's prices and market activity. We categorize this range as "Deflated".

When the EquipmentWatch Price Stability Index™ is between 99 and 101, it is typically demonstrating that equipment prices and market activity are moving appropriately towards market equilibrium. We categorize this range as "Stable".

It is important to note that a higher rating on EquipmentWatch Price Stability Index™ does not necessarily imply that used markets are better than a lower rating. For some, price inflation is desirable; for others, it is undesirable. However, all parties involved in buying or selling equipment on used markets can use the EquipmentWatch Price Stability Index™ to easily understand how prices in a particular region or equipment channel are moving relative to the previous month.



APPENDIX

SECTION GUIDES

The Introduction

In the top left, we exhibit a tally of the estimated market value of market activity last month in the Resale channel and Auction channel.

In the main table, we display market activity and assets for each market, along with month over month and year over year changes in Fair Market Value and Forced Liquidation Value.

Overall Trends

This page is an overview of each channel. The graph highlights an overall FMV and FLV trend line for all of the equipment types and manufacturers in the report for the last 13 months. It also displays very general month over month and year over year trends across the entire channel.

Type Trends

This page subsets the analysis of the previous page across each of the key equipment types in this report.

Brand Trends

This page shows some of the key month over month trends for the manufacturers represented in this report, including equipment values, Usage, market activity, and age trends.

Regional Trends

This page shows the EquipmentWatch Price Stability Index™ for each of the 14 regions, using the same calculation method as the EquipmentWatch Price Stability Index[™] shown on the first page of the report. The states and provinces which make up each region are listed in the table to the right.

Note that due to regional disparity in market activity, some regions with very little or no market activity in the last month are excluded from the analysis. These are marked with "NA" on the map.

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Country	Region	State/Province
USA	Α	CT, DE, MA, ME, NH, NJ, MY, RI, VT
USA	В	MD, P, VA, WV
USA	С	AL, FL, GA, KY, MS, NC, SC, TN
USA	D	IL, IN, MI, OH, WI
USA	Е	IA, KS, MO, NE
USA	F	AR, LA, OK, TX
USA	G	AZ, CO, NM, UT
USA	Н	ID, MN, MT, ND, SD, WY
USA	I	CA, NV, OR, WA
USA	J	HI
USA	K	AK
CAN	L	NT, NU, YT
CAN	M	AB, BC, MB, SK
CAN	N	NB, NL, NS, ON, PE, QC

FAQS

Why did you limit the equipment types in this report?

EquipmentWatch tracks market activity for over a hundred unique equipment types each month. For each channel, we selected the most popular equipment types, based on the frequency of appearance on the resale and auction channels.

Why are there only 24 manufacturers in this report?

EquipmentWatch tracks market activity for almost 400 unique manufacturers each month. For each market, we selected the top 6 manufacturers. As the markets shift and prominence on used markets changes, we will adjust our selections accordingly.



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Why don't you use OLV?

Orderly Liquidation Value, or OLV, is a third major category of values. These are the values of an asset given a single seller and multiple potential buyers given a long or indefinite timeframe in which to dispose. Given the lack of clarity around the time dimension, we have chosen not to make assumptions about the orderly liquidation process. However, OLV is typically between FLV and FMV in gross value.

IMPORTANT DEFINITIONS

Fair Market Value (FMV): the value of an asset sold to a single buyer under no compulsion.

Forced Liquidation Value (FLV): the value of an asset sold at a properly advertised and conducted auction in which the seller is under compulsion to sell on an as-is, where-is basis as of a specific date.

Market Activity: A measure of the total number of observations collected by EquipmentWatch, including publicly-available dealer listings, auction results, and final sales data.

Meter Reads: A measure of Usage that varies by equipment market. For most equipment types, this represents engine hours at the time of observation.

Age: the age of an asset, based on model year and the year of observation.

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ABOUT EQUIPMENTWATCH

EquipmentWatch is the trusted source for heavy equipment data and intelligence. EquipmentWatch produces the leading database information products for the construction equipment industry and is the world leader in heavy construction research and serves more than 15,000 professional, high-volume users of construction and lift-truck data. Our online and print products are valuable tools in decisions surrounding the purchase, valuation, operation, and disposal of equipment.

For nearly 50 years, EquipmentWatch has served contractors, equipment manufacturers, dealers, rental companies, lenders and insurers, and government agencies involved in heavy civil construction.

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