

Summary

The mobile construction and agriculture machine industry showed remarkable performance in Q2 2021, albeit against a very weak Q2 2020. All of the OEM or hydraulic component suppliers followed in this report showed increased sales and all but one raised or held their outlook for their respective fiscal years. All economic indicators are very bullish and all regions of the globe except China are demonstrating strength. Used equipment prices remain firm, resulting in an increase in new equipment prices. Backlogs in most companies are increasing and dealers are beginning to re-stock. Rental companies have expressed confidence and are expanding plans for new equipment purchases.

US GDP increased 6.5% in the second quarter. Government stimulus, consumer spending, and the re-opening of service industries like travel, lodging, and food service contributed to the increase. Total US construction reached an all-time peak in June, after reaching an earlier record in January. Housing is softening as high production costs, higher interest rates, and appliance shortages are holding back production. Auto production has continued to decrease based on microchip supplies, and now sales to users are suffering. All commodity prices are at or near record levels, from oil to metals to agriculture goods. Across the globe all regions except China are strong despite ongoing challenges associated with resurgence of Covid cases in certain corners of the globe.

Many firms are showcasing sustainability in their quarterly reports. In some cases, it seems that much of this is lip-service. However, JCB has committed to testing a hydrogen fueled commercial excavator. Cummins has made a significant commitment to hydrogen with engine testing and an MOU with Chevron. For electric machines, Snorkel has 8 models of electric lifts available today, and Hitachi is working on a novel trolley-battery haul truck. One has to wonder what the large companies, i.e. Deere, Cat and Komatsu are working on that has not been published.

OEMs have been increasing prices on new equipment to offset manufacturing cost increases (labor, materials, and logistics, primarily). Price increases have also been supported by higher used equipment prices, driven by shortages of new equipment availability. This has been observed in the higher costs that rental houses are reporting for new equipment purchases. Naturally, costs have also increased for component suppliers. Price increases, if not already implemented, need to be implemented now to offset higher costs. When the market softens, customers will not be willing to discuss, let alone allow, price increases. Strike when the iron (or in this case, market) is hot....

Overview

The July Manufacturing PMI registered 59.5, a decrease of 1.1 points from the June reading of 60.6. This figure indicates expansion in the overall economy for the 14th month in a row after contraction in April 2020. The New Orders Index registered 64.9, decreasing 1.1 points from the June reading of 66. The Production Index registered 58.4, a decrease of 2.4 points compared to the June reading of 60.8. The Prices Index registered 85.7, down 6.4 points compared to the June figure of 92.1, which was the index's highest reading since July 1979 (93.1). The Backlog of Orders Index registered 65.0, 0.5 point higher than the June reading of 64.5. The Employment Index registered 52.9, 3 points higher compared to the June reading of 49.9. The Supplier Deliveries Index registered 72.5, down 2.6 points from the June figure of 75.1. The Inventories Index registered 48.9, 2.2 points lower than the June reading of 51.1. The New Export Orders Index registered 55.7, a decrease of 0.5 point compared to the June reading of 56.2. The Imports Index registered 53.7, a 7.3 point decrease from the June reading of 61.

US construction spending rose in Q2 along with the rebound in economic activity. Overall spending in June reached an all time high of \$1.55T, and was essentially flat throughout the quarter. Good weather across the nation, higher raw material costs, higher commodity prices and opening of the post-Covid economy pushed the gains. The gains could have been even larger if not for worker shortages and in some cases, lack of raw materials.

Housing starts in the US cooled during the second quarter as prices rose and mortgage rates also increased, shutting out some buyers. June sales were reported at 676,000 annualized units, 6.6% below May and 19.4% below year-ago levels. While builder and realtor confidence remains strong, increased costs are impacting the market. Soft lumber, which had been up 300%, is now just +70% over year ago levels. Yet, inventory needs to flush out of the pipeline before lower prices are seen on the building sites. A new challenge to new home sales has cropped up in the current quarter - that is a shortage of new appliances. It has been reported that the chip crisis that has gripped auto and machine manufacturers has now begun to impact household appliance manufacturers.

United States Agriculture tractor sales showed continued strength and are having a great year. During the second quarter, leadership shifted from small tractors to large tractors. YTD thru June, larger tractors are +32% and small tractors are just +16%. Combines are +11% thru 6/30. Replacement cycles, the desire for new technologies, and higher farm commodity prices are driving the shift from small to large Ag. This naturally benefits the large players in the industry, Deere, AGCO, and CNH.

Monthly US auto production increased in April and May, but finished June at the lowest level of the year. In fact, excluding the Covid blip, the levels seen in June have only been worse during the 2008-2009 recession. The lowered production has begun to

affect sales to users, and new sales are now forecast to only reach 15.2M units in 2021, down significantly from last quarter's estimate of 18.1M units.

Gold prices moved up slightly in a tight range in Q2, similar to the last 9 months. Gold traded recently at \$1799/troy ounce, remaining above the level needed to profitably extract the shiny metal, continuing to drive some gains in mining machine sales and spare parts for repairs. Other metals reached multi-year highs on re-opening and economic growth. Copper traded above \$4.70/lb during the quarter, eclipsing last quarter's \$4.30, levels not seen in the last 50 years. Other metals traded higher as the economy strengthened. Aluminum recently traded at \$1.17/lb, up from last quarter's \$1.11. Lead traded up 10%, closing at \$1.04/lb. Coal production in the US was dismal again, limiting some mining sales in the USA for the large OEMs.

Coal production was 6% lower in Q1 2020 compared to Q1 2020 and was the 4th lowest production in the last 6 years. US coal exports increased 9% quarter-over-quarter. US coal consumption increased 13% in Q1 vs. Q4, decreasing coal stockpiles. It is unclear if these stockpiles need to be replenished, and overall active mine counts continue to drop to record low levels. In 2020 there was an 18% decrease in active mines in the US. By the end of 2020, the number of producing coal mines in the United States fell to 551 mines, the lowest number since U.S. coal production peaked in 2008. In 2020, 40 coal mines were opened or reactivated, and 151 mines were idled or closed. This overall decrease resulted in an 18% annual decline in the total number of producing coal mines from 2019 and a 62% decline since 2008. Shutting down less efficient mines while adding relatively few new mines and reactivating few idled mines resulted in the reduction in 2020.

OEMs

The mobile equipment industry continues the rapid recovery from the pandemic effect. The second quarter was notable because China sales softened, but South America came back strong. The gains were across the board in access equipment, construction, mining, agriculture and power systems. Even aerospace markets showed signs of recovery. Nearly all equipment OEMs reported higher sales and profit and many increased guidance for the current fiscal year. Increasing commodity prices, increasing grain prices, and overall economic expansion are fueling gains. Agricultural equipment manufacturers continued to be the global winners in the 2nd quarter. Continued strength in farm commodities as well as replacement demand is continuing to drive sales. Mining showed signs of increased activity in new equipment sales as well as parts sales. Engine sales continued to show strength.

Rental companies benefited from the return of business activity. The American Rental Association (ARA) reports that overall rental rates in construction and industrial markets increased 1.4% in the quarter. Offsetting this, acquisition costs increased 4.5%, indicating price increases by the OEMs.

All of the OEM and hydraulic companies followed reported sales increases in the quarter compared to very weak year-ago results. Changes in the quarterly year-over-year sales for construction and mining companies ranged from +4.8% (Astec) to +89% (JLG), with a simple average of +49%, or 31% better than in Q1. Agriculture companies performed comparably with sales gains of +35% to +49% being reported. The hydraulic supplier followed in this report showed sales changes of 25%, improving with the OEMs. Continuing to signal an end to the worst of the pandemic impacts, all companies issued steady or improved outlooks for the current year except Oshkosh/JLG. Cat and Woodward have continued to decline providing guidance. This quarter's heat map reflects the reports of Q2 and is shown on page 5.

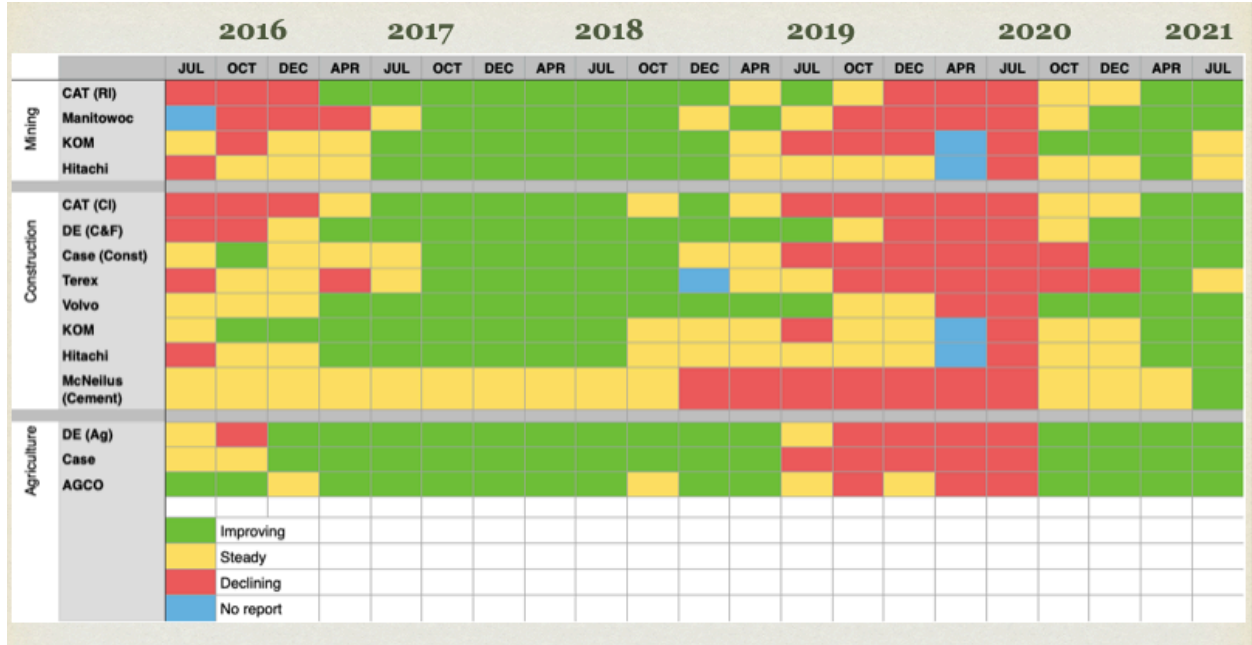
KOMTRAX is Komatsu's on-board data monitoring system. Usage data reviewed for this report show improving machine utilization in all regions, except China. This trend was also reported by Hitachi. The data comparing North America, China, Japan and Europe machine usage are presented on page 6.

OEM Spotlight:

Woodward reported Q3 fiscal year results that showed sales increased 6% to \$557M. Both segments of the business have strengthened in the second quarter. Aerospace sales increased 11% to \$341M, as commercial aerospace continues to recover. Build rates at plane makers are increasing, and more and more of the current commercial flights are on newer aircraft, where Woodward has higher parts content. This will translate to higher parts sales in the future. Defense spending remains favorable and the aftermarket is solid. Industrial sales were flat for the quarter, although all signals point to increased sales in the near term with the exception of the Chinese natural gas truck business.

Woodward declined to give specific guidance, citing the dynamic and volatile nature of the COVID-19 global pandemic has continued to cause uncertainty in many of their markets. While the ongoing rollout of vaccines across the globe has begun, new viral variants and regional resurgences make forecasting the future of their business challenging in the near-term. Given this uncertainty, and the protracted nature of this crisis, Woodward will continue to withhold financial guidance, although they are encouraged that ongoing stabilization will lead to recovery across the globe.

Heat Map for the Current Period



KOMTRAX data (as of 07/2021)

hours		[A]19/08-20/07	[B]20/08-21/07	[A] vs.[B]		[A]19/08-20/07	[B]20/08-21/07	[A] vs.[B]	
Japan	Aug	48.3	50.2	4.0%	Europe	Aug	74.7	70.5	-5.6%
	Sep	53.1	51.4	-3.2%		Sep	81.4	82.4	1.2%
	Oct	54.0	54.7	1.4%		Oct	86.8	80.7	-7.0%
	Nov	55.6	51.4	-7.6%		Nov	76.9	80.1	4.1%
	Dec	54.1	57.3	5.9%		Dec	56.8	59.2	4.3%
	Jan	52.3	59.3	13.4%		Jan	67.8	59.7	-12.0%
	Feb	58.3	57.2	-2.0%		Feb	70.0	64.8	-7.4%
	Mar	54.0	55.1	2.0%		Mar	73.6	87.0	18.2%
	Apr	50.9	48.8	-4.1%		Apr	66.3	79.1	19.4%
	May	46.9	44.0	-6.0%		May	70.9	74.8	5.4%
Jun	51.7	51.7	0.1%	Jun	77.0	81.9	6.4%		
Ju I	49.8	52.7	5.7%	Ju I	80.4	79.2	-1.5%		
North America	Aug	80.5	71.2	-11.6%	China	Aug	129.2	130.1	0.7%
	Sep	74.7	68.9	-7.8%		Sep	126.3	124.6	-1.4%
	Oct	78.4	72.2	-7.9%		Oct	128.4	137.3	6.9%
	Nov	67.8	64.3	-5.1%		Nov	135.5	136.3	0.6%
	Dec	59.8	61.2	2.3%		Dec	124.7	128.5	3.1%
	Jan	66.1	61.0	-7.7%		Jan	59.1	109.7	85.7%
	Feb	60.8	55.0	-9.5%		Feb	30.6	43.9	43.5%
	Mar	63.5	68.7	8.2%		Mar	113.4	121.9	7.4%
	Apr	61.3	68.8	12.2%		Apr	144.0	123.2	-14.4%
	May	62.1	64.9	4.6%		May	147.2	125.5	-14.7%
	Jun	71.4	73.0	2.3%		Jun	126.4	109.5	-13.3%
	Ju I	71.8	71.3	-0.7%		Ju I	126.1	106.2	-15.8%

