S&P Global
Market Intelligence

Mayville Engineering Company, Inc. NYSE:MEC

Earnings Call

Wednesday, August 2, 2023 3:00 PM GMT

CALL PARTICIPANTS	2
PRESENTATION	3
QUESTION AND ANSWER	8

Call Participants

EXECUTIVES

Jagadeesh A. Reddy
President, CEO & Director

Todd M. Butz
CFO, Secretary & Treasurer

ANALYSTS

Edward Randolph Jackson
Northland Capital Markets, Research Division

Joseph Michael Grabowski
Robert W. Baird & Co. Incorporated, Research Division

Timothy M. Moore
EF Hutton, Research Division

Vladimir Benjamin Bystricky
Citigroup Inc., Research Division

ATTENDEES

Stefan Neely

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Presentation

Operator

Hello, and welcome to the Mayville Engineering Company Second Quarter 2023 Earnings Call. My name is Elliot, and I will be coordinating your call today. [Operator Instructions]. I'd like to hand over to Stefan Neely with Vallum Advisors. Please go ahead.

Stefan Neely

Thank you, operator. On behalf of our entire team, I'd like to welcome you to our second quarter 2023 results conference call. Leading the call today is MEC's President and CEO, Jag Reddy; and Todd Butz, Chief Financial Officer. Today's discussion contains forward-looking statements about future business and financial expectations. Actual results may differ significantly from those projected in today's forward-looking statements due to various risks and uncertainties, including the risks described in our periodic reports filed with the Securities and Exchange Commission.

Except as required by law, we undertake no obligation to update our forward-looking statements. Further, this call will include the discussion of certain non-GAAP financial measures. Reconciliation of these measures to the closest GAAP financial measure is included in our quarterly earnings press release, which is available at mecinc.com. Following our prepared remarks, we will open the line for questions. With that, I would like to turn the call over to Jag.

Jagadeesh A. Reddy
President, CEO & Director

Thank you, Stefan, and welcome to those joining us on the call and webcast. Our second quarter results demonstrated favorable demand conditions across our key end markets, together with early benefits of targeted price actions, cost discipline and improved asset optimization. In recent months, we have experienced solid organic sales momentum across key customer accounts, which has supported improved utilization across our operations, a key area of focus for our entire leadership team.

Through our MBX value creation strategy, MEC has become an increasingly cash-generative business, focused on targeted commercial expansion within higher-value markets, improved operational efficiency and disciplined capital allocation. For the quarter, we have delivered more than $18 million in free cash flow, excluding a onetime deferred compensation payout, continuing to position us to fund a combination of organic and inorganic growth investments together with opportunistic open market repurchases of our common equity.

To that end, during the second quarter, we repurchased $1 million worth of common equity under our $25 million share repurchase program with $18 million remaining under the existing authorization as of June 30. In July, we closed on our acquisition of Mid-states aluminum, providing us with a strategic entry point into high-value lightweight materials fabrication, positioning MEC to grow our share of wallet with existing accounts, most notably in our commercial vehicle, power sports and agriculture end markets, while building leading market positions within emerging high-potential industries. The integration is moving forward seamlessly with both MEK and MSA teams collaborating to provide our combined customer base with a full life cycle of on-demand solutions that include design, engineering and customer fabrication.

I will discuss the revenue and cost synergy opportunities here in more detail shortly. While demand conditions remained stable during the second quarter, near-term supply chain disruptions and fixed cost under absorption from new program launches impacted adjusted EBITDA and adjusted EBITDA margin rate. Fixed cost under absorption at Hazel Park alone impacted the second quarter adjusted EBITDA and adjusted EBITDA margin by $1.4 million and 100 basis points, respectively. Excluding the impact of the Hazel Park ramp-up, our normalized adjusted EBITDA margin rate was 12%. We currently expect Hazel Park to reach full utilization by year-end 2024, which based on our current estimates, could contribute an additional $15 million to $20 million of annualized EBITDA to our business.

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Turning now to a review of market conditions across our 5 primary end markets. Let's begin with our commercial vehicle market, which represents 40.7% of our trailing 12-month revenues. During the second quarter, commercial vehicle revenue increased 2% on a year-over-year basis, driven by strong demand and elevated build rates. Customer demand requirement continue to indicate slowing demand in the second half of the year and into 2024 as the industry navigates regulatory changes as well as general slowing in economic activity. However, projected build rates for the second half of the year have consistently improved relative to where they were a quarter ago amid resilient macroeconomic conditions. Currently, ACT Research forecasts that Class 8 vehicle production to increase 4.3% year-over-year in 2023 to 328,000 units followed by a 15% decline in 2024, while supply chain constraints have continued to impact our commercial vehicle customers, this has only resulted in deferred volumes that will be delivered in the second half of the year.

Next is the construction and access market, which represented 19.3% of our trailing 12-month revenues. Construction and Access revenue declined 10% on a year-over-year basis in the second quarter given weaker fundamentals within the residential housing market, which continues to be impacted by the elevated interest rate environment. Our sales during the quarter were also impacted by customer supply chain constraints, while residential construction trends appear to have trough and infrastructure and energy market demand remained stable, we still expect to see demand softness year-over-year through the remainder of 2023, with the potential for improvement in 2024. The power sports market represented 16.6% of our trailing 12-month revenues and increased by 7% on a year-over-year basis in the second quarter. We continue to benefit from market share gains, which includes new customer programs, which were partially offset by a cooling in customer discretionary spending. Given current market conditions, we anticipate customers will seek to bolster demand through rebates and incentives over the course of the current year.

On balance, we see the opportunity to grow our share of wallet in the current year, positioning us to drive incremental sales growth in the power sports market. Our agriculture market represented 10% of trailing 12-month revenue and decreased 13% on a year-over-year basis during the second quarter. The decrease during the quarter was primarily driven by a decline in small ag equipment demand as large ag continues to be strong. This trend is in line with our expectations as global food stocks remain tight and crop prices remain elevated, while inventory of both new and used machinery remains slow. Given elevated crop prices, we believe producer demand will increase in 2023, supporting further large ag equipment demand, which should mitigate the softness in small ag demand.

Our military market represented 5.8% of trailing 12-month revenues and increased 66% on a year-over-year basis in the second quarter, driven by new program wins and build rate increases. Our customers have solid contractual backlogs with the U.S. government, and we continue to see good volumes based on new vehicle introductions and related programs. However, we foresee volume growth moderating later in the year due to the expected expiration of some legacy projects. Through the end of the second quarter, customer coating activity and order rates remain strong, though we remain mindful of how quickly the economic activity can change and the potential for a slowdown as we move through the year. At this time, we see no indications of slowing in our customers' pace of activity, Shifting now to an update on our MBX initiative. During the second quarter, we continued to progress in the implementation of our MBX value creation framework.

I am pleased to report that we are on track to achieve the objectives we laid out last fall when we first announced the MBX initiative. We will provide further details at our inaugural Investor Day planned for September, but I would like to highlight a few key updates from this quarter. represents a key area of strategic focus for our team as we position MEC to achieve consistent above-market performance throughout the cycle and capitalize on multiyear reshoring and outsourcing mega trends among major OEMs. At a commercial level, our focus remains on expanding our integrated solution suite within both existing customer accounts together with targeted growth in higher value growing adjacent markets, including clean tech and energy transition.

Allow me to share some of the commercial milestones we achieved during the second quarter. During the second quarter, we continued to launch new products and expand our relationship, supplying battery thermal management products. This relationship will continue to expand as our customers grow their

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

electric vehicle battery systems. Leveraging the significant growth in the power sports market we had in 2022, particularly with the new customer, we expanded further with the new products, and we are building momentum through the second half of 2023 with significant launch activity.

Within the second quarter, we made progress on securing additional market share within our large agriculture and construction customer. These new parts were related to next-generation products and were one based on our strong engineering efforts during the product development process. Given the upcoming emissions regulation changes occurring over the coming years, many of our commercial vehicle customers are continuing to develop their next-generation products, including battery electric vehicle offerings. We are focused on expanding our market share during these product changes, and we continue to make progress in the quarter for vehicles that will begin production in 2024.

The other pillar of MBX is commercial excellence, where our focus is to implement strategic and value-based pricing models across our customer programs. Year-to-date, the teams have been working tirelessly to implement a programmatic pricing model. We have already seen some benefits from these efforts through the second quarter, but we expect to see pricing benefits ramp up further in the second half of the year. On the operational excellence front, we have continued our rigorous implementation approach centered around our quarterly presence Kaizens, supplemented by monthly operational and commercial excellence kaizens.

During the second quarter, we completed 36 kaizen with a focus on sustainability of cost-saving measures identified. Overall, our team is tracking to the savings and KPI target improvements that underpin our 2023 financial expectations. We look forward to providing a comprehensive update on these improvements, along with multiyear performance targets at our first ever Investor Day next month at our Hazel Park, Michigan facility. On the commercial expansion front, the second quarter was very eventful for us with the announcement of the MSA acquisition, our first since becoming a public company. As we announced on July 5, we successfully completed the acquisition on July 1, and the integration is well underway and on track to our expectations. Given the steady demand in our end markets, together with improved plant utilization and 6 months of contributions from the MSA acquisition, we anticipate 100 to 200 basis points of second half adjusted EBITDA margin expansion relative to the first half of the year.

From a capital allocation perspective, having completed the MSA acquisition, our primary focus will be on utilizing free cash flow to repay our debt. At this time, we intend to reduce net leverage to below 2x within the next 18 months. Given our current forecast, we anticipate strong free cash flow conversion in the second half of 2023 and going into the full year 2024. As evidenced in the second quarter, our free cash conversion exceeded 75% when excluding a onetime deferred compensation payout, and we expect strong conversion to recur in the second half of the year. While our capital spending year-to-date has been minimal, we expect our total CapEx for the year will be in the $15 million to $20 million range. Our capital investment strategy remains rooted in pursuing opportunistic investment in equipment that will yield attractive returns on capital. In summary, we delivered on several important strategic milestones during the second quarter, consistent with our MBX value creation priorities.

Looking to the second half of the year, demand conditions remain stable across our end markets, even as we maintain our price discipline. The MSA integration is on track, providing MEC customers with an expanded suite of capabilities and integrated solutions that will support our longer-term margin expansion targets we remain committed to. With the addition of MSA, we are focused on executing a seamless integration and look forward to the growth opportunities that we will be positioned to pursue going into next year. With that, I will now turn the call over to Todd to review our financial results.

Todd M. Butz
CFO, Secretary & Treasurer

Thank you, Jag. I'll begin my prepared remarks with an overview of our second quarter financial performance, followed by an update on our balance sheet and liquidity. Total sales for the second quarter increased 0.5% on a year-over-year basis to $139 million, driven by a combination of improved sales volumes and continued price discipline, partially offset by lower material price pass-through to customers. Excluding the impact of material price pass-through, our second quarter sales would have increased 6.5% on a year-over-year basis. Our manufacturing margin was $16.1 million in the second quarter

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

as compared to $18.3 million in the same prior year period. The decrease was driven by an increase in employee health insurance claims, unabsorbed fixed costs associated with project launches, a $500,000 impact from a onetime field replacement claim and a $700,000 decline in scrap income.

Our manufacturing margin rate was 11.6% for the second quarter of 2023 as compared to 13.2% for the prior year period, a decrease of approximately 160 basis points was due to the reasons just discussed. When excluding the impact of these items, our manufacturing margin would have been 14.6% or an increase of 140 basis points as compared to the prior year. Profit sharing bonus and deferred compensation expenses increased by $1.5 million to $2.7 million for the second quarter of 2023, primarily driven by lower deferred compensation expense during the prior year period related to fluctuations within the financial markets. Other selling, general and administrative expenses were $7.4 million for the second quarter of 2023 as compared to $6.4 million for the same prior year period. The increase is primarily attributable to the $900,000 of expenses related to the MSA acquisition, which was added back to adjusted EBITDA during the second quarter. As such, we continue to believe that SG&A expenses on a go-forward basis will be approximately 4.5% to 5.5% of sales.

Interest expense was $2 million for the second quarter of 2023 as compared to $765,000 in the prior year period due to higher interest rates and higher borrowings under our credit facility. Due to the increase in our borrowings at the end of the quarter associated with the MSA acquisition, we expect that our interest expense will be higher on an absolute basis going forward based on our current borrowing rates. Adjusted EBITDA decreased to $15.3 million versus $18.2 million for the same prior year period. Adjusted EBITDA margin percent declined by 210 basis points to 11% in the current quarter as compared to 13.1% for the same prior year period. The decrease in our adjusted EBITDA margin was due to a $1.8 million increase in employee health insurance costs and the $1.4 million impact of the ramp-up of HASL Park. Turning now to our statement of cash flows and balance sheet.

Cash flow provided by operating activities during the second quarter of 2023 was $0.2 million as compared to $16.1 million in the prior year period. The expected decrease in operating cash flow was entirely due to the $17.6 million deferred compensation payout made to our former Chief Executive Officer. Excluding the impact of this payout, our cash provided by operating activities would have been $17.8 million during the second quarter, an increase of 10.6% relative to the prior year period. Our resulting free cash flow conversion rate exceeded 75% and we are projecting to generate an additional $25 million to $35 million in free cash flow in the second half of the year. Capital expenditures for the second quarter of 2023 were $3.9 million as compared to $13.4 million during the second quarter of 2022. The decrease in capital expenditures is a result of the completion of the initial capital investment in the Hazel Park, Michigan facility, which was finished in the second half of 2022.

As of the end of the second quarter of 2023, our net debt, which includes bank debt, financing agreements, finance lease obligations and cash and cash equivalents were $89.7 million as compared to $79 million at the end of the second quarter of 2022. Cash and cash equivalents included in net debt was $90.1 million, which relates to the $90 million of funds held in escrow to fund the MSA acquisition which closed on July 1. Furthermore, as of June 30, our net leverage ratio was 1.6x. Additionally, as noted in our press release on June 29, we entered into an amended and restated credit agreement that provides for an additional $50 million of availability under our credit facility, while retaining an uncommitted accordion feature of $100 million.

The new credit agreement also allows for a maximum leverage ratio of 3.5x, up from 3.25x in our previous agreement. Furthermore, when accounting for the 4 quarter leverage holiday following an acquisition that takes our total maximum net leverage ratio to 4x for the next year. As we have stated, it is our intention to use free cash flow generation to reduce our net leverage ratio to between 1.5x and 2x over the next 18 months. Now turning to our 2023 guidance. Today, we are increasing our financial guidance for the full year 2023 due to the closing of the MSA acquisition. For the full year 2023, we expect the following: net sales of between $580 million and $610 million, adjusted EBITDA of between $66 million and $71 million and capital expenditures of between $15 million and $20 million.
Our increased financial guidance captures continued steady customer demand and improved plant utilization resulted in adjusted EBITDA margin expansion relative to the first half of the year. In addition to these dynamics in our legacy business, our increased guidance range includes the expected $30 million

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

to $35 million of incremental revenues and $4 million to $6 million of incremental adjusted EBITDA associated with the MSA acquisition. With that, operator, that concludes our prepared remarks. Please open the line for questions as we begin our question-and-answer session.

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Question and Answer

Operator

[Operator Instructions] Our first question comes from Mig Dobre with Baird.

Joseph Michael Grabowski
Robert W. Baird & Co. Incorporated, Research Division

It's Joe Grabowski on for Baird this morning. I had a number of questions around guidance. I just want to make sure that I understand it. Maybe starting with raw material price pass-throughs. It looks like you're expecting a continued drag in the second half but better than the first half, maybe a total of around $6 million in the second half. Just wanted to confirm that I'm calculating that correctly.

Todd M. Butz
CFO, Secretary & Treasurer

Yes, Joe, I think you're thinking of that in the right manner. Year-to-date, we've had about $17 million of material price pass-through relative to the first half of '22. That really declined in the second half. As we did see steel in the latter half of last year already start to come down. So that change from year-to-year will be less in the second quarter or second half of the year.

Stefan Neely

Just to add to that I just wanted to point out that from a headline perspective, right, even though we show only 0.5% sales improvement in Q2 without the material pass-through, as you just indicated, right, our revenues are actually up in Q2 6.5%, right? So I just want to drive home that point. Sometimes it's -- at that point can be missed in reading our results, given the material pass-through.

Joseph Michael Grabowski
Robert W. Baird & Co. Incorporated, Research Division

Right. No, definitely understood. And then on the EBITDA, adjusted EBITDA guidance, obviously, you're layering in MSA. But ex MSA, I guess, maybe you took down the midpoint of the range just a little bit. Again, I want to make sure I have that right and what caused the midpoint -- the core midpoint to go down a little bit.

Stefan Neely

I mean I wouldn't say that we took down the guidance, right, we'll probably tighten the range is how I would position that. It's simply for a couple of reasons, as I'm sure you have questions around our Construction Access segment, our construction access market continues to be soft, as we indicated in prepared remarks, and some of that volume is missed volume for the year, whereas even though we had similar supply chain disruptions with a couple of our CV customers in Q2, we expect that to be picked up in Q3 as the customers continue to make up those volumes, right? So given some of that, we just wanted to get ahead of that and then tie them to tighten the range a bit, and if our construction access market recovers in the second half, we could still come in towards the higher end of that range. But at this point, we're trying to be a little bit more conservative and trying to tighten our range for the year.

Todd M. Butz
CFO, Secretary & Treasurer

And Joe, on the EBITDA front. When you think of the base business, the legacy business without MSA, the addition of that, a lot of that -- those challenges have already occurred in the first half, and I do want to highlight that we have bought a 200 basis point margin improvement on the legacy business as we look into the second half of this year. So a lot of the things we've talked about with the project launches in as Park and a few other locations. Those are going to start moving into production, becoming utilizing those assets. MBX continues to gain ground. And as Jay said on the call, we have some pricing initiatives as well. So we feel really good about the margin expansion into the back half.

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Joseph Michael Grabowski
Robert W. Baird & Co. Incorporated, Research Division

Yes. No, I saw that. It looks like maybe assuming around a 12.5% EBITDA margin in the second half with the guidance midpoint, which is definitely an improvement from the first half. Just a couple of quick questions on MSA, and then I'll pass it along. I believe MSA revenue in 2022 was $86 million. You're going to own it for half a year, and you're guiding to 33 to 30 I'm sorry, you're guiding to $30 million to $35 million. So maybe just explain kind of the delta between the $86 million last year in the, again, half a year, $30 million to $35 million? Yes.

Stefan Neely

So when we began talking to MSA late last year, beginning of this year, right, we knew coming into 2023, data revenues were going to be approximately times 2, right, of the second half revenues we're projecting here. That's because of one segment that they were participating and that is the RV market. They had significant sales in 2022. We knew that RV market was going to be down. And in fact, they will probably realize almost 0 revenues in 2023 from that end market. So we knew that coming in, and our intent from the beginning was to use that capacity, extra capacity that's going to be available at MSA to drive further sales synergies with our commercial vehicle and our power sports and our ag customers, right? So that's why we're not concerned about where MSA revenues are in 2023. We expect to gain significant revenue synergies in 2024 and 2025 and beyond. We will provide additional details on those synergies at our Investor Day coming up in next month.

Joseph Michael Grabowski
Robert W. Baird & Co. Incorporated, Research Division

Got it, and last question, and I'll pass it on. You've owned MSA for a little over a month now. Any initial learnings? Anything that maybe you didn't expect when you told us about the deal back in June.

Stefan Neely

I can tell you today that since we announced the transaction and closed the transaction, I've been there more times than any other non-naval location within our network, right, given the solid minutes away from our headquarters. Every single time I leave MSA facilities, I am more excited about MSA and the future of MSA, and my enthusiasm continues to grow every time I talk to the employees, that came on board with MSA. My enthusiasm continues to grow as we continue. Our sales teams continue to talk to our existing customers in some of the markets I just mentioned. So the future for MSA within MEC is bright, and I couldn't be prouder of the MEC team and the MSA team that came together, worked really hard for over almost 9 months to make this a reality. So yes, the future for MSA is bright, and I'm really excited about it. As you can tell from my comments.

Operator

We now turn to Bystricky from Citigroup.

Vladimir Benjamin Bystricky
Citigroup Inc., Research Division

So can you talk about the conversations that you're having with customers about their restoring plants and whether you're actually seeing evidence of them moving forward with these plans and therefore, contributing to growth runway from MAX?

Jagadeesh A. Reddy
President, CEO & Director

Sure. I think glad if you remember, when I came on board about a year ago, we talked quite a bit about both reshoring and onshore. So I would sort of capture those trends in one bucket rather than a separate buckets, right? So many of our customers in power sports and other markets, particularly power sports, I'll take that as an example. They had components that they were producing in Asia, let's say, and many of them continue to bring some of those components back into the U.S. or North America, and we

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

continue to be a beneficiary of those reshoring projects. We talked even in the prepared remarks, we talked about a customer in power sports that we're winning more business with. All of those prove to us that, that reshoring trend is real, and Mac has been a beneficiary.

At the same time, many of the other applications that we supply components to are some large applications, think of military, think of agriculture or commercial vehicles. The components of size and weight and volume of these components are large, and they were never made overseas, right? So that portion of our business, right, continues to be strong, and we don't expect to benefit from the reshoring aspect of that. But where we are benefiting in those markets is from outsourcing, where customers, I can give you multiple examples of our customers where they are choosing between a make or buy of those components, and as we previously discussed, we have a CD customer where we are completely taking lower production of their field teams from one of their manufacturing locations. So we're investing in a significant production line with significant capital in our Atom facility, where in Q3, we're actually going to launch a brand-new fuel tank for one of our large CV customers.

That's a complete outsourcing. So they were repaper, their production line as soon as we're up and running and exit using that component internally, right? Why are they doing that? And I can give you multiple examples of that outsourcing efforts at our customers. Capital is tight, resources are tight. They would rather choose to deploy their engineers, technicians and production associates to next-generation products such as electric vehicles and so on. So that's another area where we're gaining significant share of wallet in our end markets to continue to take over business from our customers.

Vladimir Benjamin Bystricky
Citigroup Inc., Research Division

That's really helpful color, Jay. I appreciate it. And then maybe just one follow-up for me. On MBX. I seem very focused and excited around the commercial pricing initiatives you have underway. Can you talk about some of the specific changes that you're implementing in that commercial pricing initiatives? And how you expect those initiatives to structurally impact profitability going forward?

Jagadeesh A. Reddy
President, CEO & Director

Yes. Certainly, and, at our Investor Day, we'll be able to provide additional color in more detail. But today, what I can tell you is that in the past year, certainly in the past 6 to 9 months, we have done a significant number of PPI Kaizens, what I call a transactional process improvement Kaizen, if you're famer with that parlance, where we have looked at our pricing methodology, our pricing frameworks or pricing processes, we have continuously tried to improve how we not only capture value for our customers, but also how we capture value for MEC? Historically, it would have been a cost-plus type of pricing.

We're on a journey to a value selling pricing, right? So what that does is we're not there yet. It's a multiyear journey. I've done that with multiple companies in my past. So that value selling journey, our value pricing journey takes a while, but the beginning steps are disciplined, structured, programmatic approach to pricing, and that's probably where we are right now, and we've implemented many of those steps within MEC. We expect to see a good readout starting in the second half of this year. And part of it is preventing leakages, right? That means instead of passing on a top line, let's say, make up a number, 3%, right? But then are you really capturing the 3%, once your net capture rate of the 3%, you just passed onto a particular customer, right? So that's where we found significant opportunities for improvement.

We continue to flag hold. We continue to drive the net capture rate to be higher, right? And then the second step in that process is really around cost to serve, thinking of our cost to serve, right? So if there's a customer sand a customer why right, what should be our margin expectations, right? So we started layering in things like their AR terms, right? They're payment terms, their complexity of their components, the value addition that we need with these customers, all of these have been now programmatically put in place so that going forward, right, we're much more educated about the value addition we're providing to our customers and how do we capture in turn, value back to MAC, right? So I think I'm really excited about what this body of work can do for MAC long term. As I said, certainly, right, the first basic steps and

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

the foundation has been laid in the first half. We expect to see readouts starting in the second half, and we expect to continue on the journey of value pricing going forward.

Operator

Our next question comes from Edward Jackson with Northland Securities.

Edward Randolph Jackson
Northland Capital Markets, Research Division

So most of my key questions have been asked, but I have just a couple of more market-oriented ones. One would be on the construction and access side. So you yourself commented that you might be hitting -- we might be hitting the trough in residential, and for lack of a better term, I think Caterpillar more or less said the same thing, that they felt that the residential market, at least in North America, was stabilizing. Is that reflected in your view with regards to second half? Or we indeed see the residential construction market stabilize and kind of firm up, would that cause a revisit or a change in kind of how you view your markets? That would be my first question.

Jagadeesh A. Reddy
President, CEO & Director

Yes, that's right, Ed. I think we are -- as -- it's on Slide 5 right in our deck, even though the market continues to signal softness, we do think that it is hitting a trough, and we are reasonably optimistic that the second half will be a stable market for us. As you know, we have both construction equipment and access equipment in our end market. If I think it's approximately a 60-40 split, 60% construction and 40% access is how I would describe our split, and access market, I talked about our end customer continuing to see supply chain disruptions in their prepared remarks this week. They said they were probably at about a 75% supplier rate, however, they describe that.

So what it meant in Q2 for us was we were planning on hitting a higher rate with them. But then as they could not keep up with their supply chain, they took their volumes down, right? That impacted us even though they may be bullish on their end markets and their backlog, we haven't seen that uptick in their take-up rate, right, through us, right? So that's sort of -- that's why we're being cautious on access, and construction, you're absolutely right. There are some green shoots in homebuilding as we're seeing tighten the supply of existing homes and the builders continue to plan new permits, et cetera. So perhaps the second half might be the period where we could see some residential construction pickup absolutely will help us, and similarly, we are -- like everybody, we're continuing to see potential benefits of -- or rather, we're waiting to see potential benefits of nonresidential construction and infrastructure build spending at the market, right? So there's a little bit of that optimism for us in the second half. But otherwise, right, generally speaking, we're watching the trends in that market.

Edward Randolph Jackson
Northland Capital Markets, Research Division

And then my next question, and then I have one more after this is just on the military market. You had substantial growth there. You discussed that some of it was done by new programs, some of it by build rate increases. You expect volume growth to moderate in the second half. But when you kind of strip down and get in there, what's the -- what's more important in terms of driving that growth? Is it the new programs? Or is it the rate increases? And then on the build rate increases, I mean, would you view the underpinning of that to be the war in Ukraine and the need to replenish military equipment and supplies because of shipment of those products? Are those vehicles, if you would, into the Ukraine conflict.

Jagadeesh A. Reddy
President, CEO & Director

Yes. So the 2 major programs were on our AM General's Hungry program and Oshkosh's JLTV program, right? Those are the 2 main ones we're primarily on how we have been -- we have seen a significant increase in human production rates given the war in Ukraine and as you said, right, depletion of some of the U.S. inventory but also a lot of drawdown to support Ukraine war. So that -- we're hopeful that

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

they'll continue to impact positively our second half, and JLTVs will have to watch and see. We have limited exposure to JLTVs through Oshkosh. But with AM General Winning Debt program, right, we expect to be an active supplier to, in general, in -- on the JLTV program going forward. So that could be a 2020, 2025 impact probably, and at least we're moderating our growth rates in the second half just to be a little bit more prudent and cautious, not really knowing what the drawdowns could do to additional production of these motor vehicles.

Edward Randolph Jackson
Northland Capital Markets, Research Division

Great. That was nice color. My last question is just on the MSA acquisition and the capacity, as I recall, during the call when you did the announcement, you said that there was about 30% capacity that was being unutilized at that point, and my question is pretty simple, is looking forward, how long do you think it will take for you to fill that capacity?

Jagadeesh A. Reddy
President, CEO & Director

It's a great question. We are actively working to fill that capacity, as you can imagine, Ed. One of the reasons why we were so attracted to MSA is because as a small company, MSA could not get on supplier list at any of our CD customers, any of our power sports customers, et cetera, right? The moment we announced our transaction, the moment we closed our transactions we have begun conversations with many of our major brand name OEMs that we're currently on the books with. So we're in the process of certifying MSA. There's a one simple certification called IATF. That takes a couple of months to get that done.

We're in the middle of that certification with MSA, and some of our customers already are working with us directly to get MSA on the list of suppliers to be able to supply aluminum extrusion fabrications to their end markets. So that process is very active as we speak here, and that might take a few months a couple to a few months, hopefully, by end of this year, will be on some of our customer list. That means as new business gets generated, MSA will be a recipient of those bid packages that core packages, and we'll continue to ramp up bidding for new business at many of our current MEC customers. So I expect 2024 to start seeing some wins and take advantage of existing capacity at MSA.

Edward Randolph Jackson
Northland Capital Markets, Research Division

Great. So I just want to finish with the comment, just say it was very impressive, the cash flow generation that you all put off this quarter, it kind of shows what the future holds. -- for MEC, and I'd look at the capacity that you can fill with A and then Hazelton -- it's super exciting to see where this business is going to go into '24 and '25.

Jagadeesh A. Reddy
President, CEO & Director

Thank you for the recognition, Pat. Really appreciate that. We are -- we're happy to answer any questions on cash flows, but we're very excited about cash flow generation, not only in the second half, but as you said, going forward, everyone can see our moderating of our CapEx plans for not only 2023, but hopefully, it's in line with that sort of range going forward and given our potential to continue to drive additional cash flow generation and MBX initiatives driving working capital reductions, driving down our inventories, better payment terms. We're negotiating with our customers. to get our receivables in order.

All of these activities are going to drive continued increased cash flow generation at MEC. That is the story that we are really proud of and how hard the teams have been working on to generate those cash flows, and I am really excited about what that can do to our debt levels, what that can do to reducing our leverage back down to under 2 within the next 12 to 18 months. So that's where we're focused on. And again, I appreciate you recognizing the potential and upside at MAX.

Operator

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Our final question today comes from Tim Moore with EF Hutton.

Timothy M. Moore
EF Hutton, Research Division

Most of my questions are already answered, but I have 3 remaining to ask. Jag, I know you're -- I don't want to steal your thunder or for your September Investor Day. That's clearly going to provide more details on the MBX initiatives. But just so I understand, for now, you expect a 40 to 70 basis point margin boost from MBX this year. I'm just trying to think about next year. I know it's maybe too early to answer this, but could it be a similar amount of a margin boost next year? And would that include -- or exclude the incremental margin boost you're going to get from Hazel Park reaching its full utilization by the end of next year?

Jagadeesh A. Reddy
President, CEO & Director

Thank you for the question, Tim, and obviously, we're not in a position to provide any guidance for next year. Having said that, I think that complicated spec sheet math you were trying to do, we're not there yet. But I think -- but the line of thinking is right. I think we do expect a tailwind from our ramp up in 2024. We do expect a tailwind from our Hazel Park ramp up next year. And I think that sort of framework wise, for sure, right? It's a good way to think about it, and on Hazel Park, no one has asked a question or maybe you will, but I'll answer this prematurely, and that is, we talked about the $100 million of ramp-up of revenues in Hazel Park exiting 2024, right? But the question I think people might have is, hey, how are you making progress on that front? How is that working out? Well, I can tell you, we're on track to get close to 20 -- we said 20 to 25, right, in that range of revenues out of Hazel Park this year.

We're on track for that. But what that doesn't tell the story is that, let's call it, approximately $20 million of revenues coming out of Hazel Park this year, that equates to $75 million of revenue at a toll ramp, right? So the parts we're qualified, they'll generate $20 million revenue, let me repeat, equates to $75 million of revenues on an ongoing basis at a full rent. So the $100 million of revenues for Hazel Park point million of revenues have been sold, right, on the books today, right? So that's what we're starting up, right? So all the effort and the emphasis on Hazel Park is the right emphasis for the company because $75 million of that $100 million is sold, and we're starting that up as we speak, right? So I just want to make the point, since no one has asked me that question so far.

Timothy M. Moore
EF Hutton, Research Division

Jag, I think you kind of beat me to maybe some of my next question with that. I'm wondering just maybe how the onboarding of the battery thermal management customer has gone? I know it was delayed intentionally for the March quarter into the June quarter, and that was for quality assurance reasons. Is that going now? And will most of that be in Hazel Park?

Jagadeesh A. Reddy
President, CEO & Director

Right now, right? Most of that will be in Hazel Park, Tim, good memory from your point view. And similar to my comment on IATF certification for MSA. We're in the process of getting the same IoT of certification in Hazel Park, and that's been the sort of the hurdle, if you will, to get that customer online. We're in the final phases of getting the customer online on his part. We expect Q3 to be the quarter when we'll start production for that battery electric vehicle component customer.

Timothy M. Moore
EF Hutton, Research Division

Great. That's very helpful. I'm quite familiar with what they're doing on their end, and then just lastly, I think you kind of alluded to this in some of your opening remarks. I mean, what is the update on supply chain shortages for your customers? I mean, has that -- has that narrowed over the past couple of months? I'm just wondering, is it same as it was in the March quarter? Or is it better?

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Jagadeesh A. Reddy
President, CEO & Director

Yes, it's a good question, right? As I alluded to in my earlier remarks, there are 2 end markets where we experienced some supply chain disruptions from our customers, right? So one is CV. In the commercial vehicle market, 2 large customers we work with, both had a decent amount of disruptions. So one of them had approximately 5 days of line down days during the quarter. What that meant was they shut down their lines so that they can the Russell suppliers can just catch up with all the products that they need to get to the assembly line, right? So -- and we -- and they're back in Q3, and we expect that volume to be captured in Q3.

It's not lost volume, it's just delayed volume from Q2. The second TV customer has similar frame rail issues coming out of one of their suppliers out of Mexico. So they were down and with reduced run rates in Q2, and in fact, they're working in Q3 weekends and we're supporting them with weakened production, Saturday production so that they can catch up in Q3, right? So those 2 customers, I'm not concerned about, right? It was just a delayed revenues from one quarter to another quarter. we'll catch up on that, and with all the headlines on CV market, right, the order book seems to be strong, and that's -- it's okay for us. On Axis, in particular, right, as I discussed, I'm still cautious on our view of whether our customers can actually catch up in the loss volume in Q3 -- sorry, Q2 is potentially lost volume for the year, and as I said, that's one of the reasons for us to tighten our ranges for the year.

Operator

This concludes our Q&A. I'll now hand back to Jag Reddy, President and CEO, for closing remarks.

Jagadeesh A. Reddy
President, CEO & Director

Well, once again, thank you for joining our call. As we announced on July 20, we intend to host an Investor Day on September 14 at our Hazel Park facility in Metro Detroit area. But this event, we look forward to providing a more comprehensive update on our strategy and our expectations for the coming years. Should you have any questions or be interested in attending the event, please contact Noel Ryan or Stefan Neely at Vale, our Investor Relations Council. This concludes our call today. You may now disconnect.

Operator
Ladies and gentlemen, today's call has now concluded. We'd like to thank you for your participation. You may now disconnect your lines.

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.

Copyright © 2023 by S&P Global Market Intelligence, a division of S&P Global Inc. All rights reserved.

These materials have been prepared solely for information purposes based upon information generally available to the public and from sources believed to be reliable. No content (including index data, ratings, credit-related analyses and data, research, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Global Market Intelligence or its affiliates (collectively, S&P Global). The Content shall not be used for any unlawful or unauthorized purposes. S&P Global and any third-party providers, (collectively S&P Global Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Global Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON "AS IS" BASIS. S&P GLOBAL PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Global Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages. S&P Global Market Intelligence's opinions, quotes and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P Global Market Intelligence may provide index data. Direct investment in an index is not possible. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Global Market Intelligence assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P Global Market Intelligence does not act as a fiduciary or an investment advisor except where registered as such. S&P Global keeps certain activities of its divisions separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain divisions of S&P Global may have information that is not available to other S&P Global divisions. S&P Global has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P Global may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P Global reserves the right to disseminate its opinions and analyses. S&P Global's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Global publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.
© 2023 S&P Global Market Intelligence.

Copyright © 2023 S&P Global Market Intelligence, a division of S&P Global Inc. All Rights reserved.