



Company: MTS Systems
Conference Title: MTS Third Quarter 2018 Earnings Call
Conference ID: 6870592
Moderator: Laura Fox-Anderson
Date: August 7, 2018

Operator: Good day and welcome to the MTS Third Quarter 2018 Earnings Conference Call.

Today's conference is being recorded. At this time, I would like to turn the conference over to Mr. (Brian Ross), MTS Senior Vice President Chief Financial Officer. Sir, please go ahead.

(Brian Ross): Thank you, (Chelsea). Good morning and welcome to MTS Systems Fiscal 2018 Third Quarter Investor teleconference. Joining me on the call today (Jeff Graves), President and Chief Executive Officer.

I want to remind you that statements made today, which are not historical facts, should be considered forward-looking statements as defined by the Private Securities Litigation Reform Act of 1995. Future results may differ materially from these statements, depending upon risks, some of which are beyond management's control. A list of such risks can be found in the company's latest SEC Forms 10Q and 10K. The company disclaims any obligation to revise forward-looking statements made today based on future events.

The presentation will also include reference to financial measures which are not calculated in accordance with generally-accepted accounting principles or GAP. These measures are used by management to evaluate the operating performance of the company over time. They should not be considered in isolation or as a substantial for gap measures. A reconciliation of our non-gap measures to the nearest gap measures can be found in the company's earnings release.



I will now turn the call over to (Jeff), so that he can provide an update our 3rd quarter business performance.

(Jeff Graves): Thank you (Brian) and good morning everyone. We appreciate you joining us for our call today. Overall, our 3rd quarter performance was similar to our 2nd quarter, as our Sensor's business performed very well, while our test business had mixed results. I'll start with the three main takeaways from our 3rd quarter.

First, our Sensor's business now has reported five consecutive quarters of double-digit growth. Strong economies in most of our global markets continued to translate into robust demand and our Sensor's team executed well to maintain our positive momentum. In addition, Sensor's delivered a book for bill ratio of 1 to 1 and exited the quarter with a near record backlog of \$51 million. With the forecast for our core Sensor markets remaining positive and the anticipated addition of significant orders from the U.S. Department of Defense, we continue to believe that our Sensors business will finish fiscal year 2018 double-digit revenue growth, continued operating margin expansion, and a strong backlog that will sustain this momentum in fiscal 2019.

Second, orders in the growth vehicle sector of our test business were up significantly in the quarter. As all regions reported an increase, particularly Korea, China, and Europe. We were very pleased to see the positive order trends in the quarter. However, we will remain cautious and until confirmed more definitively, we'll continue to anticipate volatility in the ground vehicle's market over the near term. In simple terms, this volatility is a reflection of the automotive OEMs need to prioritize their R&D spend in the areas of safety for automated driver assist and fully autonomous vehicles and cost for electric vehicles. We believe these trends will reverse at some point in the near future, as these new technology issues are being addressed aggressively and that there will be noticeable recovery and durability testing of these new car types. The strength of our 12-month opportunity pipeline is consistent with this view.



Third, the other major areas of our test business, including materials tests, test services, and structure test all continue to perform well and to our expectation. So, in short from a full company standpoint, our sensors performance remains very strong and three of our four major in-markets and test are performing consistently well. Our consolidated results are being impacted solely by our ground vehicles test business. Looking forwards, our near-term expectations for the test ground vehicles market continues to reflect strong overall demand, but with a continuing risk of variability and timing on order placement.

Importantly, each of these new vehicle types will rely on different and most often, very new technologies, which we expect in turn to require new and unique testing solutions to ensure safe operation, durability, and operating performance. As the testing requirements for these new vehicles become more evident, we are very well positioned with our leading technology and global sales and service presence in all key markets around the world to capitalize on this resurging demand.

In a moment, (Brian) will provide a detailed review of our financial performance for the quarter. But before I hand off to him, let me allow you, let me give some color on our orders performance by in-market for each of our business units and I'll begin with test. We look at test in our three equipment sectors that we serve, ground vehicles, structures, and materials as well as test services.

As I mentioned earlier, test, vehicles test orders increased sharply in the 3rd quarter, being up 56% year over year and 89% on a sequentially quarterly basis from Q2. We were encouraged that the demand for durability testing equipment, upgrades in laboratory testing, and components were key drivers of this growth. These products are part of the core technology and product offerings in our vehicles test business and comprise a significant portion of our total test



opportunities pipeline. The opportunity pipeline for this space business within test increased at strong, single digit rates in the 3rd quarter and provided another meaningful indicator the customer demand remained solid. This will inevitably lead to exciting growth opportunities for our vehicle test business.

Our outlook for the structures test business remains unchanged, as we expect order levels to be relatively flat in fiscal '18 compared to fiscal '17 and that demand will then start to expand going forward. The key growth area for us centers in seismic testing systems that are used in a design of variety of civil structures, including bridges, buildings, and power plants. In addition, infrastructure investment is expected to increase due to both economic growth in key Asian countries and the enhanced government focus on addressing the aging structures in the U.S. In response to the expected growth in the structures market, we recently launched a new generation of high performance actuator systems with longer service lives and have introduced new aerospace and seismic test software that enables greater testing efficiency for our systems and products.

The materials test business reported double-digit orders growth in the 3rd quarter, due to the increased demand for testing applications across multiple markets. Of note, we had strong order activity from customers in Asia and the Americas for projects, which included rock mechanic test systems, a core expertise for our company. Rock mechanic systems are essential in oil and gas exploration enabling a detailed understanding of rock fracture characteristics, which are central to fracking.

Another driver of growth for materials test is the proliferation in the number of applications for advanced materials, such as carbon fiber composites, and very high temperature light-weight structure materials. The rapidly expanding use of additive manufacturing is also a key driver of materials test systems, as these novel components often have unique material properties that



must be characterized as they're introduced into the market. Test services continued its growth momentum with orders in the quarter 7% year over year. This continued performance puts us confidently on track to exceed \$100 million in service orders for the full year. A nice milestone for our test business. Customer reception to our service initiative remains very positive and with our installed base of equipment now approaching \$5 billion, we expect this reoccurring revenue stream to continue its growth.

I'll now move to our sensors business, which as I mentioned earlier, is performing very well and in an exciting market. We discussed our sensors business in four market sectors. Test, which are sensors used in the testing of new products and in our expanding range of U.S. Military applications. Industrial, which are sensors used for industrial automation. System, which are turn key systems for measuring noise or for calibration. And position, which are sensors used for highly precise position measurement in industrial equipment and mobile hydraulic applications.

Beginning with our position sensors sector, Q3 saw excellent revenue growth of 16% versus the same quarter in the prior year, with Europe posting especially strong results. Demand in this sector remains strong across multiple industrial and OEM markets. Mobile hydraulic growth is solid driven by the ongoing strength of demand from OEMs in the construction, agriculture, and mining industries, reflecting designed wins earned over the last few years. While subject to some seasonal effects that we often see in our 4th quarter, we expect the growth drivers in this sector to remain in act, as the global industrial economies continue to expand.

Next is our test sectors for sensors, where revenue in the 3rd quarter increased at strong double-digit rates primarily due to large orders received from China for test and measurement systems and our fulfillment of a large order for a new U.S. Department of Defense platform program. The strength in China reflects the increasing emphasis the Chinese automotive and aerospace OEMs have on the development of new products for the domestic Chinese marketplace. These



products include electric vehicles that are critically needed for reduce air emissions, which have reached alarming levels in some of the largest Chinese cities, as well as new commercial aircraft systems being devoted for air transportation for the Chinese public. The demand fo new aircraft in China is expected to grow rapidly in the years ahead and the Chinese Government's focused on developing a domestic source for these aircrafts. Given these trends, which are being repeated across our end markets, we're excited about the test sector of our sensor business. We believe this growth is still in its early stages and that it will further benefit from the long-term sales synergies with our ground vehicles and aerospace testing equipment business.

In addition to the growth we're experiencing due to the increased testing of new products, the test sector of our sensor business also comprises our rapidly expanding opportunities with the U.S. Military. Having completed a key initial production contract successfully in Q3, we are anticipating significant new awards from the U.S. Military in the near future and that these opportunities will expand in the years ahead. We've estimated revenues from these new awards to approach \$300 million over the next decade.

The industrial sector for sensors reported a nice increase in revenue as well, despite continuing pressures in the industrial gas turbine market. We expect these headwinds to continue for the foreseeable future. However, they will be more than offset by the increasing demand we see in the renewable energy market, for industrial machinery, factory automation which will drive continued overall growth in this exciting market sector.

And lastly, the systems sector had another strong quarter of double-digit revenue growth as well. This business remains on track to deliver a double-digit increase in revenue for the full year. Contributing to this growth is an increase in global demand across several markets for systems design to measure and monitor noise levels. This includes aerospace and defense, energy, and electric vehicle applications. Incremental growth is coming from new products that were



developed and monitored both airplane and environmental noise levels. The successful introduction of the new products and continued demand for calibration systems is contributing to the revenue growth of this business.

Now, I'd like to turn the call over to (Brian) to further discuss our financial results and our outlook.

(Brian Ross): Thank you (Jeff). I'd like to expand on a few of the items (Jeff) addressed.

First, as you heard from (Jeff), our sensors business is performing very well. We are growing the topline in double-digit fashion as planned, managing the cost structure, and driving strong profitability. This performance has been a primary reason for our ability to continue to reduce our outstanding debit. Second, the non-vehicles areas of our test business are performing well. This includes structures and materials test and test services. We are pleased with the 8% revenue growth in these areas of test as we continue to execute on the strategy we laid out at the beginning of the fiscal year.

Lastly, our ground vehicles test business remains under pressure as the world's largest auto manufacturers continue to navigate a very dynamic and volatile environment. We continue to see pressure on the topline as the timing of R&D investments by our customers have been moving targets, especially for those auto industry growth areas, such as autonomous and electric vehicles. We believe we will see this pressure for at least the next few quarters but is it quite possible it could be longer, and we are monitoring it very closely. In the longer term, we continue to believe that durability testing for new products, which is our core expertise historically, will be essential to all of the new vehicle types that are in the development pipeline. Therefore, from our standpoint, it's a matter of when, not if, we will see a sustained rebound in orders for our vehicle test area.



There are several metrics that help us feel good about our test business. First, test orders increased 33% in the sequential quarter comparison and 17% compared to the same period a year ago. This increase in orders was weighted favorably by our ground vehicle sector growth and also particularly attributable to the timing of order placement. Second, backlog was up 9% sequentially from the 2nd quarter and 15% year over year. We had a good quarter growing our test backlog, which currently stands at \$326 million, the highest backlog level since the end of fiscal year 2016. As much as we would like to see these orders transition to revenue more quickly, the fact is, we are positioning the company for growth once we get through this volatile period in the auto industry.

Third, we experienced a 5% increase in revenue on a sequential basis and expect growth of 5 to 7% sequentially in the 4th quarter. While the timing has been delayed from our estimates earlier in the year, the trend is positive and with backlog growing, we remain positive about the future. One more point I'd like to add, although we are positioned well for the long term, for the past few quarters we have carried excess capacity in our test business cost structure. That was intended to be servicing a heightened level of activity in our ground vehicles test business. This includes high-caliber engineers to be used for the development and execution of new test equipment that our customers continue to tell us they need. But for which a historical high percentage of which have been delayed into the future. This is clearly pressured our profitability in the past few quarters, as we have experienced delays in order placement by our customers, which at its peak, was over 80% of total orders in our 12-month opportunity pipeline.

At this point, we want our shareholders and investors to be clear that we are willing to reduce these costs if the market environment continues to be volatile. However, as I hope you appreciate, these resources are available and scarce, particularly in the current low unemployment environment, and are needed to fulfill our growing backlog provided this growth



continues. So, it is a delicate balance that we are evaluating regularly. I will now discuss our 3rd quarter fiscal 2018 results and focus primarily on a year over year, quarterly comparison.

Total revenue of \$195 million was 50 basis points higher than the same quarter results in fiscal 2017, as a 13.8% increase in sensors was almost fully offset by the test decline of 6.7%. Sensors performed outstanding again during the 3rd quarter, as broad global economic growth, coupled with good business execution, delivered a solid, double-digit increase in revenue. Despite our revenue pressures and tests, our gross margin had a slight increase in the consolidated gross margin percentage.

Our test segment remained in the low 30% and our sensor segment was right around 50% gross margin. Both segments were in line with our expectations and reflect the demand for our high-end product and services. We continue to closely manage gross margin well with our primary goal of driving increased gross profit dollars. Consolidated operating expenses remained relatively flat at \$60 million when we compare it to the prior year and is an important factor we manage within the business to ensure profitability levels are moving in the right direction. We expect to remain at or below this level for the 4th quarter. Two items have positively impacted the net interest expense which declined by \$1.5 million compared to the prior year same quarter.

One, we are realizing savings after we repriced our debt in July of 2017 and two, we have continued to reduce our debt balance over the last 12 months. The effective tax rate for the 3rd quarter was 10.6% compared to a benefit rate of 32.9% for the prior year same quarter. The prior year rate included additional U.S. benefits associated with domestic manufacturing, deductible acquisition-related expenses, and U.S. R&D tax credits. Excluding these discrete tax benefits, the effective tax rate for the prior year would have been 2.2%. Comparing the 2.2% from last year's quarter to the 10.6% this quarter, the change is primarily due to higher earnings before



taxes and are a mix of geographic earnings, partially offset by the lower U.S. corporate tax rate under the tax act. We anticipate a tax rate of approximately 15 to 18% for full fiscal year 2018.

On a gap basis, earnings per share of 47 cents was lower than prior year gap results of 55 cents per share. This was due primarily to the increase in the effective tax what I just described. Third quarter adjusted EPS was 49 cents per share, a decrease of 7 cents per share, compared to prior year adjusted EPS of 56 cents. The two-cent per share difference between gap EPS and non-gap EPS was related to restructuring charges. Adjusted EBITDA grew to \$27.8 million in the 3rd quarter, which is a 3.9% to the prior year same quarter and flat compared sequentially to the 2nd quarter of fiscal year 2018.

Next, I would like to give you an update on the restructuring taking place in China. As we announced last quarter, we are in process of transferring our production from an MTS-owned facility to a contract manufacturing partner. We believe this move will save to \$5 to \$10 million annually starting in the 2nd half of fiscal 2019. In the 3rd quarter of fiscal 2018, we recognized approximately \$739 thousand of restructuring costs, mostly in the form of severance. In addition, of the two buildings we own, we have made good progress in the sale of one of them and expect this sale to be completed by the end of September 2018. The gain on the sale of this building is expected to be approximately \$3 million and is included in our adjusted EBITDA guidance. Overall, the restructuring has gone smoothly to date.

Another topic I'd like to address is the proposed tariff increases on goods imported from China. Specifically, with regard to our production in China, we have not historically imported these products into the U.S. and would expect minimal impact from U.S. import tariffs. We believe our exposure is small and is related mostly to steel and aluminum used in the U.S. manufacture of test equipment. We believe we have several viable options on how to manage increased tariffs if they ultimately are enacted and we continue to manage this closely.



I have just a few specific items to note on working capital and our balance sheet. We have proven our financial viability of a debt holder since the inception of our Term Loan B two years ago by consistently operating conformably below our covenant thresholds. In addition, we reduced our debt for seven consecutive quarters and notably, have made total debt payments above the minimum requirements of the last three consecutive quarters. In total, we have paid down an incremental \$83 million of debt in the past 7 quarters, including \$59 million in excess payments. In the 3rd quarter alone, we decreased our debt by roughly \$20 million. We expect to continue to use excess cash to pay to our dividend and to further reduce our debt balances for the foreseeable future. This along with our consistent working capital rate to revenue of approximately 25% provide us with a confidence in our ability to manage the balance sheet in our business.

The final topic I would like to discuss is the update to our fiscal year 2018 guidance. We now expect full year, fiscal year 2018 revenue, to be in the range of \$775 million to \$785 million. Our adjusted EBITDA in the range of \$112 million to \$118 million. And diluted earnings per share in the range of \$3.25 to \$3.35 per share. The reduction in our expected ranges for the fiscal year are solely attributable to the challenge of the ground vehicle sector of our test business as we navigate the volatile time in this market. Before I pass it back to (Jeff), I would like to reiterate that our company continues to perform well, especially given the dynamic ground vehicles environment. We are positioned well for the long term, we will manage appropriately through these short-term headwinds, and are committed to managing our business to provide long-term value to our shareholders.

I will now turn the call back over to (Jeff).



(Jeff Graves): Thanks (Brian). Before moving to Q&A, I'd like to reinforce the key takeaways I mentioned at the beginning.

Our sensor business has actual momentum and strong financial performance. Our sensor business is executing well to our business plan and delivering leading technology with an intense focus on total customer satisfaction. Double-digit growth in the current fiscal year coupled with increasing operating margins is exactly how we foresee our performance in the future. We expect to finish fiscal year 2018 strong from both a topline growth and probability perspective, delivering record performance for our sensors business. This momentum will lead us into fiscal 2019 with high expectations.

With regard to the test business, we laid out a plan at the beginning of the year as it showed it needed improvement in the business with growth in the 2nd half of the year exceeding that in the 1st half. The execution of this plan has been overshadowed by significant timing delays in the largest market we serve, that of ground vehicles. As I mentioned earlier, we expect this dynamic to continue in the short term, with timing for durability testing in the automotive market remaining volatile quarter by quarter. We continue to execute well with growth in our other test sectors and expect this trend to continue.

As we remain focused on serving all of our test markets, we'll also be taking actions to ensure our profitability is sustained. We're evaluating our cost structure in light of the potential for continuing volatility in the vehicle test market to ensure we're positioned well to service our customers while delivering increased value for our shareholders. This balance requires particular care, as our order rates now show the first signs of significant improvement, and our backlog strengthens. But with continuing risk to order volatility quarter by quarter. We're mindful of this as we manage an engineering knowledge base that is a true competitive advantage for our company and heavily valued by our customers.



With that, (Chelsea), (Brian), and I are happy to open it up for questions.

Operator: Yes, sir. Thank you. If you would like to ask a question, please signal by pressing Star 1 on your telephone keypad. If you are using a speakerphone, please make sure that your mute function is turned off to allow your signal to reach our equipment. Again, please press Star 1 to ask a question.

And our first question will come from John Franzreb with Sidoti and Company.

(Jeff Graves): Morning (John).

John Franzreb: Morning (Jeff). Morning guys, how are you doing?

(Jeff Graves): Morning.

John Franzreb: Actually, I just want to start with one of the last things you said, (Brian), about the guidance. Does PS guidance include facility sale and if so, how much is in there?

(Brian Ross): Yes, it does. So, approximately \$3 million is what we expect to incur as a gain on the sale and there's a simple U.S. tax effected piece to it.

John Franzreb: Okay. Got that. And regarding the custom jobs, you kind of put, you know, decided that, you know, the impact of hiring, jobs, and the backlog of maybe weighing down the gross margin. Could you just give us a sense of what the gross margin profile custom jobs are today versus a year ago? Is there any meaningful difference there?



(Jeff Graves): Yes. So, as far as the custom backlog and what we're seeing flow through on revenue, we do see a slight decrease in the gross margin compared to maybe two or three years ago. A lot of that due to the size of some of those custom projects. In addition to that, the large amount of materials that go into it with don't always have as much as a markup. So, there is a slight decrement to what we've seen maybe two or three years ago.

John Franzreb: Now, you now, correct if I'm wrong, but didn't you put in place a check and balance a couple years ago to make sure that that wasn't the case? So, that, you know, the margin profile and the jobs that were written were, you know, at adequate profitability?

(Jeff Graves): Yes. (John), I would tell you, we did. In mid '16 and this, you know, when our automotive customers particularly started coming in and requesting, you know, tremendous amounts of custom content to the point of being first of a kind equipment. We started really metering out very carefully how many of these jobs we took and how we priced them. So, all in all, I would tell you if you will, the risk profile, in our backlog on the custom content is down substantially. And those projects, in terms of the timing of delivering those, the last of those are being solved right now. So, that tells how long our cycle time is.

So, jobs that we would have taken prior to mid '16, a couple of those really difficult first of a kind jobs, are moving behind us now. So, that's a good thing and the number of first of a kind projects are dropping. So, if you will, you know, kind of unexpected job cost adjustments in these fixed price contracts have fallen fairly dramatically and will continue to do so. So, what (Brian's) referring to is kind of the typical custom job that we get in backlog. There has been some, it's been relatively steady, but some downward pressure on that, just to material content and things of that nature.



But by and large, if you look at the total makeup of the custom content and backlog, those first of a kind projects have fallen off fairly dramatically by our own choice. We just have to meter that stuff out very carefully.

John Franzreb: You know, I guess, you know, considering what the auto bookings like, is there any sense that maybe, you know, just for an absorption, you know, rate, you may want to take on some of those jobs you've been turning away in the past?

(Jeff Graves): Yes. We look at two things, John. One is the absorption, you know, just the financial impact of the volume coming through and the second, is the IP generation. In some cases, we'll take a low-margin job because the IP content is extremely high, and we see it as a growth market. But I would tell you, we spend a lot more time upfront now than we did, and really, that's been true over the last year, than we did in mid '16 because we had so many coming in at that point. It was, and it was all lovely work and novel machines, I mean, truly incredible engineering machines but there was just too much of it.

So, so we've metered that down now, we've picked very carefully some for volume reasons and some for the IP generation itself. And as we sit here today, I believe our, we should start seeing some tailwinds from our backlog mix in terms of overall gross margin now. You know, part of that is a first of a kind effect on custom and part of it just more, you know, componentry. You know, some of our high-end signal componentry and other items that are in backlog, standard products, that are in backlog.

John Franzreb: Okay. Great. (Jeff), thanks. I'll get back into queue. Thanks for taking my questions.

(Jeff Graves): Thanks John. Good questions.



Operator: All right. Again, to ask a question, please press Star 1. And our next question will come from Rich Kawas with Wells Fargo.

(Ron Yeps): Good morning. This is (Ron Yeps) calling for Rich.

(Jeff Graves): Morning (Ron).

(Ron Yeps): Morning. And I just was curious with the push for real-world emission testing in Europe, is that having an impact on the test business?

(Jeff Graves): Yes. I would tell you some of the, now, we're not traditionally in the actual emissions testing, there are other companies that specialize in that. But some of the, you know, creating the test environment for the car, if you will, or truck of any other environment, a lot of times, there are, you know, what we would call, "rolling belt systems". These, you can think of them as kind of stainless treadmills, if you will, to go onto the tires of the car and they have to vibrate a car, things like that, that effect the emissions performance because it effects the power train. Some of those systems we participate in, so there has been some lift. We're not directly in that business so it hasn't been as dramatic for us but certainly, it does help.

And the overall thrust, (Ron), I would tell you for quality checks of what the companies are signing up for, including the penalties that have metered out for not doing those tests properly have been very high. So, there's an overall heightened sensitivity in our customer base about doing good, very good quality checks, when you're developing a new car. And our end of that world tends to be durability, so how long will the car last on the road, and aerodynamic performance. And unfortunately, those attributes have kind of taken a back seat to some of the safety-related issues in autonomy today. But still, it's a critical factor for a car to hit the road and that's why we feel good about future demand.



(Ron Yeps): Yes, that makes sense. And then, given the issues to test that primarily have been attributable to pushouts from auto OEMs? Is it reasonable assume that the backlog is now just disproportionately weighted towards ground vehicles relative to the historical mix?

(Jeff Graves): Yes. I mean, with the current orders performance in the quarter that went up so much?

(Ron Yeps): Yes.

(Jeff Graves): Yes. And (Brian), I think you know the numbers better. But, yes, directly (Ron), that's certainly correct. Yes, we had a big burst of orders coming through on, on the ground vehicle sector. (Brian), do you have any color you want to put on that?

(Brian Ross): No. It is, there's, I wouldn't say disproportionately in the ground vehicle side of it, but we have had a nice uplift in the ground vehicles backlog.

(Jeff Graves): The way to think of it, (Ron), is we've seen nice, consistent smooth growth, relatively exciting growth, in materials testing, big seismic testing machines tend to be choppy, you know, and lumpier. But we've seen nice growth in materials testing, we've seen nice growth in services all year long, we expect those trends to continue. The seismic machines will be lumpy quarter by quarter but generally the trend has been upward if the ground vehicle business as it is has fluctuated for us and we were thrilled with the orders in the quarter. But it takes more than one quarter to draw a line, so, we're, you know, let's why we continue to use the word, "volatile". We just have to see that performance continue.

(Ron Yeps): And then, just mix in with occasions, with that? You seem pretty optimistic just a moment ago but it just...



(Jeff Graves): Yes. I think, (Ron), it gets kind of back to the prior question that (John) had. The, I feel really good about our discipline on order, order acceptance today. We do a lot of pre-sale work with customers and then, the pre-sale activity can take a year or two with a lot of customers. Which is why we have such good visibility into our 12-month opportunity product line. We do better work now than we've ever done in terms of pre-sale activity, concept design, all of that, so that we have a very clear line of sight on what risk we're accepting for both performance and schedule when we take a job. So, I feel really good about that.

So, what business we're booking now, I feel it's great quality business. We should be able to execute it very well and we've retained, you know, as (Brian) said, excess capacity to deliver on those, on that volume, when it's in our backlog. We just want to see the order rates become more consistent and rise from our automotive OEMs.

(Ron Yeps): I appreciate the colors, guys. I'll hop back into queue.

(Jeff Graves): Thanks (Ron).

Operator: Thank you. We have another question from John Franzreb.

John Franzreb: Sorry guys, you have to put up with me again.

(Jeff Graves): That's okay John.

John Franzreb: (Jeff), can you just me through the volatility you're seeing in ground vehicle? You said that it evolved around your customer spending, around safety, and costs.



(Jeff Graves): Yes.

John Franzreb: What does it mean? Does that mean that it's not as addressable market for you? Can you just kind of, you know, clarify what the discussion is there?

(Jeff Graves): So, here's the situation, John, and we're, you know, we're very intimate with our customers worldwide so we hear this feedback real time from them. Is, look, they have what's probably a record number of new products they're developing. They're doing tremendous amounts of work and all of those vehicles have to have durability testing, which is what we really do heavily for a living, that's our core capability, right? Durability testing.

John Franzreb: Right.

(Jeff Graves): Those, that all has to get done, and they know it, they talk to us about it. We have it all in our pre-sales activity and then, eventually within 12 months of issuing an PO, it goes into our opportunity pipeline and we track it. And what we've seen over the last year, year and a half, John, is at the last minute they'll come back and say, "Guys, I'm sorry. We have to do that, but we've got an emergency need right now to redirect our R&D spending into", what John, I would broadly refer to as, "safety". So, when you think about autonomous cars or even driver assist systems on the road, the auto companies have announced introduction to those cars very clearly. You know, like 2019, 2020, it's coming right up on us. And the safety testing of those sensor systems and things for cars and the computer systems that are associated with them, they've got to get that right or there's a high risk of accidents.

And so, safety becomes their paramount priority. Now, as soon as that's done, John, or they feel good about that, they've got to come back to durability testing. Because durability relates to the warranty of the vehicle on the road and as you know, many of these autonomous cars are going



to be driving very heavy-duty cycles. You know, some at 18, 20 hours a day, delivering things from people to pizzas. And so, the durability testing's critical for them but we see, so what that means for us, is we see it, you know, a record or near record opportunity pipeline now every quarter for the next 12 months. It's at well over a billion dollars now of opportunity pipeline but that testing has to work it's way through their queue and it is a lower priority that safety of drivers and passengers in a car.

So, I hope that clarifies. The electric vehicle situation's a little bit different because electric cars, while there's, you know, lower concerns around safety because people still drive the cars, it's a concern around cost. I mean, if you look at electric vehicles today, they are, you know, it's hard to make any money on an electric car for an OEM, just put it that way. So, they've got to get cost and they've still got to still get performance, range, out of these electric vehicles. So, that's become their paramount thing, they want to be selling more and they've committed to sell more. But at this point, they can't any money at it, so they've got to fix that.

Now, John, this is turning into a long-winded answer, but I would tell that's really helping our materials business, materials test. Because that is encouraging them to light-weight vehicles, to put in carbon fiber composites, and light-weight aluminums into cars to extend the range. So, that's helping our materials test business and that's a good thing.

John Franzreb: Right.

(John Graves): But in terms of the, you know, the exposure we have to the automotive industry, it's hurting our durability testing because it's coming in as a lower priority. So, different reasons, but I hope you followed all that logic. So, our customers continue to say, "Guys", our customers continue to say, "Guys, keep your capacity please, keep your resources, we've got t have these systems." But then they keep delaying purchase orders and it's just maddening, John. I was



thrilled with the quarter in terms of the uptick, it's great to see. I'd love to believe that's going to just continue running and I think, in the long term, it certainly will, we have no doubt that it will. It's the short-term quarter by quarter volatility that we remain concerned about and we just watch. So, I'm not raising an undue red flag, it's just something that we have to watch and string together a few quarters of this upward trend to feel really good about it.

John Franzreb: Okay. So, then, in the sensor side of the business, do they benefit from increased ground vehicle testing on safety and cost?

(John Graves): Yes. When, we're seeing that, John. The test portion of sensors is doing really well. So, yes, you're precisely right, that does benefit from no matter what kind of car they're testing or for what kind of purpose.

John Franzreb: Right.

(John Graves): You still have to put sensors on the car even if you're doing safety tests. And in fact, we make great sensors for safety testing and we're thrilled about that business and it's part of why the test portion of sensors is growing so well. And that's why I love having sensors in test as a part of MTS because we still benefit no matter what kind of test they're running.

John Franzreb: Okay. That helps me a little bit, actually a lot of it. And one last question, why is the ground vehicle order book at 56% year over year? I mean, what's driving that increase in the ground vehicle test order book up 56% year over year? If there's a retrenchment in some of the other parts of that, of that testing business.

(John Graves): Yes. John, they can't wait any longer. What you're starting to see, and we saw this in Q4 as well as last year. The need builds and builds and then, finally, these cars get so close to



being launched that they just got to do some more durability testing on them. And that's what you see breaking through now, you know, and in certainly in Q3, was they just couldn't wait any longer. They had to place the orders and we, so eventually, you'll see that happening consistently. And what (Brian) and I are trying not say is, I'm not sure that it'll be every quarter right now. But certainly, Q3 was great and obviously, that seemed to tee our backlogs up, you know, about \$20 million (Brian)? And it's all driven by vehicles testing, it was great. We just want to see that trend kind of continue now.

John Franzreb: Great. All right. Thanks guys. Thanks for taking my questions. I appreciate it.

(Jeff Graves): Yes. Thanks for the questions, John. Very thoughtful.

Operator: All right. Our next question comes from Liam Burke with B. Riley FBR.

Liam Burke: Thank you. Morning, (Brian), morning (Jeff).

(Jeff Graves): Good morning Liam.

Liam Burke: (Jeff), the orders were up nicely at service again, you seem to be getting entrenched in with that business, but the revenues were flat. Is there a timing issue or recognition issue on the service set when looking at the revenue?

(Jeff Graves): Yes. There is occasionally, Liam. We, some of the orders that we book are multi-year orders or year-long contracts and they have different time-phasing by customer. You know, sometimes you'll run into a geographic shutdown, like in China or Europe, or somewhere where they, it's, it may be a year-long contract that's sitting in backlog, but they don't want you in certain months because they're shut down or, they want you in certain months. You know, there, it tends



to be vary so you see a little very variability in revenue, but the important thing to watch really is that consistent orders growth because that's really what feeds it.

And I'm thrilled this year, that we're going to pass the \$100 million mark in services. Customers love it, they want more worldwide, and we continue to expand that and grow and then, we review that as a reoccurring revenue stream. So, we'll just continue building on that every year but, yes, this year will be a nice milestone at 100 million and like I said, they were up 7% again this quarter in orders.

Liam Burke: Great. And on sensors and on tests, both on, on both sides of the business, are you getting any traction on cross-selling opportunities?

(Jeff Graves): Yes. We are, Liam, and we had modeled those, you know, we're in year two now, of having a much larger sensors business. We're working our way through year two. Year one was largely spent, you know, integrating our PCB acquisition and to converting it into a public company. Year two now, we've, obviously, we've harvested some of the cost synergies which have been really effective. So, we have critical volume moving through our plants, we're getting some sourcing savings flowing through now.

The real exciting part of it is now is going to be the revenue synergies as those play out over the next few years. And I mentioned China, specifically, sensors had a terrific quarter in China and they're being helped by, but we've been in China on the test side for, you know, for well over 20 years. So, we know these customers intimately and there's a lot of new Chinese customers. We have a big footprint and we're able to get PCB sensors into the labs over there and really help them get introduced much more quickly. And you're starting to see some of the revenue flow through from that. We were thrilled with the performance in China this quarter of our sensor business, driven out of the test space, particularly. It's going to be marvelous for us.



Liam Burke: Great. Thanks (Jeff).

(Jeff Graves): Thanks Liam.

Operator: All right. And sir, there are no further questions in the queue at this time. So, I'd like to turn the call back over to (Jeff Graves) for closing remarks.

(Jeff Graves): Thanks (Chelsea), and thank you everyone for participating in our call today. We look forward to updating you on our progress again next quarter. So, thank you all and have a great day.

Operator: Thank you, ladies, and gentlemen. This concludes today's teleconference and you may now disconnect.