Q1 2022 results

Mr. Dassen, can you give us a summary of the Q1 results?

Sure, we recorded net sales of €3.5 billion. Included in that €3.5 billion was the revenue for three EUV systems. We shipped nine EUV systems in the quarter and the delta obviously is related to the effect of the ‘fast shipment’ processes that we extensively talked about in the last quarter. Also included in the €3.5 billion is €1.2 billion for Installed Base revenue, which was as guided. We also recorded a gross margin of 49%, once again as guided. All that led to net income for the quarter of €695 million. In terms of bookings, we’re looking at net bookings for Q1 of €7 billion, of which €2.5 billion for EUV and in that number there were also multiple High-NA orders included in there. So yes, all in all I think a good quarter and the financial results delivered as guided.

Q2 and Full Year 2022

What is your guidance for the second quarter?

For revenue, we are guiding €5.1 to €5.3 billion. That excludes €800 million of net delayed revenue for Q2. That is the result of the fact that we expect more fast shipments at the end of Q2 than we had at the end of Q1. €1.2 billion again expected and guided as the Installed Base revenue for Q2. We are expecting a gross margin between 49% and 50%. That is a little higher than we had in Q1. On the one hand, it benefits from a higher volume both for DUV and EUV. But on the other hand, we are expecting slightly lower ASPs for EUV. The ASP for EUV was very high in Q1 – we expect that to be a little bit lower. And also, we expect a slightly negative mix effect from gross margin perspective because we expect a bit more dry business relatively speaking. So, between 49% and 50%.

Do you foresee any changes to your revenue outlook for the full year?

For the full year, I think demand is very, very strong, as evidenced by the order intake that I just talked about and also the order book. So, the demand outlook is very strong. So once again as we said in Q1, this year will be very much supply constrained. And on the supply side, we are working very, very hard to navigate all the supply chain issues that everyone is dealing with – our industry, the entire industry – we are working very, very hard to navigate that. So in light of that, we still expect revenue to be up around 20% for 2022 in comparison to 2021.

If you then look at the different products and the different businesses, on the EUV side we expect to ship 55 EUV systems. We won’t get revenue for all of those 55 systems because we are expecting quite a few EUV systems to be fast shipped in Q4 at the end of the year. So not all of the revenue for those 55 systems will be recognized in this year. Some will be recognized in 2023. But still also in light of that, we still expect that EUV revenue for the year will go up approximately 25%.
If we then look at the non-EUV business, we expect that to go up a bit more than 20% in comparison to 2021. Which is driven both by immersion, by dry and also by metrology systems.

So that's the outlook, if you like, for the different products. If you then look at the different businesses it is again, as we said in the last quarter. So that means that the Installed Base business will be up approximately 10%. The Memory business will be up, we expect around 25% and the Logic business we expect to be up more than 20%.

How about the gross margin for the full year and the impact of increased costs?
Good question. So maybe to remind people of what we said in the last quarter. So last quarter, we articulated an expectation of around 53% in terms of gross margin, which was a little bit up from last year.

Going into the moving parts that we discussed then at that point in time, we said we expect the gross margin on the Installed Base revenue business to be a little bit lower because last year we had a very, very high level of software business and there we expect that to be a bit lower this year. So that's why we expect the gross margin on the Installed Base business to be a bit lower.

We expected the gross margin on EUV to be higher, and that is primarily driven by the fact that all of the systems that we are going to ship this year will be NXE:3600s. Last year we had a mix of NXE:3600 and NXE:3400. So that will be positive. It's a little bit offset by the fact that we expect the High-NA costs to be a little bit higher this year. So that takes the gross margin down a little bit. And then on the DUV side, we expected it to be more in line with where we were last year, because the mix that we're looking at for this year will be more or less comparable to the mix between immersion and dry that we had last year. So that was what we said in Q1. So those are the moving parts.

Then – exactly to your point in terms of expectations around cost and around inflation. If you look at the different categories, there are four categories there that I think we need to look at. On the one hand of course there is the labor cost. There are two things happening there: on the one hand – and we're going to talk about that a little bit later – we're really adding people. We're adding people because we are looking at an accelerated growth of our capacity, if you like. So, we are adding people to get them trained, et cetera. So, the people are there but they are not yet productive because they need to be trained and productivity obviously lags out a little bit. So that's one element of cost increase. The second element, particularly for a company that is taking so many talents out of the market because of our growth, we are experiencing quite some competition in the labor market. And of course, that's a bit regional. The competition is very, very strong on the labor market in Asia, in Silicon Valley. But all in all, if you add all of that up, there is some cost increase on the labor cost side. So that's the first element.
The second element, of course, is on the component side. With a number of suppliers we do see some price increases in the components. And we also have some cost, some incremental cost, if you like, from service fees to secure parts that are in short supply and very high demand. So that’s the second category.

The third category is freight. Freight costs are going up substantially – that’s as a result of the increases in fuel prices I think everyone will recognize. But also pretty specific to us because of so many freight movements going into Asia, with all the corridors that are being changed as a result of the situation around Ukraine. Of course that means that also the freight costs are going up as a result of those changes in corridors.

And then the fourth element is, in general, the increase in energy prices. It doesn’t affect us all that much to be honest, at least not directly. Because first off, we have, of course, longer-term contracts and secondly, to a very large extent we are relying on renewables, on renewable energy. So that part is not affecting us very strongly directly.

Those are the four elements in terms of cost increase. If I were to quantify that, I think all in all we might be looking this year about a 1% incremental impact on the gross margin. So I think it’s safe to say that rather than the 53% I think what we are looking at right now, taking into consideration all these effects, I think it’s more moving towards 52% for this year in terms of overall gross margin.

If you then do the calculation – so I gave you the results for Q1, I gave you the expectations for Q2 – that means that you’re looking at approximately 54% expectation for gross margin in the second half and I would say that is primarily driven by volume. So we expect the volume obviously to go up in the second half and that will drive both on the EUV side and on the DUV side that will drive the gross margin. And also, we believe that the gross margin on Installed Base in the second half is going to be more favorable than what we saw in the first half, just as a result of the composition of the different components within the Installed Base revenue.

EUV High-NA
Let’s have a look at EUV High-NA. You have received more orders from customers this quarter. Where are you at present with EUV High-NA?
Yes, I would say on the technology side there is a lot going on. For people here in Veldhoven it’s very plain to see that we are building up the first system in our new fab here in Veldhoven. So that’s cool and that progress is going according to plan. Also, to your point on the commercial side, multiple orders taken in in Q1. But also, as a matter of fact in this month, in April, we also had multiple orders for High-NA. If you look at the current order situation, we have orders for High-NA from three customers in Logic and from two customers in Memory. If you look at it, I would say both on the technical side but also on the commercial side, really good progress being made on High-NA.
**Longer-term outlook demand and capacity**

**We’re looking at a strong demand. Do you expect this strong demand to continue beyond 2022?**

To be honest, I think everything we said in the capital markets day and also in the recent calls still holds true. I think the overall picture of very, very strong demand – that continues to go on. And as we said, that’s premised on two main drivers. First, it’s the secular driver, it’s the secular growth that we see around the broader and broader application of semiconductors in many different industries and products. So that’s the main driver I would say. We continue to see that develop very favorably.

And then secondly, as we also discussed, it’s this whole trend around technological sovereignty. You really now see that many of our customers are becoming more and more firm and more concrete in the plans they have for building fabs across the globe. That is really manifesting itself. That is going to lead to incremental demand for our products in the years to come.

Lastly, I would say once again, look at the order book. We are looking at an order book of €29 billion at the end of Q1. And again also for this quarter I expect some pretty healthy order intake yet again. If you just mirror that €29 billion against €17 billion of systems sales that we expect to see for this year, that just gives you an indication of how very, very strong order intake is and how very much covered we already are for 2023. For us, in spite of the macro challenges that are all around us, we continue to see very, very strong demand and I’m very positive about also the period beyond 2022.

**You mentioned last quarter that you were looking to increase your capacity – where are you at present? Can you give us an update?**

It’s twofold. On the one hand, we’re already very actively working – both us and with the supply chain – to just increase capacity. You might recall when we had the capital markets day last year, we talked about increase in capacity towards 2020 with 1.5x for DUV. So that gets you to approximately 375 DUV systems capacity by 2025. And we’re doubling capacity in comparison to 2020 for EUV. So 2x and that will get you to more than 70 EUV systems by 2025.

So that was what we already told you at the capital markets day last year and we are executing on that. We are, the supply chain is, et cetera. But to be honest, in light of everything that’s going on, in light of the very, very strong demand that is out there, and also in light of the fact that the data points are becoming clearer and clearer, that we’re really looking at a semiconductor market that is going to double during this decade by 2030. Just in light of all those data points, we really said we need to push down the accelerator even further. That’s also what we said on the call last quarter. We said we’re looking at further increasing that.

So, what we’re doing right now is really looking at the feasibility of increasing capacity even beyond the points that I just gave you. To be very concrete, what we are looking at is: is it feasible both for ourselves and for the supply chain to get to a capacity for EUV by 2025 – low-NA EUV – of 90 units and DUV 600 units? That’s what we’re looking at for 2025. For the medium term we’re also looking at 20 units for High-
NA. So that’s, in fact, the ‘exam question’ that we now have both for ourselves and for the supply chain: Can we do this? Can we make that happen by 2025 and for High-NA in the medium term?

So, we’re going through that process right now – we had a very extensive dialogue with all of the suppliers to just see whether that’s happening and they are very active to see, can we pull that off. We expect the results of that I would say in the second half of this year. Once we have that and once they have done their homework, to test whether and under what circumstances that can be done, and we have done the same on our end (because of course that would also mean that we would have to build incremental cleanrooms here for us) – once all of that is done, then we are going to translate that into updated scenarios for 2025 and also updated growth projections beyond 2025. I gave you the capacity numbers that we’re working towards for 2025. Of course, that doesn’t automatically translate into sales numbers for 2025 – that’s pretty obvious. This is the objective, the goal that we have for capacity. Once we know that’s feasible, we’re just going to look at what updated 2025 scenarios and growth expectations beyond 2025 are going hand in hand with that new plan.

Once we have that established in the second half of this year, we would like to give an update and we would like to, in essence, in Q4, we’re targeting a new investor day in which we would then give these updated scenarios and share that with the financial community.

So yes, all in all, while on the geopolitical front, of course, these are tough times and challenging times. To be honest, for our industry, given all the dynamics that we talked about, given the strength of the order book that we see, it’s actually a pretty exciting time. From that vantage point, just recognizing that growth, recognizing the positive dynamics that we see within our industry, our confidence in the growth trajectory that we see for ourselves is going from strength to strength.