

"Our goal is to decouple process from the product"

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Waters Corporation, the world's leading specialty measurement company, has recorded a sales of \$1,949 million, an increase of 23 per cent for the first nine months of 2021, compared to sales of \$1,579 million for the first nine months of 2020. The company has pioneered chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for more than 60 years. This significant growth at Waters is led by Dr Udit Batra, President and Chief Executive Officer of Waters Corporation, USA who has taken over this position effective September 1, 2020. In an interview with BioSpectrum, Dr Batra who has more than two decades of leadership and operational expertise in the healthcare and life sciences industry, including a proven track record of driving results at the top of the industry and successfully managing a global organisation, shared the growth of the analytical instruments market and challenges the industry is facing besides the initiatives taken by Waters. Edited excerpts;



What is the analytical industry scenario in India and globally?

The analytical industry market, I rather call it the life sciences tools and diagnostics industry, is large and growing and is quite attractive. If we put some dimension to it then it will be in the range between \$300 and \$350 billion and witnessing single digit growth. There are certain segments that are more attractive than others. At Waters we are active in QA and QC and analytical instruments, part of the industry, which is roughly about 15-20 per cent of the industry. That is our market space. We are big suppliers of analytical instruments specifically for regulated applications for pharma drug manufacturing. We are growth leaders especially in the last year. If we look at the first half of the year our global growth rate was 27-30 per cent. If we look at the two year basis i.e. during the pandemic period, the growth was just 7 per cent, which was high end of

the industry's average growth during the period. That was a robust growth with a very attractive market. With lots of unmet needs in the market, what makes us attractive is not just the growth but the ability to keep a growth position once we are in. And that's the advantage we have.

What about the Indian market in particular?

In India, thanks to Anil and his team, we have witnessed roughly about 60 per cent growth versus last year in the second quarter. For the first half of the year this number was 40 per cent. Really a very good growth. This is behind a lot of consumption by contract manufacturers and generic players for HPLCs. We are active in this space. I have a lot to thank Anil and his team in India because they were able to work through how difficult it was during the pandemic for certain times in India. They were able to work during the pandemic and were able to get our customers' products, which are very relevant to medicines that are produced to even combat COVID. In some cases our service engineers are more preferred over the employees of the companies that we are serving. Ironically our service engineers are more on the sites than their own employees because the instruments that we are servicing were that important. India has done very well. In fact it is the fastest growing large market that we have in Waters for the first half of the year.

What are the new products likely to come out and transform the ongoing and post COVID-19 scenario?

We at Waters are very active with new product launches. I will share three examples that are relevant for the current times. The first one is mRNA-based vaccine space and here if we think of mRNA as a vaccine and as a modality for the future it can be broken into three parts. Plasmid manufacturing, mRNA molecular manufacturing and formulation of mRNA with liquid nanoparticles. In all of the three cases the molecules have an affinity to metal surfaces. We have designed with our premier technology a surface which reduces metal binding with these kinds of compounds. It is very relevant for what we are doing today. And it is relevant for large molecules.

The first one is a premier technology that has been rolled out for our columns - our separation columns and now for instruments across HPLCs and ULPC lines. Second is in the area of diagnostics. We recently launched our LC-MS Research Use Only kit for SARS-COV-2 virus that has significant potential that can be expanded to other areas as well. We are very happy about it. The third one is high end technology in mass spec space. Recently we launched the Multi Reflecting Time-of-Flight (MRT) mass spectrometry platform SELECT SERIES MRT, a high-resolution mass spectrometer instrument. There are significant applications and improvements in application pharma, biomedical research, and material research, natural's research. It is a state-of-the-art mass spec research instrument that increases the time of light in mass spectrometry by about 50 folds. This means that one can get higher resolutions at higher speed and can do the experiments much faster.

With lock-down enforced globally and nationally that impacted shipping and air cargo, how was Waters able to manage the situation from India and the US to other markets, globally?

It's a great question. We have to take a step back. The first and foremost objective that we have globally and in India particularly is to protect our employees and their families. We were able to do that with a lot of focus. Many of our employees are being vaccinated. We have stringent rules and that we are quite successful and a very scientific basis for doing that. From a distribution perspective we have a long standing relationship with multi global freight forwarders and as such, they offered us many options. The same thing is true in India. We have deep relations with the freight forwarders in India and in particular during the pandemic our products served the life sciences industry relevant for COVID-19. So far we have managed to get preferential access to reach out to customers. We haven't faced any major challenges.

What are the challenges that you see in the analytical industry?

Our strategic plans as we just prepared are going to address these challenges. One of the biggest challenges is that mass spec is one of the most powerful techniques in the industry but it is rather complex to operate. LCMS and liquid chromatography mass spec combined has mass application in bioprocessing, application in research labs and diagnostic labs but for it to be useful in bulk processing we need to simplify its use. We have done this. I would say a tremendous job in this space. Recently with some products, one of the products, I would say is BioAccord, which produces results at highest levels of quality with very simple to use LCMS instruments and also produces data that is compliant and that is tailor made applications in bioprocess space and in QA and QC space in particular. We are trying to do this in the diagnostics space as well. I think that is one of the biggest challenges. But we have great and powerful instruments that we have not necessarily in the past done a good job of simplifying for use.

The second challenge I would say as an industry we faced is as more and more complex products are developed especially in the biologics space, the manufacturers have to file not to the just product but also have to file the process patent with the regulators and that does not allow us to modify the process by which these products are manufactured at least not easily once we have launched these products to the market that limits the application of technology. Our goal is to decouple the process from the product. These are just two examples that I would like to highlight. There are several other challenges as well.

How much are you spending on research activities on developing new products?

Over the last few years our research spending has increased more than double digits well above our sales growth. Right now it's been about 6-8 per cent of our sales. It has grown between 12 and 15 per cent in the last few years. We are investing more and more on R&D. Besides investments what is more important is what areas we have been spending time and energy and whom we are working with.

I would give three highlights of recent works that show that we have a long standing relationship with many different academic institutions. The first one is very relevant with SARS-COV-2 virus. We are using our SELECT SERIES Cyclic IMSs, a Mass spec that allows you to separate and identify the proteins not just based on size but also on shape. This has been especially relevant to look at spy proteins - SARS-COV-2 virus and also influenza virus. This is one collaboration that we have with Boston University in the US.

The second one that I would highlight is the partnership with Singapore's Bioprocessing Technology Institute. Remember I mentioned that one of the big challenges is simplifying LCMS for use in bioprocessing and complex molecules. That is what this collaboration envisages. That is what we are trying to do with the Bioprocessing Technology Institute in Singapore to really bring LCMS into the bioprocessing suite.

The third one is the UK government collaboration that we had with National Health Services for a test and trace programme. We have been very active in taking LCMS and making it an alternative diagnostic method for COVID-19. As I mentioned earlier the RUO kit accords this collaboration. This significantly lowers the false positives than PCR tests. Then you can ask why it is not widely available. Partly because this was developed during the pandemic. There were not sufficient regulatory and commercial capabilities to get this into the market. But the learnings that we have now will allow us to take it to different markets of the world. These are three recent and relevant research initiatives that we have during the pandemic.

How receptive have pharma companies been to invest in analytical instruments from Waters during the last 18 months of the pandemic?

The pharma is the largest customer globally for Waters. We have seen that the overall business has grown more than 27 per cent over the first half of the year and the pharma component has grown in excess of 30 per cent. Pharma is growing faster than our average growth. Our products are very relevant for what pharmaceutical companies are doing and they are very receptive not just to our existing products but to our new products as well. From a revenue perspective it has grown faster than the overall business. And the same thing is relevant for India as well. In India our business is heavily focussed on pharma and during the second quarter of year, India has recorded 60 per cent growth and in the first quarter it was over 40 per cent. We are largely driven by pharma firms including large pharma customers, generic customers, contract manufacturers who have been buying our products heavily in India in particular.

What is the kind of the hiring on the cards for the company across the markets and which areas would it be in?

We have 650 open positions globally across the domains. As I mentioned, since our sales growth is quite impressive we are really focused on making sure that our sales team is fully staffed, our research team is fully staffed, and the manufacturing staff is fully staffed. There are openings across the board. In India, we have about 350 workforce with 25-30 openings at any point in time especially now. We are now deeply focussed not on filling the vacancies but also smartly thinking of what capabilities we need to become even a stronger digital company, a strong R&D based company that is where our focus is all about.

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