

MEC CO., LTD (4971 JP)

NEWLY REVISED FY22 GUIDANCE, LED BY CONTINUED STRENGTH OF CORE PRODUCTS BUT PRICE RISE IS NOT YET REFLECTED

FY22 Q2 RESULTS SUMMARY

MEC's (4971 JP) FY22 (Dec year-end) 1H (Jan~June 2022) results overshoot the firm's guidance, coming in with 1H operating profit [OP] of ¥2,084mil (+6.9% YoY) on sales of ¥8,127mil (+15.7% YoY). Continued strength in the sale of MEC's core chemical products were supported mainly by rising demand for high-end package substrates loaded with semiconductors, as demand for data centre servers remains robust. OP landed higher than the firm's internal estimate thanks to continued sales growth of adhesive enhancing chemicals such as the CZ series, which boosted sales by ¥1,221mil YoY (+28.0% YoY, including the FOREX impact).

With regards to the weak yen, MEC's earnings are more sensitive to the Taiwanese dollar (a change of ¥0.1/NT will impact sales by ¥40mil and OP by ¥27mil in 1H) and the Chinese Yuan (a change of ¥0.1/RMB will impact sales by ¥13mil and OP by ¥6mil in 1H). For the 1H, the weaker yen added +¥520mil to sales and +¥288mil to OP.

Chemical sales, which constitutes nearly 98% of the firm's total sales, rose +15.9% YoY to ¥8,032mil in the 1H. However, despite an improved sales mix, with record sales of CZ-8101, 1H gross profit margin [GPM] contracted 3.3ppt YoY to 60.5%.

COGS were up by ¥668mil (+26.3% YoY) due to higher raw materials costs (+¥535mil) and labour cost / other expenses (+¥134mil). Of the ¥535mil increase in raw materials costs, 1) approx. 50% was for costs associated with an increase in sales, 2) 20~30% from the increase in material prices 3) 10% from a temporary production shift to Japan from the firm's plant in Suzhou, China, and 4) 10~20% from changes to the sales mix and FOREX impact.

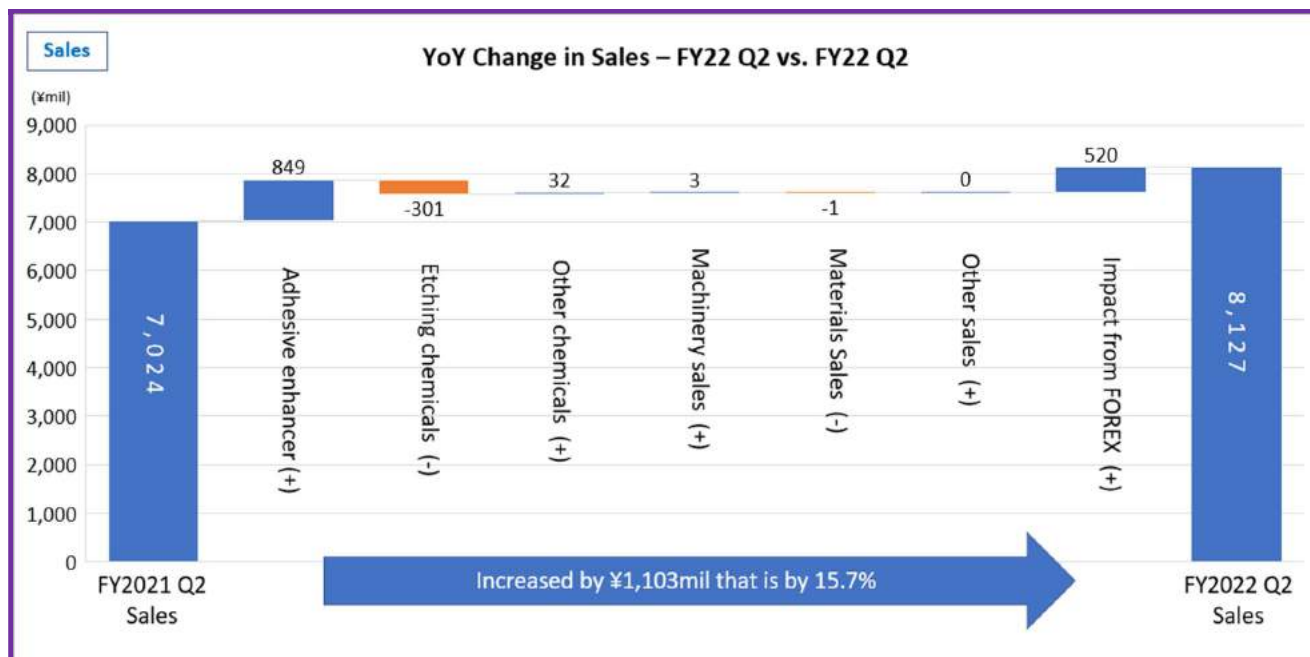
MEC revised its FY22 earnings guidance with the release of the Q2 results as shown in the table below. While the new forecast reflects the performance of Q2, particularly the record quarterly revenues of the CZ series, which will likely continue in 2H, the guidance does not reflect the price hikes that the company implemented in the CZ series from July.

Change in FY22 H1 (cumulative) & FY guidance						
(¥mil)	FY22					
	1H	YoY (%)	FYCE (Old)	FYCE (New)	Difference (%)	YoY (%)
Sales	8,127	15.7	16,650	17,000	2.1	13.0
Incl. Chemicals	8,032	15.9	16,294	16,711	2.6	13.2
Operating Profit [OP]	2,084	6.9	4,200	4,400	4.8	11.7
OP Margin [OPM] (%)	25.6	-2.2pp	25.2	25.9	+0.7pp	-0.3pp
Recurring Profit [RP]	2,374	17.4	4,450	4,800	7.9	16.9
NP for the parent's s/holders	1,661	13.3	3,200	3,400	6.3	15.3
EPS (¥)	87.40	13.2	168.35	178.87	6.2	15.2

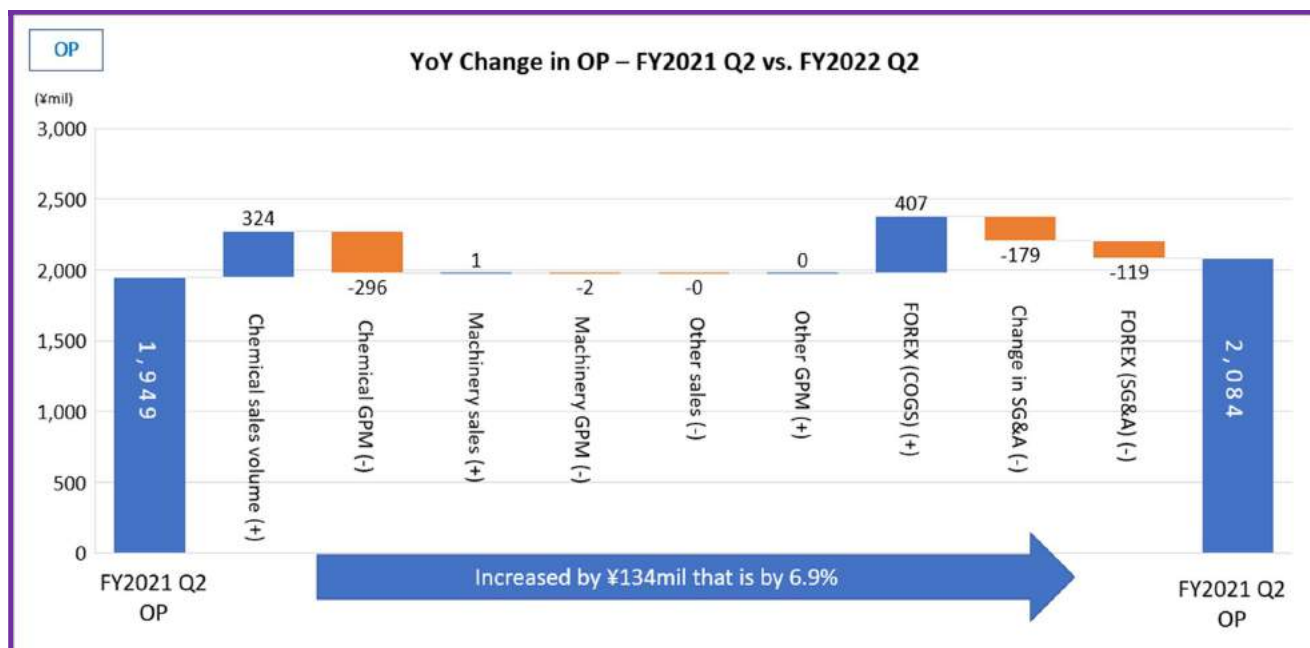
Source: Nippon-IBR based on MEC Co., Ltd.'s FY22 Q1 & Q2 Earnings Results Material

EXECUTIVE SUMMARY

- MEC's (4971 JP) FY22 1H (Jan~June 2022) results overshoot the firm's expectation, coming in with 1H operating profit [OP] of ¥2,084mil (+6.9% YoY) on sales of ¥8,127mil (+15.7% YoY).
- Higher COGS (+26.3% YoY) led to a fall in GPM to 60.5%. Raw material costs rose +¥535mil due to (1) costs associated with an increase in sales, (2) higher material prices, (3) a temporary production shift to Japan from the firm's plant in Suzhou, China, (4) changes to the sales mix and FOREX impact. Apart from hike in raw materials prices, labour cost and other expenses, in total of ¥134mil, also pushed up COGS.
- Sales of CZ-8101, MEC's core product, hit yet another record level in quarterly sales [¥1,410mil (+35.8% YoY / +10.5% QoQ)], supported by the rapid rise in package production bolstered by expanding demand for servers at data centres.
- MEC revised up its full year guidance given the stronger-than-expected performance up to Q2 from an OP of ¥4,200mil (+6.6% YoY) on sales of ¥16,650mil (+10.7% YoY) to OP of ¥4,400mil (+11.7% YoY) on sales of ¥17,000mil (+13.0% YoY).
- Forecasts for 2H onwards assume favourable business conditions, such as solid demand for CZ-8101 as package production rises, and seasonality of its earnings in Q3 remain unchanged. Yet the potential upside from the price hikes that were implemented from July are not reflected in the forecasts.
- To meet the rising demand for CZ chemicals, ¥300mil in capex over FY22~FY23 will be spent to expand MEC's existing capacity at Amagasaki and Nagaoka plants by 40%.



Source: MEC Co., Ltd. FY22 Q2 earnings results presentation



Source: MEC Co., Ltd. FY22 Q2 earnings results presentation

SEGMENTS

Adhesive Enhancers

FY22 Q2 Adhesive Enhancer sales hit a new record for the quarter of ¥2,911mil (+31.4% YoY / +8.8% QoQ). The CZ series sales produced another record level in sales of ¥2,609mil (+32.8% YoY / +8.6% QoQ). The firm’s core product in this product group, CZ-8101 – an adhesive-enhancing chemical used in packages for servers and chiplet packaging – also reported another record in quarterly sales, hitting ¥1,410mil (+35.8% YoY / +10.5% QoQ). The main growth driver behind the strong CZ-8101 sales has been the rising demand for packages used in servers and base stations, bolstered by the increase in data transmission as penetration of the 5G communication progresses.

In addition, Other CZ Chemicals, which include chemicals used pre and post the adhesive processes, also achieved record quarterly sales of ¥883mil (+43.3% YoY / +8.9% QoQ). Demand for these adhesive chemicals also benefited from the higher demand from package makers as they are used to raise the density of packages used in servers as they have become larger and have more layers. A newer generation of the CZ series, CZ-8201 and CZ-8401, is also included in this category.

The CZ-8100 product, which is partly used in packages for auto components, also reported record quarterly sales despite the semiconductor shortage affecting auto production. Although MEC had expected the semiconductor shortage-led slowdown in auto production to have some negative impact on CZ-8100 demand, it was offset by a rise in the number of semiconductors used per car as automakers continue to increase their EV model line-up. Q2 sales remained above the ¥300mil level at ¥316mil (+1.9% YoY / +0.3% QoQ).

V-Bond, another adhesive-enhancing chemical used in multilayer substrates for autos and middle-end smartphones, reported quarterly sales of ¥206mil (+11.6% YoY / -0.9% QoQ).

Etching Chemicals

FY22 Q2 sales of Etching Chemicals were ¥1,020mil (-5.9% YoY / -0.1% QoQ). The segment saw a YoY decline in sales due to 1) EXE, another of MEC's etching chemical products used in chip-on-film [COF], saw Q2 sales of ¥308mil (-31.4% YoY / -14.4% QoQ) due to a slowdown in display production as some TV display makers entered an adjustment phase, and 2) SF, a key material used in touch panel sensors, came in with Q2 sales of ¥246mil (+2.1% YoY / +20.6% QoQ). As the new models of high-end smartphones no longer use touch panel sensors, 1H sales of SF fell 20.8% YoY, which MEC had already expected, hence was not a surprise.

Chemical Sales by Products (Quarterly)												
(¥mil / Dec year-end)	FY20				FY21				FY22			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	QoQ (%)	YoY (%)
Copper surface treatment chemicals	2,550	2,701	2,824	3,069	3,278	3,301	3,807	3,621	3,695	3,931	6.4	19.1
Adhesive enhancers (CZ, V-Bond etc.)	1,720	1,695	1,828	1,970	2,150	2,216	2,624	2,625	2,676	2,911	8.8	31.4
CZ Series Total	1,507	1,491	1,562	1,700	1,906	1,964	2,313	2,294	2,403	2,609	8.6	32.8
CZ-8100	246	225	264	314	301	310	312	302	315	316	0.3	1.9
CZ-8101	787	820	822	865	1,026	1,038	1,199	1,244	1,276	1,410	10.5	35.8
Other CZ chemicals	474	446	476	521	579	616	802	747	811	883	8.9	43.3
Etching chemicals (EXE, SF etc.)	830	1,006	996	1,099	1,128	1,084	1,183	996	1,019	1,020	0.1	-5.9
SF	182	298	247	362	326	241	281	210	204	246	20.6	2.1
EXE	301	362	316	326	407	449	443	318	360	308	-14.4	-31.4
Other surface treatment chemicals	109	127	121	91	174	178	193	191	202	202	0.0	13.5
Chemical Sales Total	2,661	2,829	2,946	3,160	3,452	3,480	4,008	3,814	3,898	4,134	6.1	18.8

Source: Nippon-IBR based on MEC's earnings presentation materials

Chemical Sales by Products (Cumulative)											
(¥mil / Dec year-end)	FY20				FY21				FY22		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	YoY (%)
Copper surface treatment chemicals	2,550	5,251	8,075	11,146	3,278	6,579	10,386	14,007	3,695	7,626	15.9
Adhesive enhancers (CZ, V-Bond etc.)	1,720	3,415	5,243	7,213	2,150	4,366	6,990	9,615	2,676	5,587	28.0
CZ Series Total	1,507	2,998	4,560	6,260	1,906	3,870	6,183	8,477	2,403	5,012	29.5
CZ-8100	246	471	735	1,049	301	611	923	1,225	315	631	3.3
CZ-8101	787	1,607	2,429	3,294	1,026	2,064	3,263	4,507	1,276	2,686	30.1
Other CZ chemicals	474	920	1,396	1,917	579	1,195	1,997	2,744	811	1,694	41.8
Etching chemicals (EXE, SF etc.)	830	1,836	2,832	3,931	1,128	2,212	3,395	4,391	1,019	2,039	-7.8
SF	182	480	727	1,089	326	567	848	1,058	204	450	-20.7
EXE	301	663	979	1,305	407	856	1,299	1,617	360	668	-21.9
Other surface treatment chemicals	109	236	357	448	174	352	545	736	202	404	14.8
Chemical Sales Total	2,661	5,490	8,436	11,596	3,452	6,932	10,940	14,756	3,898	8,032	15.9

Source: Nippon-IBR based on MEC's earnings presentation materials

FY22 OUTLOOK

MEC revised its full-year FY22 guidance from an OP of ¥4,200mil (+6.6% YoY) on sales of ¥16,650mil (+10.7% YoY) to OP of ¥4,400mil (+11.7% YoY) on sales of ¥17,000mil (+13.0% YoY). The revised forecast reflects the better-than-expected 1H results, while forecasts for 2H onwards assume that the favourable business conditions, such as the solid demand for CZ-8101 on the back of increased package production and the seasonality of its earnings in Q3, remain unchanged. However, any potential upside from the price hikes that were implemented from July are not reflected in the forecast.

MEC also assumes the following cost increases:

1. Apart from rising raw materials costs associated with higher sales, there will be cost increases due to the rising price of raw materials. Although a relatively small proportion of raw materials used by MEC are directly derived from crude oil, the overall price level of raw materials has edged up,
2. An increase in shipping costs, while also having to produce in Japan to compensate for the lack of capacity at its factory in Suzhou, China,
3. Higher SG&A as the firm resumes normal business activities,
4. Higher labour and personnel costs due to an increase in new hires and a firm-wide base-up of salaries

MEC has already factored in a rise of ¥654mil (vs the previous estimate of ¥630mil) in FY22 COGS, largely due to a rise in personnel costs and to reflect the rapid rise in raw material costs. The firm plans to tackle this by boosting sales volumes, which is reflected in the full-year guidance. Demand for semiconductor packages will likely remain strong. Moreover, as packages gradually shift to mass production under the chiplet packaging method, this enables the size of a package to be larger and have more layers, thus requiring around eight times more CZ chemicals per package than current levels. However, contributions to earnings from a surge in demand for CZ chemicals from mass production of chiplet packaging will likely not come before FY23.

Adhesive Enhancers

Thanks to the continued strength in demand for CZ-8101, bolstered by strong demand for servers and the associated strength in demand for semiconductor packages, MEC revised FY22 CZ Series sales from ¥9,969mil (+17.6% YoY) to ¥10,555mil (+24.5% YoY) to surpass annual sales of ¥10,000mil for the first time. Growth will be led by CZ-8101, whose FY22 sales were revised from ¥5,309mil (+17.8% YoY) to ¥5,619mil (+24.6% YoY).

The firm has also revised up its sales forecast for CZ-8100 – used in applications such as autos, where the number of semiconductors/vehicle is expected to rise and simple packages used in memory cards etc – from ¥1,332mil (+8.7% YoY) to another record level of ¥1,346mil (+9.7% YoY).

For V-Bond, although management does expect auto production to normalise as the component shortage problems are gradually solved, management remain conservative in their estimate, guiding for a slight revision of ¥16mil in sales from the previous forecast of ¥827mil (+1.2% YoY) to ¥843mil (+3.3% YoY).

Etching Chemicals

MEC assumes SF sales will decline 12.2% YoY to ¥929mil. The firm had already factored in a gradual decline in SF sales as new versions of high-end smartphones will no longer require touch panel sensors, for which SF is used. Furthermore, the semiconductor shortage continues to affect production volumes of tablet devices, which might potentially impact SF sales as well.

MEC also revised down FY22 sales forecast of EXE –used in Chip-on-Film [COF] for TVs, displays and mid-range smartphones (Chinese makers) – from ¥1,791mil (+10.8% YoY) to ¥1,414mil (-12.6% YoY). The firm assumes production of displays will resume after Q2, however, there is no evidence yet of a recovery in production.

Capital Allocation Policy

MEC has maintained its dividend payment of ¥45/share despite the upward revision to FY22 earnings. Based on the revised FY22 EPS estimate, the dividend pay-out ratio will be 25%. MEC's target is to achieve a dividend pay-out ratio of 30% under the ongoing medium-term management plan. Due to the continued strength in demand for CZ chemicals, MEC plans to spend ¥300mil to increase existing capacity of two factories in Japan, Amagasaki, and Nagaoka, by 40% over FY22 and FY23. In addition, there are plans to spend an even larger amount in CAPEX in FY25 to meet expected surge in demand for CZ chemicals when package makers fully start mass production of packages using chiplet packaging such as EMIB. Until then, MEC aims to meet increasing demand by expanding its existing capacity and increasing work shifts.

MEC is currently in the first year of its three-year medium-term management plan. For details of the Plan, please visit to our previous research report at <https://nippon-ibr.com/research-coverage-2/>.

Applications and trend for MEC's main chemicals (¥mil)							
Chemicals	Applications	Trend	FY20	FY21 Result	FY22CE (Old)	FY22CE (New)	YoY (%)
CZ series	PC, Tablets, Servers, AiP, packages for autos.	<p>Since FY20, there has been strong demand for servers due to an increase in demand for tablets and laptops due to a rise in remote work and distant learning.</p> <p>The expansion of 5G infrastructure, which requires more servers, will help boost CZ-8101 sales. CZ-8101 is partly used in chiplet technology such as EMIB.</p> <p>The newer generation CZ-8201 is also used in chiplet technology.</p>	6,260	8,477	9,969	10,551	24.5
EXE	COF (Chip-on-Film) for TV, smartphones, and tablets. Currently tested for use in high-end smartphone motherboards.	<p>FY20 sales were led by rising tablet and laptop demand. FY21 growth relies on a recovery in Chinese smartphone production.</p> <p>There are also increasing enquires for the subtractive wire forming method, in which EXE is used, in HDI motherboards.</p>	1,305	1,617	1,791	1,414	-12.6
V-Bond	Pre-lamination treatment for multilayer substrates. Used in packages for autos and middle-end smartphones	Sales to recover in line with automotive and Chinese smartphone production	668	817	827	843	3.2
SF	Touch panel sensor	Decline in sales from smartphone displays expected as new technologies have eliminated the need for sensors.	1,089	1,058	916	920	-13.0

Source: Nippon-IBR

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