MEC CO., LTD (4971 JP)

UPWARD REVISED FY22 GUIDANCE ONLY REFLECTS Q1 RESULTS, LED BY STRONG PERFORMANCE OF CORE PRODUCTS AND FOREX

FY22 Q1 RESULTS SUMMARY

MEC's (4971 JP) FY22 Q1 (Dec year-end) results overshot the firm's expectation, coming in with Q1 operating profit [OP] of ¥1,051mil (+8.0% YoY) on sales of ¥3,955mil (+12.8% YoY). Continued strength in MEC's core chemical products sales were supported mainly by rising demand for high-end package substrates loaded with semiconductors, as demand for data centre servers continue to be strong. OP landed higher than the firm's internal estimate thanks to continued sales growth of etching chemicals such as the CZ series, and lower than budgeted SG&A spending amid less business travel due to COVID-related closures. MEC's earnings are more sensitive to the Taiwanese dollar (a change of ¥0.1/NT will impact sales by ¥20mil and OP by ¥10mil) and the Chinese Yuan (a change in ¥0.1/RMB will impact sales by ¥6mil and OP by ¥2mil). The weaker yen added +¥228mil YoY in sales and +¥116mil YoY in OP.

Chemical sales, which constitutes nearly 98% of the firm's total sales, rose +12.9% YoY to ¥3,898mil. However, despite an improved sales mix, with record sales of CZ-8101, Q1 gross profit margin [GPM] worsened by 1.9ppt to 61.4% as raw materials cost rose ¥200mil YoY due to 1) a rise associated with an increase in sales (+¥100mil), and 2) price rise, change in sales mix and a temporary production shift to Japan from the firm's plant in Suzhou, China (+¥100mil).

MEC also revised its 1H and FY22 earnings guidance with the release of the Q1 results as shown in the table below. While the revised earnings reflect the performance of Q1, the forecasts are unchanged for Q2~Q4 due to uncertainty caused by geopolitical risks.

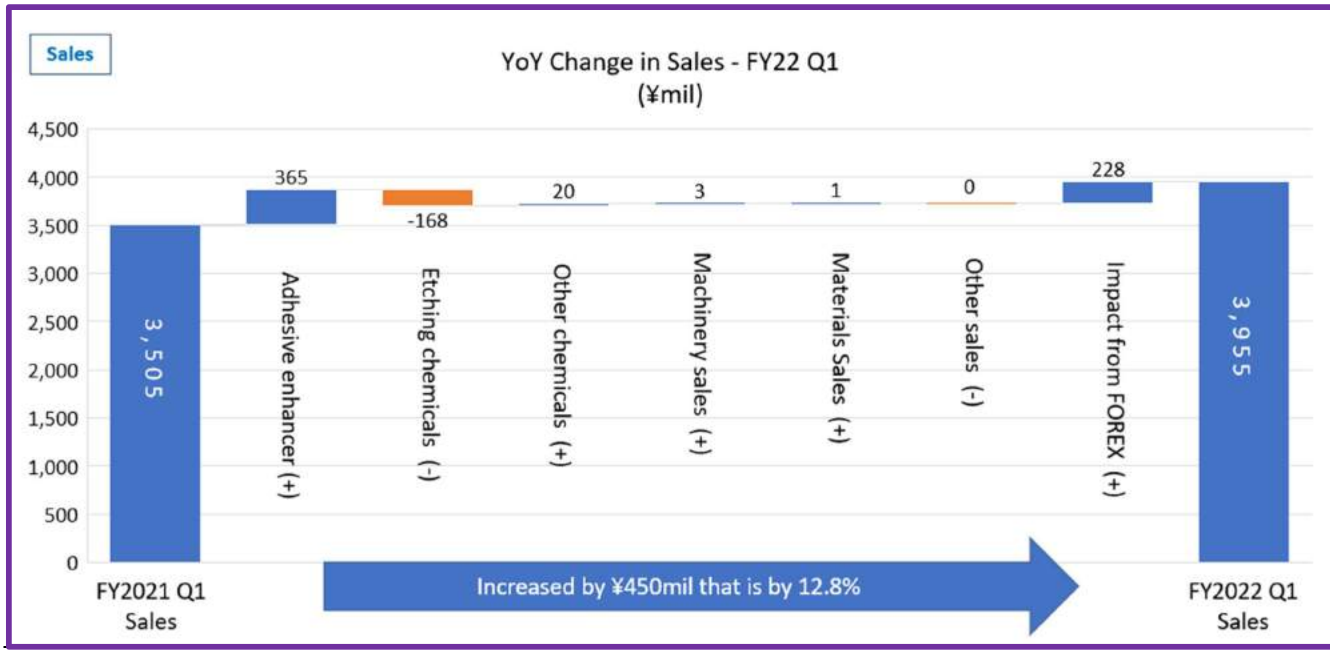
Earnings Summary (Cumulative)

(¥mil)	FY22						
	1H				FY		
	Q1	YoY (%)	1HCE (Old)	1HCE (New)	FYCE (Old)	FYCE (New)	YoY (%)
Sales	3,955	12.8	7,800	7,950	16,500	16,650	10.7
incl. Chemicals	3,898	12.9	n/a	n/a	n/a	n/a	n/a
GP	2,428	9.4	n/a	n/a	n/a	n/a	n/a
GPM (%)	61.4	-1.9pp	n/a	n/a	n/a	n/a	n/a
SG&A	1,377	10.5	n/a	n/a	n/a	n/a	n/a
SG&A/Sales (%)	34.8	-0.8pp	n/a	n/a	n/a	n/a	n/a
OP	1,051	8.0	1,800	2,000	4,000	4,200	6.6
OPM (%)	26.6	-1.2pp	23.1	25.2	24.2	25.2	-1.0pp
RP	1,186	14.5	1,850	2,150	4,150	4,450	8.4
RPM (%)	30.0	+0.4pp	23.7	27.0	25.2	26.7	-0.6pp
NP	793	6.9	1,300	1,500	3,000	3,200	8.5
EPS (¥)	41.76	6.9	68.41	78.92	157.86	168.35	8.5
DPS (¥)	n/a	n/a	20.00	20.00	40.00	45.00	28.6

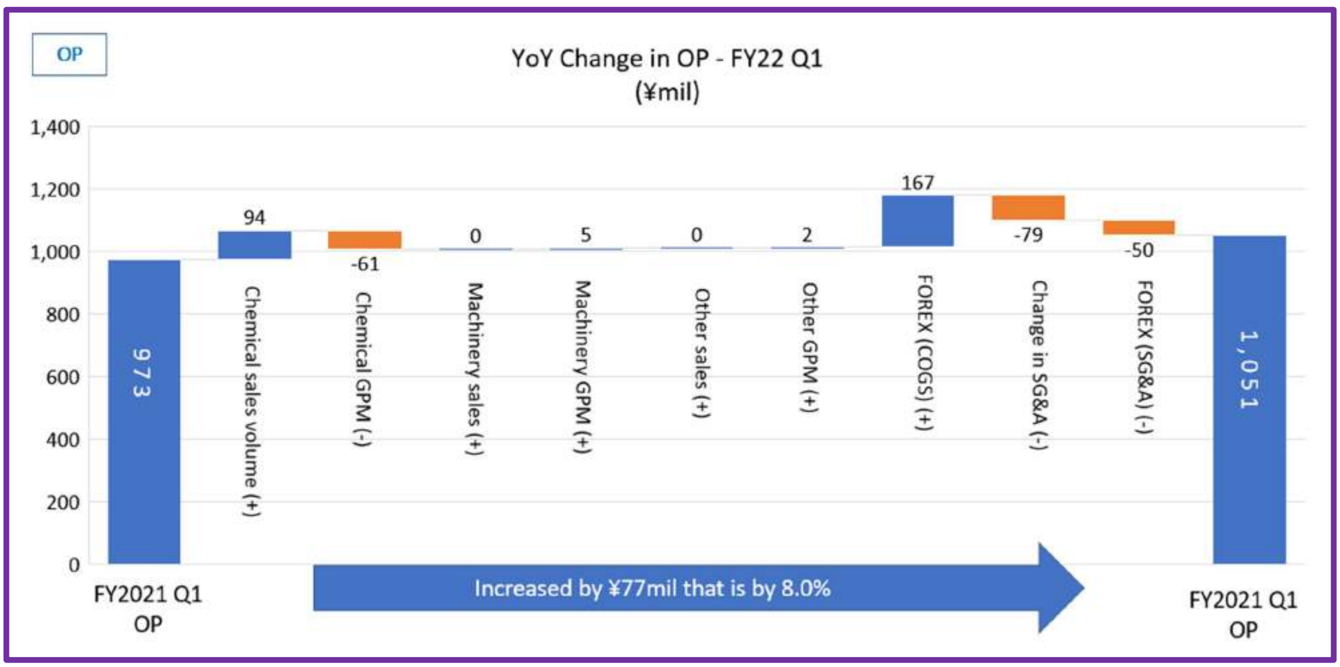
Source: Nippon-IBR based on MEC's results presentation material

EXECUTIVE SUMMARY

- MEC's (4971 JP) FY22 Q1 results exceeded the firm's expectations. As a result, the firm has revised up its estimates for the year.
- The weak yen led to FOREX gains (sales +¥228mil / OP +¥116mil).
- Higher COGS led to a 1.9ppt YoY decline in GPM to 61.4% due to 1) a rise associated with an increase in sales (+¥100mil), and 2) price rise, change in sales mix and a temporary production shift to Japan from the firm's plant in Suzhou, China.
- Sales of CZ-8101, MEC's core product, hit yet another record level in quarterly sales [¥1,276mil (+24.4% YoY / +2.6% QoQ)], supported by the rapid surge in package production bolstered by rising demand for servers at data centres.
- FY22 1H earnings were revised up from OP of ¥1,800mil (-7.7% YoY) on sales of ¥7,800mil (+11.0% YoY) to OP of ¥2,000 (+2.6% YoY) on sales of ¥7,950mil (+13.2% YoY), and for the full-year from OP of ¥4,000mil (+1.5% YoY) on sales of ¥16,500mil (+9.7% YoY) to OP of ¥4,200mil (+6.6% YoY) on sales of ¥16,650mil (+10.7% YoY). The revised forecast only reflects better-than-expected Q1 results.
- The annual dividend was also raised from ¥40/share to ¥45/share. Based on the firm's revised FY22 EPS estimate, the dividend pay-out ratio of 26.7% is an improvement from the previous guidance of 25.3%. MEC target is to achieve a dividend pay-out ratio of 30% under the ongoing medium-term management plan.



Source: MEC Co., Ltd. FY22 Q1 earnings results presentation



Source: MEC Co., Ltd. FY22 Q1 earnings results presentation

SEGMENTS

Adhesive Enhancers

FY22 Q1 Adhesive Enhancer sales hit a new record in quarterly sales of ¥2,676mil (+24.5% YoY / +1.9% QoQ). The CZ series sales came in at a record ¥2,403mil (+26.1% YoY / +4.8% QoQ). The firm's core product in this product group, CZ-8101, an adhesive-enhancing chemical used in packages for servers and chiplet packaging such as EMIB, also reported another record in quarterly sales, hitting ¥1,276mil (+24.4% YoY / +2.6% QoQ).

The main growth driver behind the strong CZ-8101 sales has been demand for packages used in servers and base stations, bolstered by the rise 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 hit record quarterly sales of ¥811mil (+40.1% YoY / +8.6% QoQ). The rise in demand for these adhesive chemicals – used by package makers to increase density of packages in their efforts to improve adhesiveness – also helped improve overall profitability. 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 automobile 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. Q1 sales remained above the ¥300mil level at ¥315mil (+4.7% YoY / +4.3% QoQ).

Moreover, V-Bond, another adhesive-enhancing chemical used in multilayer substrates for autos and middle-end smartphones, reported quarterly sales of ¥207mil (+11.0% YoY).

Etching Chemicals

FY22 Q1 sales of Etching Chemicals were ¥1,019mil (-9.7% YoY / +2.3% 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 Q1 sales of ¥360mil (-11.5% YoY / +13.2% QoQ) due to a slowdown in display production as some display makers entered an adjustment phase, and, 2) SF, a key material used in touch panel sensors, saw Q1 sales decline 37.4% YoY / 2.9% QoQ to ¥204mil as the new models of high-end smartphones no longer use touch panel sensors. MEC has been aware of this technological shift since FY21, hence the fall in sales of SF 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	QoQ (%)	YoY (%)
Copper surface treatment chemicals	2,550	2,701	2,824	3,069	3,278	3,301	3,807	3,621	3,695	2.0	12.7
Adhesive enhancer (CZ, V-Bond etc.)	1,720	1,695	1,828	1,970	2,150	2,216	2,624	2,625	2,676	1.9	24.5
CZ Series Total	1,507	1,491	1,562	1,700	1,906	1,964	2,313	2,294	2,403	4.8	26.1
CZ-8100	246	225	264	314	301	310	312	302	315	4.3	4.7
CZ-8101	787	820	822	865	1,026	1,038	1,199	1,244	1,276	2.6	24.4
Other CZ chemicals	474	446	476	521	579	616	802	747	811	8.6	40.1
Etching chemicals (EXE, SF etc.)	830	1,006	996	1,099	1,128	1,084	1,183	996	1,019	2.3	-9.7
SF	182	298	247	362	326	241	281	210	204	-2.9	-37.4
EXE	301	362	316	326	407	449	443	318	360	13.2	-11.5
Other surface treatment chemicals	109	127	121	91	174	178	193	191	202	5.8	16.1
Chemical Sales Total	2,661	2,829	2,946	3,160	3,452	3,480	4,008	3,814	3,898	2.2	12.9

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	YoY (%)
Copper surface treatment chemicals	2,550	5,251	8,075	11,146	3,278	6,579	10,386	14,007	3,695	12.7
Adhesive enhancer (CZ, V-Bond etc.)	1,720	3,415	5,243	7,213	2,150	4,366	6,990	9,615	2,676	24.5
CZ Series Total	1,507	2,998	4,560	6,260	1,906	3,870	6,183	8,477	2,403	26.1
CZ-8100	246	471	735	1,049	301	611	923	1,225	315	4.7
CZ-8101	787	1,607	2,429	3,294	1,026	2,064	3,263	4,507	1,276	24.4
Other CZ chemicals	474	920	1,396	1,917	579	1,195	1,997	2,744	811	40.1
Etching chemicals (EXE, SF etc.)	830	1,836	2,832	3,931	1,128	2,212	3,395	4,391	1,019	-9.7
SF	182	480	727	1,089	326	567	848	1,058	204	-37.4
EXE	301	663	979	1,305	407	856	1,299	1,617	360	-11.5
Other surface treatment chemicals	109	236	357	448	174	352	545	736	202	16.1
Chemical Sales Total	2,661	5,490	8,436	11,596	3,452	6,932	10,940	14,756	3,898	12.9

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

FY22 OUTLOOK

MEC revised its earnings guidance from FY22 1H OP of ¥1,800mil (-7.7% YoY) on sales of ¥7,800mil (+11.0% YoY) to OP of ¥2,000 (+2.6% YoY) on sales of ¥7,950mil (+13.2% YoY), and for the full-year from OP of ¥4,000mil (+1.5% YoY) on sales of ¥16,500mil (+9.7% YoY) to OP of ¥4,200mil (+6.6% YoY) on sales of ¥16,650mil (+10.7% YoY). The revised forecast only reflects the better-than-expected Q1 results, while forecasts for Q2 onwards remain unchanged, although the firm continues to see solid demand for CZ-8101 and seasonality of its earnings is usually stronger in Q3.

MEC appears conservative for the remaining nine months due the following factors:

1. The uncertain global environment due to geopolitical events,
2. Rising raw material costs associated with sales increase,
3. 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,
4. Higher SG&A on the back of resuming normal business activities.

The firm has already factored in a rise of ¥6,300mil in total costs for FY22. In particular, the rise in raw material cost will squeeze the firm's profitability. MEC says that it will tackle the rise in raw material costs by increasing sales volume and it will consider hiking prices. 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.

Adhesive Enhancer

Thanks to the continued strength in demand for semiconductor packages, bolstered by strong demand for servers and the associated strength in demand for CZ-8101, MEC forecasts FY22 CZ Series sales to rise 17.6% YoY to ¥9,969mil, which will mark another record level. The growth will be led by CZ-8101, which is forecast to rise 17.8% YoY to ¥5,309mil, and the firm anticipates demand for CZ-8100, used in applications such as automobile – where the number of semiconductors used per vehicle is expected to rise – and simple packages used in memory cards etc. will generate annual sales of ¥1,332mil (+8.7% YoY) – another record level.

For V-Bond, although management does expect auto production will stabilise as the component shortage problems are gradually solved, they remain conservative in their estimate, guiding for a slight increase in sales (+1.2% YoY) to ¥827mil.

MEC also assumes newer generation CZ chemicals, such as CZ-8201, will earn FY22 sales of ¥458mil (approx. 2.0x YoY). However, as noted above, the number does not factor in the potential growth from of mass production of packages using chiplet technology. A bottleneck, however, still lies in production yields in chiplet packaging which involves the technological challenge of inserting silicon substrates inside the packages.

Etching Chemicals

MEC assumes SF sales will decline 13.4% YoY to ¥916mil. The firm had already assumed SF sales would gradually shrink 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. However, the decline in SF will be partially offset by recovery in demand for EXE which will be used in Chip-on-Film [COF] for TVs, displays and mid-range smartphones (smartphones Chinese makers). MEC assumes production of displays will resume after Q2.

Shareholder Returns

MEC also revised its annual cash dividend from ¥40/share to ¥45/share. Based on the firm's revised FY22 EPS estimate, the dividend pay-out ratio will be 26.7%, an improvement from 25.3% based on the previous guidance. MEC target is to achieve a dividend pay-out ratio of 30% under the ongoing medium-term management plan.

Applications and trend for MEC's main chemicals (¥mil)

Chemicals	Applications	Trend	FY20	FY21CE	FY21 Result	FY22CE	YoY (%)
CZ series	PC, Tablets, Servers, AiP, packages for automobile.	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. 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. The newer generation CZ-8201 is also used in chiplet technology.	6,260	8,000	8,477	9,969	17.6
EXE	COF (Chip-on-Film) for TVs, smartphones and tablets. Currently used in the high-end smartphone motherboards.	FY20 sales were led by increase in tablet and laptop demand. FY21 growth relies on recovery of Chinese smartphone production. There are also increasing enquires for the subtractive wire forming method, in which EXE is used, in HDI motherboards.	1,305	1,617	1,617	1,791	10.8
V-Bond	Pre-lamination treatment for multilayer substrates. Used in packages for autos and middle-end smartphones	Sales recover in line with automotive and Chinese smartphone production	668	768	817	827	1.2
SF	Touch panel sensors	Decline in sales from smartphone displays expected as new technologies have eliminated the need for sensors.	1,089	1,000	1,058	916	-13.4

Source: Nippon-IBR

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/.

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