

MEC CO., LTD (4971 JP)

STRONG PERFORMANCE IN FY21 1H LED TO ANOTHER FULL-YEAR REVISION THANKS TO CONTINUED SURGE IN PACKAGE PRODUCTION

FY21 Q2 RESULTS SUMMARY

MEC (4971 JP) reported another strong performance in FY21 (Dec year-end) 1H earnings with operating profit [OP] of ¥1,949mil (+72.0% YoY) on sales of ¥7,024mil (+23.2% YoY) on the back of (1) strength in chemical products sales supported by continued solid sales of devices, such as PC and tablets, and (2) a boost in demand for package substrates loaded with semiconductors as demand for servers increased. The 1H results overshot the company estimate by 1.8% in sales and 11.4% for OP, respectively. This strong performance resulted in a substantial improvement in the operating profit margin [OPM], up from 19.9% in FY20 1H to 27.8%.

On the back of the firm's continued strong performance, the full-year FY21 guidance was revised again from the one released at the time of Q1 results on 12 May. MEC's revised FY21 guidance now eyes for OP of ¥3,500mil (+47.7% YoY) on sales of ¥14,000mil (+17.1% YoY), up from the previous forecast of OP of ¥3,100mil (+30.8% YoY) and sales of ¥13,600mil (+13.7% YoY), though the forecasts are on the conservative side, reflecting the current semiconductor shortage.

1H results & change in FY guidance					
¥mil / Dec year-end)	FY21				
	1H (Estimate)	1H (Results)	FY21CE Old	FY21CE New	Change (%)
Sales	6,900	7,024	13,600	14,000	2.9
OP	1,750	1,949	3,100	3,500	12.9
OPM (%)	25.4	27.8	22.8	25.0	+2.2pp
RP	1,850	2,023	3,200	3,600	12.5
NP for the parent's s/holders	1,300	1,466	2,250	2,600	15.6
EPS (¥)	68.47	77.25	118.46	136.88	15.5

Source: MEC Co., Ltd. press release on 10 Aug 2021

SEGMENTS

1H Chemicals division sales, which comprises more than 90% of the firm's total revenue, rose 26.3% YoY to ¥6,933mil and contributed ¥660mil of the ¥815mil YoY (+72.0% YoY) increase in FY21 1H OP. By product, Adhesive Enhancing chemicals and Etching Chemicals enjoyed strong 1H sales growth of 27.8% YoY and 20.5% YoY, respectively. In Q2 alone, the Chemical division saw a 23.0% YoY / 0.8% QoQ increase in sales to ¥3,480mil.

Continued strength in server demand at data centres as well as demand for PCs and tablets, bolstered by the rise in data transmission, supported MEC's sales growth. FY21 1H sales of Copper Treatment Chemicals (ca. 95% of Chemicals sales) rose 25.2% YoY to ¥6,578mil. In Q2 alone, Copper Treatment Chemicals sales hit a consecutive record in quarterly sales of ¥3,300mil (+22.2% YoY / +0.7% QoQ).

EXECUTIVE SUMMARY

- MEC (4971 JP) reported another strong performance in FY21 (Dec year-end) 1H earnings with operating profit [OP] of ¥1,949mil (+72.0% YoY) on sales of ¥7,024mil (+23.2% YoY).
- Sales of CZ-8101 hit yet another quarterly sales record, supported by the rapid surge in package production.
- CZ-8100 and V-Bond, both of which are exposed to the auto sector, saw sales recover YoY despite the current slowdown in automobile production, due to the semiconductor shortage.
- Q2 SF sales fell 26.4% YoY / -19.5% QoQ. MEC had built this into its outlook at beginning of FY21.
- 1H Chemical division sales (90%+ of total revenue) rose 26.3% YoY to ¥6,933mil. Both Adhesive Enhancer (that includes CZ series) and Etching Chemicals saw favourable YoY sales growth of +27.8% YoY and +20.5% YoY respectively.
- MEC revised up full year guidance for the second time. The dividend forecast was also revised up to ¥35.00/share from the previous forecast of ¥28.00/share
- Over the medium-term, factors that will likely drive MEC's earnings growth are unchanged. Chipmakers and package makers are aggressively investing in capacity expansion to meet demand from data centre servers that will be required as part of essential 5G infrastructure.

The Chemical Division comprises the following two sub-segments:

1) Adhesive Enhancers

FY21 1H Adhesive Enhancer sales rose 27.8%YoY to ¥4,366mil, of which sales in Q2 alone hit another quarterly record of ¥2,216mil (+30.7% YoY / +3.1% QoQ). The core CZ series Q2 sales improved 31.7% YoY / 3.0% QoQ to ¥1,964mil. The firm's other core product, CZ-8101, an adhesive-enhancing chemical used in packages for servers and chiplet packaging such as EMIB, reported another record in quarterly sales. In Q2 alone, CZ-8101 sales reached ¥1,038mil (+26.6% YoY / +1.2% QoQ), supported by the rapid surge in package production.

The growth driver for CZ-8101 sales has been packages for (1) servers, bolstered by the increase in data transmission, and (2) for PCs whose demand remains strong on the back of prolonged remote working and distant learning. CZ-8101 sales were further enhanced with the package makers gradually shifting to chiplet technology such as EMIB.

Another CZ series chemical, CZ-8100, which is partly used in packages for automobile components, showed resilience despite the semiconductor shortage affecting the automobile production. Although MEC had expected the semiconductor shortage-led slowdown in automobile production to have some negative impact on CZ-8100 demand, it was offset by an increase in the number of semiconductors used per car. In Q2 alone, CZ-8100 saw record quarterly sales of ¥310mil (+37.8% YoY / +3.0% QoQ). V-Bond, another adhesive-enhancing chemical used in multilayer substrates for automobiles, also reported quarterly sales of ¥184mil (+24.3% YoY / -1.6% QoQ).

2) Etching Chemicals

Q2 sales of Etching Chemicals were ¥1,084mil (-7.8% YoY / +3.9% QoQ). SF, a key material used in touch panel sensors, saw sales of ¥241mil (-19.1% YoY / -26.1% QoQ). There was continued strong demand for existing tablet models with touch panel sensors on the back of prolonged remote working and distant learning which boosted 1H (Jan~June) SF sales 18.0% YoY to ¥566mil. The Q2 decline was not a surprise as MEC had already taken it into account at the beginning of this fiscal year.

EXE, another of MEC's etching chemical products, also reported record quarterly sales of ¥449mil (+24.0% YoY / +10.3% QoQ). Demand for use in chip-on-film [COF] remained solid thanks to steady demand for laptops and displays on the back of continued remote working and distant learning. COF for TVs, whose sales were boosted on the back of the Tokyo 2020 Games, also contributed to the sales increase of EXE.

Chemical Sales by Products (Quarterly)												
(¥mil / Dec year-end)	FY2019				FY20				FY21			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	QoQ (%)	YoY (%)
Copper surface treatment chemicals	2,134	2,497	2,919	2,592	2,551	2,701	2,824	3,069	3,278	3,300	0.7	22.2
Adhesive enhancer (CZ, V-Bond etc.)	1,360	1,588	1,718	1,695	1,720	1,695	1,828	1,970	2,150	2,216	3.1	30.7
CZ Series Total	1,185	1,379	1,484	1,468	1,507	1,491	1,562	1,700	1,906	1,964	3.0	31.7
CZ-8100	232	260	257	269	246	225	264	314	301	310	3.0	37.8
CZ-8101	540	789	752	753	787	820	822	865	1,026	1,038	1.2	26.6
Other CZ chemicals	413	330	475	446	474	446	476	521	579	616	6.4	38.1
Etching chemicals (EXE, SF etc.)	773	909	1,200	897	830	1,006	996	1,099	1,128	1,084	-3.9	7.8
SF	145	205	407	222	182	298	247	362	326	241	-26.1	-19.1
EXE	297	349	369	278	301	362	316	326	407	449	10.3	24.0
Other surface treatment chemicals	132	125	133	122	109	127	121	91	174	178	2.3	40.2
Chemical Sales Total	2,266	2,623	3,052	2,715	2,661	2,829	2,946	3,160	3,452	3,480	0.8	23.0

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

Chemical Sales by Products (Cumulative)											
(¥mil / Dec year-end)	FY2019				FY20				FY21		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	YoY (%)
Copper surface treatment chemicals	2,134	4,631	7,550	10,142	2,551	5,252	8,076	11,147	3,278	6,578	25.2
Adhesive enhancer (CZ, V-Bond etc.)	1,360	2,948	4,666	6,361	1,720	3,415	5,243	7,213	2,150	4,366	27.8
CZ Series Total	1,185	2,564	4,048	5,516	1,507	2,998	4,560	6,260	1,906	3,870	29.1
CZ-8100	232	492	749	1,018	246	471	735	1,049	301	611	29.7
CZ-8101	540	1,329	2,081	2,834	787	1,607	2,429	3,294	1,026	2,064	28.4
Other CZ chemicals	413	743	1,218	1,664	474	920	1,396	1,917	579	1,195	29.9
Etching chemicals (EXE, SF etc.)	773	1,682	2,882	3,779	830	1,836	2,832	3,931	1,128	2,212	20.5
SF	145	350	757	979	182	480	727	1,089	326	567	18.0
EXE	297	646	1,015	1,293	301	663	979	1,305	407	856	29.0
Other surface treatment chemicals	132	257	390	512	109	236	357	448	174	352	49.2
Chemical Sales Total	2,266	4,889	7,941	10,656	2,661	5,490	8,436	11,596	3,452	6,932	26.3

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

FY21 OUTLOOK

MEC revised up its previous FY21 guidance from OP of ¥3,100mil (+30.8% YoY) on sales of ¥13,600mil (+13.7% YoY) to OP of ¥3,500mil (+47.7% YoY) on sales of ¥14,000mil (+17.1% YoY). The FY21 dividend forecast was also revised to ¥35.00/share on a revised EPS of ¥136.88/share.

The firm's assumptions on each segment are as follows:

1) Adhesive Enhancer

Previously, MEC estimated the sales of CZ series at approx. ¥7,400mil. Thanks to continued strength in demand for semiconductor packages, bolstered by strong demand for servers, and the associated strength in demand for CZ-8101, the firm revised the full-year sales of the CZ series to ¥8,000mil. CZ-8101 full-year sales were only revised by ¥200mil to ¥4,200mil because MEC has a conservative assumption for 2H given the shortage of semiconductors. Demand for CZ-8101 still remains solid, especially for packages used in servers.

For CZ-8100, MEC previously assumed flat growth YoY as it expected the semiconductor shortage would continue to be an issue for the automobile sector. However, thanks to a rise in the number of semiconductors used per vehicle, the firm now assumes that the solid trend seen in 1H CZ-8100 sales will continue into the 2H. Furthermore, demand for CZ-8100 used in memory is also seeing an uptrend. Equally, for V-Bond, while the firm assumes that sales will remain solid, it expects a slower pace of growth in 2H.

2) Etching Chemicals

MEC had already assumed that SF sales would gradually shrink as new versions of a certain high-end smartphones and tablets will no longer require touch panel sensors, for which SF is used. Therefore, the drop in sales in Q2 was not a surprise. Although the COVID-led boost in the sale of tablets that do include touch panels somewhat supported sales of SF during 1H, the firm estimates that this positive impact will fade away in 2H.

For EXE, sales growth will likely be delivered by strong demand for displays and mid-range smartphones in which EXE is used in COF throughout the year.

3) Cost increase

MEC estimates an increase in personnel costs (both labour cost in COGS and personnel cost in SG&A) and overheads. As a result, the FY21 OPM is estimated to fall to 25.0% vs the 27.8% OPM achieved in 1H.

Demand from Package Makers to Remain Firm

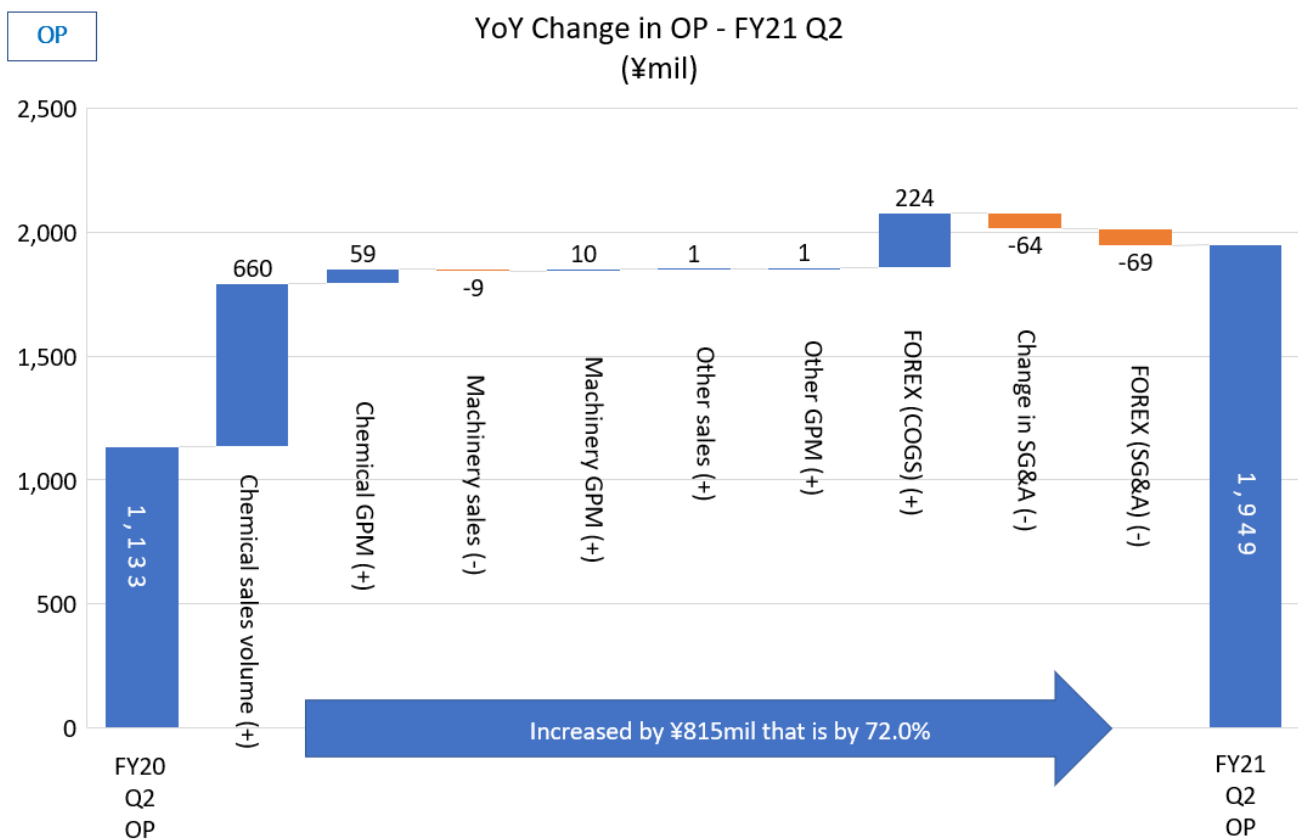
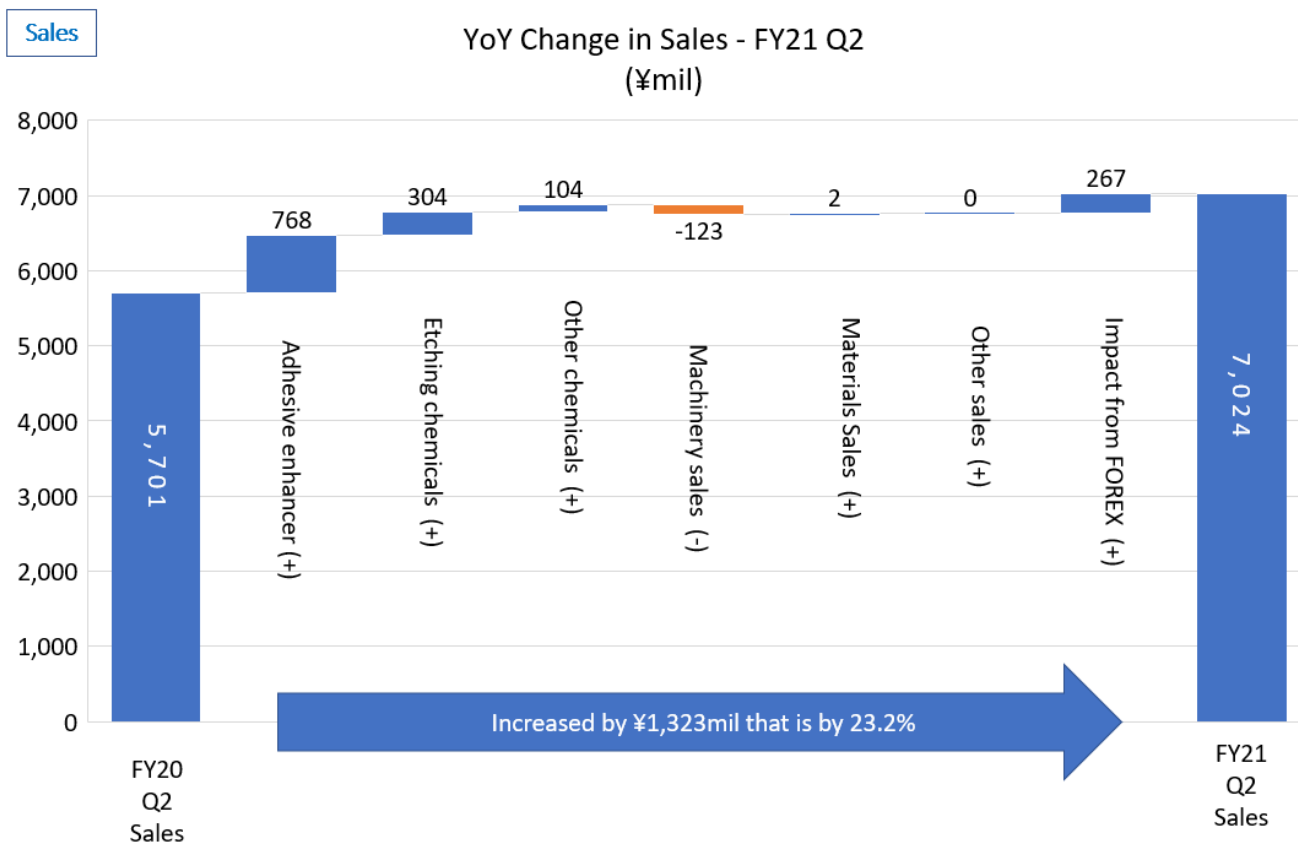
The key driver in earnings growth will be the demand for CZ-8101 from package makers. Although there is an ongoing short-term uncertainty, MEC reckons that the medium-term potential for its chemicals will likely remain steady. Chipmakers, as well as package makers – MEC's customers – are reportedly continuing to invest in capacity expansion to meet the demand from data centre servers as more 5G infrastructure is installed. It is said that towards 2025, package makers will gradually shift to the chiplet packaging method, which enables the size of a package to be larger and have more layers. Therefore, packages will require approx. 8x more CZ chemicals than the current amount used to produce packages for PCs. Judging from the level of CAPEX that is planned by its customers, MEC assumes the current high demand for its core chemical will likely remain firm until FY2023, then anticipates demand slowing down by FY24~25.

Capacity Management and Expansion

Currently, MEC's factory in the Suzhou factory in China has been operating at the full capacity. Due to strict environmental regulations in the province that restricts adding expansion to the existing plant, MEC ships product directly from Japan. Due to the current soaring shipping freight rate, the firm assumes ¥50mil rise in freight cost in 2H. Exporting from Japan will be a temporary solution but will likely continue until FY22, while MEC increases capacity at its another factory in Zhuhai, near Macau. Furthermore, the shift of capacity from the Nishinomiya factory to a factory in Thailand, which has been pending due to COVID, will likely be completed in FY21. From FY22, after the accreditation process of the Thai factory by customers is completed by the end of FY21, the Thai factory will add further capacity that enables the firm to supply to customers in the Southeast Asia. Over the past two years, MEC has spent total of ca. ¥2,200mil on CAPEX to enhance the production capacity to generate an annual sale of ca. ¥17,000~18,000mil. In FY21, MEC is planning CAPEX of approx. ¥700mil, some of which has already been spent on enhancing the existing capacity at the Amagasaki factory. In FY22, the firm plans an increase in capacity at the Nagaoka factory in addition to aforementioned capacity increase at the Zhuhai factory. However, those investments will unlikely need any large CAPEX.

Applications and trend for MEC's main chemicals					FY20	YoY	FY21CE	FY21CE	YoY
Chemicals	Applications	Trend	(¥mil)	(%)	Old	New	(¥mil)	(¥mil)	(%)
CZ series	PC, Tablets, Servers, AiP, packages for automobiles.	<ul style="list-style-type: none"> As seen in FY20, MEC expects strong demand for servers due to a rise in demand for tablets and laptops on the back of increasing remote work and distant learning in FY21. Expansion of 5G infrastructure that 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	13.5	7,400	8,000	27.8		
EXE	COF (Chip-on-Film) for smartphones and tablets. Currently tested for usage in high-end smartphone motherboards.	<ul style="list-style-type: none"> FY20 sales were led by rising tablet and laptop demand. FY21 growth relies on the recovery of Chinese smartphone production. Increasing enquires for the subtractive wire forming method, in which EXE is used, in HDI motherboard. 	1,307	1.1	1,617	1,617	23.7		
V-Bond	Pre-lamination treatment for multilayer substrates. Used in packages for autos and middle-end smartphones	<ul style="list-style-type: none"> Sales recover in line with automotive and Chinese smartphone production 	668	-2.5	768	768	15.0		
SF	Touch panel sensor	<ul style="list-style-type: none"> Decline in sales from smartphone display expected because of a new technology that does not require sensor. 	1,091	11.4	1,205	1,005	-7.8		

Source: Nippon-IBR



Source: MEC Co., Ltd. FY21 Q2 earnings results presentation

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