

Internal Correspondence

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Subject: 3520 Double Decker OVM Product Review/June 22, 1981

Date: July 1, 1981

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SEP 9 '81

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The product review included presentation and discussions of laboratory data regarding performance of the 3520, the manufacturing and quality assurance aspects established to date.

Technical (L. W. Anders)

1. Results from xylene leakage tests showed a good seal between the primary and secondary body.
2. % recovery of the double decker monitor was unaffected when spiked at increased concentrations of ketones, esters, and halogenated compounds. Data collected were based on (12) samples per compound.
3. Sampling rate tests on representative group of compounds were run to verify a weight correction factor, K, which is the ratio of the sampling rate of the primary wafer to the secondary wafer. The K value is used to determine the total weight collected by the double decker monitor:
$$W_{Total} = W_{pri.} + K \cdot W_{sec.}$$
4. At different PEL of various contaminants, experimental data to date showed a K value of 2.2.
5. The secondary wafer (back up section) will sample no more than 25% of the primary wafer.
6. Test data showed that the double decker monitor will perform satisfactorily in an environment where a mixture of compounds is present.

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Manufacturing (P. L. Sullivan)

1. Currently, the primary body and its lower cup are molded at Bldg. 98 Shop using a single cavity prototype mold. The secondary body is molded at Key Tool, using a four-cavity production mold.
2. Cost per part is:
 - a) primary body - \$.34 ea.
 - b) primary body lower cup - \$.34 ea.
 - c) Secondary body - \$.15 ea.

With improvements in the primary body mold, the cost/unit is estimated to be reduced to \$.28/ea.

Quality Assurance (E. M. Songco)

1. Release tests for incoming inspection, in-process, and final product, are known and specified. Most of the tests are routine for the 3500 monitors, with the exception of the sampling rate.
2. Verification of the K value will be done by doing more sampling rate tests. This will start the week of June 29.
3. Shelf life study will commence soon as samples are received.

General Discussion/Comments

1. The unit price for the double decker monitor has not been determined yet.
2. L. Anders has test data of 3520 vs charcoal tube.
3. L. Anders has completed product literature.
4. There are enough parts to make 5M monitors.
5. Can the 3520 replace the 3500? A marketing strategy should be targeted at areas where the 3500 don't sell.
6. More emphasis or information on the capacity; i.e., what is its capacity for vinyl chloride?


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