

TEKwEEK

They proved it can be done



FACED WITH THE CHALLENGE OF JAPANESE COMPETITION, the Ceramics Group of Hybrid Ceramics Manufacturing worked out ways of making CRT envelopes at lower cost, yet maintain high quality. Dale Thornburg (Ceramic Component Manufacturing manager), center, displays the "You Done Good" award that was presented to the group.

See article on page one

TEK WEEK

Ceramics competes with the Japanese . . . and wins!

Not everyone can meet Japanese competition and beat them at their own game. But it's happening more and more frequently at Tektronix. Here is the latest success story:

In June, 1982, the Ceramics Group of Hybrid Ceramics Manufacturing was making ceramic CRT envelopes used in our 465, 475, and 2200 Series oscilloscopes. The Japanese offered to make an electrical equivalent glass envelope 28 per cent cheaper than the ceramic funnel in lots of 100,000.

The CRT Manufacturing Group notified Ceramics that they must become competitive with the outside world or lose the 465-475 envelope account.

Dale Thornburg (Ceramic Component Manufacturing manager) recalls his reactions:

"At first, I didn't see any way that we could compete. Although we had several innovative CRT envelope cost reductions in the planning stage, I was apprehensive that even if those ideas were all effective, we couldn't begin to come close to that price."

But Dale and his staff burned some midnight oil and finally proposed to build 100,000 ceramic envelopes at a competitive cost by the first of June, 1983.

"CRT Manufacturing was impressed with our proposal," Dale said, "and gave us permission to go ahead. By the end of May, we were proud to announce that we produced the CRT envelopes for the last quarter of year 300 at a weighted-average cost that was below both our estimated cost and the Japanese bid."

Dale pointed out several innovations that made the critical difference in lowering variable manufacturing costs.

"At our isostatic ceramic envelope stations, we formerly pressed two envelopes simultaneously. Envelope sawing, cutting and drilling were done at separate work stations. With our redesigned work station, now one operator presses three envelopes simultaneously and accomplishes the saw, cut and drill operations as well."

Dale indicated that similar savings were accomplished at the ceramic envelope grinding stations where the top and bottom of envelopes are ground flat and washed.

Previously, two operators worked at a four-grinder sta-



SINCE IT WAS A GROUP EFFORT, this certificate should say, "You All Done Good." Dale Thornburg (Ceramic Component Manufacturing manager), left, and Barbara Lepschat (HCM Funnel Production) represent the Tekns in Ceramics who "done good," while Chris Curtin (Display Devices Manufacturing manager) represents the "customer" group which recognized Ceramics for a high quality product at low cost.



A CERTIFICATE IS FINE, but food is better! After the presentation, members of the Ceramics Group were treated to a 6-foot long submarine sandwich, one slice at a time.

tion, each operator grinding and washing envelopes. Now, one operator controls all four grinders at each station. The washing occurs automatically on the conveyor to the next manufacturing operation.

"Before," Dale said, "we finished 200 envelopes at each grinding station in eight hours. At each station now, we turn out 800 envelopes on each eight hour shift."

Dale also mentioned that an evaluation of the material-

handling station procedures where envelope inspection and packaging occurred resulted in additional improvements.

"Our people made the difference," he said proudly.

"It was a team effort. The ceramic managers and engineering staff came through with innovative ideas and the tenacity to work them out. And our production people made those ideas practical and effective."