



Thin Film, Big future

This little wafer of glass is one of the most significant telephone advances since the invention of the transistor.

Reason? It's a complete electrical circuit, ready to be slipped into a piece of communications equipment.

In the years to come, as it finds its way into new Bell System "hardware," it will save money and help hold down the cost of your telephone service.

We deposit thin films of metal *only four millionths of an inch thick* on a glass surface like that shown in the picture above.

Because thin-film circuits are photo-etched on the glass, they can be made economically.

And because a number of components and connections can be consolidated into one unit, thin-film circuitry is extremely reliable and precise.

Thin-film technology has benefited from many important contributions by Bell Telephone Laboratories. It is now being applied to a number of Bell System products manufactured by Western Electric. Among these are a new Electronic Central Office, a new high-speed data transmission system, and a new switchboard.

Thin as the film is, its future is big in our plans to keep improving your telephone service while helping to hold down its cost.



Bell System

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