

Hanover Fair reflects world depression

by William Engdahl

The Hanover Industrial Fair, held April 1-8 in this northern German city, is one of the most remarkable events in the world for anyone concerned with the latest research and application of industrial production technology. Begun immediately after the war, it has grown to become the world's largest and most important trade fair. Buyers and sellers of technology from all over the globe gather to show their wares, and talk.

This year, more than 6,000 companies from throughout Western Europe, North America, and select developing countries presented exhibits of their newest and most impressive technological production tools and machinery.

First, some positive observations: Only last year, commercial development of a six-axis industrial robot in conjunction with a laser driver was a major new advance displayed by two German firms. This year, six-axis robotics was evident to a degree that it has become accepted "state of the art." The British company now owned by Westinghouse, Puma, displayed a "mini-robot," marketed through Westinghouse's Unimation subsidiary. The PUMA 260 is a six-axis unit with a payload capable of just less than a kilogram and a reach of 0.4 meters. The machine has been developed for specific application in the automated creation of computer chips. In new generation microchips, air purity control is one of the most persistent problems. Human operators, even with high sanitation garb, masks and such, achieve an air purity level of "Class 1000." Normal robots typically achieve Class 100. Puma's new unit claims air purity clean-room specification to Class 10.

The world leader in overall robotics for several years has been the Swedish company, ASEA. This year, too, they featured a number of new, larger units. Other firms had interesting combinations of new robotics as well.

Something was clearly absent, however. The explosive enthusiasm and optimistic technology-push of the previous several years was gone. One leading robotics spokesman told the author, "The bottom has fallen out of the world robotics market in the last few months. The worst hit came with GM in the States announcing cancellation of plans to add 1,000 robots to its production facilities." Alternative markets under present conditions of dollar uncertainty, simply are not evident. Much of the boom was based on the promise of expanding U.S. markets, under the rhetoric of the Reagan "recovery," combined with the extraordinarily favorable terms of trade for West European exporters, especially German

exporters, through the end of 1986. But the "mini-boom" of 1985-86 in this vital area has collapsed.

Austerity is the buzz word

The most telling reflection of economic pessimism came in the opening remarks of the president of the West German Employers Federation, Dr. Klaus Murmann. Murmann expressed concern over "radical changes taking place in international trading patterns. Almost all countries have been affected by the dramatic fall in the dollar. . . . The dollar area, which extends far beyond the U.S.A., accounts for approximately 30% of world exports and 35% of world imports."

So far, he is correct. But this important European industrialist, speaking before the world's most important exhibit of industrial technology—the path out of any industrial depression—could only think in terms of depression, not how to get out of it.

In sharp contrast to similar keynotes in previous years, which stressed development of the frontiers of technology for the automated "factory of the future," Murmann spent the greater part of his remarks calling for three desperate economic austerity measures. He called for "top priority to . . . balancing the budget and cutting public expenditures." For the Western European economy, this would mean inducing severe depression by slashing vital state support for steel, coal, shipbuilding, and many other strategic sectors of the fragile economy. He then turned to the vital area of medical care. At a time when the exploding AIDS epidemic is demanding exponential expansion of medical and biological expenditure, Murmann called for a structural reform of West Germany's still functioning medical insurance system in order to "prevent social spending from exceeding all limits." Ironically, two minutes later, Murmann cited medical technology as one of the areas where Europe "leads the world." And finally, he foolishly attacked the high wage-cost of European industry.

All of this made the impact of the feature exhibit of this year's Hanover Fair a bit anti-climactic. The theme, chosen each year to illustrate the most important new frontier in industrial technology development, was appropriately "Systems Integration—the Key to the Factory of the Future." This was a special exhibit on production automation under direction of Prof. Hans-Jürgen Warnecke of the West German Fraunhofer Institute for Production Technology and Automation, located outside the industrial city of Stuttgart. It demonstrated a DEC/Vax-compatible system for sequential multiple-product assembly lines for achieving optimal production control, planning, and monitoring. It contained numerous features which would be standard industrial technology in an expanding world market.

But so long as industrial spokesmen who should know better call for industrial austerity, there will be no expanding market. Depression will only deepen.