Slipping **Industrial Machinery** Gears

Japan's machinery industry finds little comfort in today's rigorous business environment. Industrial machinery makers are struggling to make headway in the face of dropping export competitiveness brought on by the rapid appreciation of the ven and an investment slowdown in the key United States market. Restraints on plant investment by domestic manufacturing companies. which were struck a body blow by the ven's appreciation, have not helped either, while falling crude oil prices have exhausted the economies of Middle Fast oil-producing countries. Little relief can be expected this year.

Construction machinery

The exports and production of construction machine makers are believed to have decreased in 1986 from year-before levels. Despite several price hikes, the export prices of Japanese machines were not able to keep up with the rapid rise of the yen. The cost performance of Japanese construction machines has also begun to sag due to the strong Japanese currency. At the same time, the weakness of Japanese makers' sales networks in the huge American market is gradually becoming apparent.

The export environment is expected to remain rigorous in 1987. No substantial increase in domestic demand can be expected despite a supplementary budget amounting to ¥3.6 trillion, including ¥1.4 trillion earmarked for public works proiects. This is because all construction and engineering companies are already burdened with big inventories of large construction machinery. Increased demand for small construction machines can be expected, however, as building construction increases to meet the heavy demand for office space in the heart of Tokyo.

Machine tools

Exports of machine tools to North America, accounting for half of Japan's total machine tool exports, are believed

to have decreased in 1986 from year-before levels due to the ven's appreciation. while in Japan the automobile and electric machinery industries, both major users of machine tools, curtailed their fixed investment. Consequently, machine tool output in 1986 is believed to be about 80% of the previous year's ¥1 trillion (about \$6 billion) production.

In 1987, a double-digit decrease in production is again considered inevitable. Reasons include the prevailing uncertainty over the automobile industry's plant and equipment investment plans, the likelihood that the electric machinery industry, embracing such growth businesses as information and communications apparatus, will not recover until the second half of 1987 and the imposition of quantitative quotas on exports of machine tools to the United States as a result of the Japan-U.S. trade friction over machine tools that surfaced in 1986.

Agricultural equipment

The production of agricultural equipment in 1986 was firm compared with other machine types. This was due primarily to replacement demand and relatively steady home lawn mower and small tractor exports to the United States.

In 1987, incremental agricultural equipment production is expected to be sustained despite Japanese farmers' hesitancy to purchase new machinery in the face of the Agriculture. Forestry and Fisheries Ministry's policy of further reducing rice-planting acreage and the braking of agricultural equipment exports by the strong ven. This is because there is no competitive maker of small tractors in America. Meanwhile, the mechanization of agricultural production in Southeast Asia is progressing, albeit gradually, and domestic farmers' replacement demand is expected to strengthen once again.

Precision machines

Prices of Japanese precision machines, especially timepieces and cameras, were

Industrial Machinery Supply and Demand

	FY 1985	FY 1986 (estimate)	FY 1987 (forecast)
Production	15,019.9 (4.6)	13,989.0 (-6.9)	13,970.0 (-0.1)
Domestic demand	10,986.4 (4.1)	10,885.0 (-0.9)	11,063.0 (1.6)
Exports	4,640.2 (4.4)	3,579.0 (-22.9)	3,456.0 (-3.4)
Imports	606.7 (-4.3)	475.0 (-21.7)	549.0 (15.6)

Note: Figures in parentheses represent the growth rate over previous year.

raised several times overseas during 1986 to keep up with the ven's sharp rise. As a result, timepiece inventories in the United States were double the appropriate levels last summer, forcing all makers to cut monthly production by 5-15%.

All precision machine makers are rapidly increasing their production in Asian NICs. Japan's exports of key parts to NICs, and NICs' exports of finished products to all parts of the world, will increase in 1987

Office machines

Office machine production in 1986 was projected to dip from year-before levels as a result of reduced exports of copy machines to Europe and the United States stemming from the strong ven. The negative growth can also be attributed to the EC Commission's imposition of a dumping surcharge on Japanese plain paper copiers, and to the fact that Ricoh Company and Minolta Camera Co. both started local production in the United Kingdom and West Germany, respectively, in 1986. Despite the stiff business environment, the office machine industry is expected to achieve positive growth in 1987 by developing new machines with multiple functions and by widely incorporating microelectronics technology to increase the value added of their conventional machines. Makers are also working to take advantage of the deep-rooted demand for OA (office automation) machines and generate fresh demand for personal use machines.

Plants

Exports of plants on a dollar basis are believed to have decreased nearly 40% in 1986 from the year before. The plunge is due not only to the economic recession in oil-producing countries caused by falling crude oil prices but also to reduced price competitiveness because of the yen, and to increasing competition from NICs, especially South Korea. This situation is not likely to change greatly in 1987. All plant engineering firms are striving to tide over the slump by rationalizing their operations, including reductions in personnel. Possible countermeasures include putting more effort into the domestic market, concentrating on smaller facilities like food-processing plants, furthering factory automation (FA) and establishing tie-ups with overseas plant makers. However, it seems that Japanese plant manufacturers will have to resign themselves to an extremely harsh environment for some time to come.

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