In 1988, the value of Japanese-made packaging and packing machinery was in excess of ¥373 000 million, an 8.6 per cent increase over the previous year. In 1989, it rose to just under ¥400 000 million. Of the total value, packaging machinery accounted for approximately ¥293 000 million in 1988 and an estimated ¥310 000 million in 1989. For packing machinery, the shares were ¥80 000 million for 1988 and nearly ¥86 000 million for 1989. Domestic production of packaging and packing equipment for the 10-year period from 1979 to 1988 is presented in Table 2.

The food industry is the major recipient of domestic production. However, from a high of 90 per cent in 1962, the food industry's share declined to an estimated 58 per cent in 1988, a decrease due to expansion of packaging and packing machinery applications in other business sectors. The leading end users of packaging and packing machinery are outlined in Table 3.

Distribution of domestic production between packing machines and each of the 12 principal types of packaging machines is presented in Table 4. For the purposes of this guide, a distinction has been made between packaging and packing equipment. Packing machines are a sub-category of packaging machines and are defined as "machines designed to hold and protect products for storage or transportation." In general, all packaging machinery sectors have experienced growth over the last five years and this trend is expected to continue for several years.

Imports

Imports of packaging and packing machinery have fluctuated since 1979 and now stand at close to \pm 13 000 million (see Table 6). Combining domestic production, imports and exports, the domestic market is estimated at \pm 364 632 million for 1988. At slightly over \pm 13 000 million, imports represent a 4 per cent overall share.

Europe remains by far the major supplier of imports (see Table 5). In 1988, imports from Europe were valued at just under ¥11 600 million. North America was a distant second with ¥1 400 million and Asia third with ¥197 million.

Data on the value and volume of selected types of imported packaging equipment is presented in Tables 7 to 12. While Europe is the dominant supplier, the United States ranks in the top three for three of the five categories and is the leading supplier of on-line scales.

Exports

Exports have steadily increased since 1979 and now stand at close to ¥22 000 million, substantially exceeding the value of imports. The principal markets for Japanese packaging machinery are the newly industrialized countries of South East Asia, the United States and Europe (see Table 13). Data on the value and volume of selected packaging machinery exports is presented in Tables 14 to 16.

Table 4
Packaging Machinery Production by Type

-	1984		1985		1986		1987		1988		1989 (est)	
Machine Type	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value	Volume	Value
Packaging Weigher	7 113	18 970	6 776	20 926	7 049	21 585	7 341	22 169	7 437	23 933	7 743	25 935
Filling	4 115	24 457	4 692	26 016	4 839	27 391	4 768	28 062	4 962	29 258	5 438	33 123
Bottling	2 705	35 450	2 947	37 687	3 270	38 106	3 433	45 314	3 805	51 774	3 970	55 482
Canning	711	5 935	678	5 958	748	6 853	582	4 797	779	6 176	809	6 402
Pouch Packaging	8 429	36 967	8 389	38 005	8 839	39 962	9 956	41 211	10 741	42 770	11 550	43 993
Form-Fill-Sealing	829	11 686	731	12 646	794	13 154	867	15 428	902	17 266	982	18 228
Labelling	264 360	14 726	260 193	14 638	277 743	14 910	311 989	17 507	315 273	22 738	320 563	25 515
Cartoning	417	5 991	434	6 092	412	6 385	429	6 519	438	6 771	488	7 277
Wrapping	33 640	23 964	36 702	26 595	39 033	27 508	40 723	27 778	43 566	29 517	48 148	31 228
Sealer	41 604	12 683	43 027	14 671	47 589	16 260	47 837	16 918	52 073	17 029	54 770	18 459
Shrink Packaging	3 589	6 040	3 392	7 011	3 424	7 505	3 768	8 207	4 235	9 635	4 540	11 014
Vacuum Packaging	3 4 87	8 836	2 904	9 251	3 224	10 981	3 738	11 310		12 872	5 521	14 325
Others	3 366	17 728	7 745	20 496	8 358	20 515	10 643	23 658	14 582	23 614	13 850	21 760
Packing Equipment	162 933	60 907	172 630	67 601	172 047	70 699	167 092	74 844	178 383	79 929	189 739	85 924
Total	537 298	284 340	551 240	307 593	577 369	321 814	613 166	343 722	642 312	373 282	668 111	398 665