

¥59 279 million or 34 per cent. Other major market sectors included marine research equipment with 20 per cent and civil engineering related equipment with 14 per cent.

Imports

Minimal statistical data are available for imported ocean industries equipment. As a result, it has been necessary to rely on industry sources and hearsay for information. Sources have indicated that, on average, ocean industries equipment imports are estimated at 50 per cent of the overall market.

Ocean industries equipment is primarily imported from the U.S., France, England, Scandinavia and Germany. Canada has also had some significant sales and there has been at least one reported case of a U.S.-sourced order for a submersible where the technology was Canadian.

In the past, Japanese companies have imported ocean industries equipment for its quality, advanced technology and price. With the strength of the yen, cheaper labour costs and higher quality products available overseas, it is more feasible, in many cases, for Japanese equipment manufacturers to import rather than to research, develop and produce equipment themselves.

Exports

Exports are defined by the ocean industries sector to be primarily standard and ship-related equipment, including imported equipment accompanying export ships. Due to the lack of documentation in this sector, the role imported equipment plays in exports is unascertainable.

In 1988, Japan's marine equipment exports totalled more than ¥64 300 million or about 36 per cent of the total domestic market. The importance of exports for various categories of product is set out in Table 3.

End Users and End Uses

The three principal categories of end users are subcontractors, government agencies and "kaizoku."

Subcontractors. Most Japanese marine-related construction, offshore oil and gas exploration companies, and government engineering agencies do not maintain full-time industrial divers. Instead, they subcontract undersea-related tasks to diving and salvage companies who also supply the basic equipment for the jobs.

As most diving companies are small, major equipment such as remote operated vehicles (ROVs) are often supplied by the construction, oil and oil drilling

TABLE 3

Marine Equipment Exports – 1988

Equipment	Export Value (¥ million)	Total Sales (¥ million)	Share (%)
Marine Research	17 770	34 738	51.2
Marine Resources Development	10 653	22 571	47.2
Marine Energy	0	133	0.0
Marine Space Use	24 079	59 279	40.6
Civil Engineering Related	2 369	24 978	9.5
Anti-Pollution	980	7 144	13.7
Diving	81	1 931	4.2
Sea Disaster Prevention	6 738	15 500	43.5
Others	1 692	8 785	19.3
Total	64 362	175 059	36.8

Source: The Japan Machinery Industry Association.