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U.S. Company Charged with Pressure Transducer Sales: Who Were the End Users?

On April 30, 2012, the U.S. Department of Commerce Bureau of Industry and Security (BIS) reached a [settlement agreement](#) with a California-based company, Mattson, for its 2006-2008 sales of 47 pressure transducers worth a total of \$78,000 to customers located in Israel, Malaysia, China, Singapore, and Taiwan. The agreement does not specify or deduce which countries were the end users of the pressure transducers. Pressure transducers are dual-use equipment which has nuclear applications in measuring the gas pressure inside centrifuge cascades. The BIS letter notes that Mattson knowingly and willfully incorporated pressure transducers into semiconductor equipment it sold to the customers, which would make a U.S. export license a requirement for foreign export. BIS was informed of the scheme by a supply chain partner of Mattson's.

The sales made to customers in China, Malaysia, Singapore, and Taiwan are of concern because of these countries' history as intermediaries or turntables for goods going to Iran's sanctioned nuclear program. Iran is a known, active purchaser of a large number of pressure transducers and its procurement agents shop widely on the global market to obtain the part for its centrifuge cascades, recently targeting the United States via Canada in the [well-publicized 2009 case](#) of procurement agent Mahmoud Yadegari. It has also aggressively targeted European countries, sending between 2008 and 2009 more than 40 requests for price quotes to German manufacturers. In 2009, a Chinese company called Roc-Master Manufacture and Supply Company also [worked to broker a deal](#) with a Taiwanese distributor of Swiss-made pressure transducers, Heli-Ocean Technology Co. Ltd., on behalf of Iran. It is unclear whether Israel's nuclear program, which does not have access to legal sales of nuclear technology as a non-Nuclear Nonproliferation Treaty (NPT) state, would have been seeking the equipment. Israel, long believed to have halted its practice of illicit nuclear trade in the 1990s after pressure from the United States, was seen between at least 2003 and 2007 [illegally buying oscilloscopes](#), equipment with uses in nuclear and missile programs.

Mattson agreed to a fine of \$850,000, \$600,000 of which can be waived pending timely payment of the first \$250,000 and compliance with the terms of its probation (including not making any additional illegal sales for one year). This case shows that pressure transducers remain sought-after equipment by illicit procurement networks, particularly those used by Iran's nuclear program, and suppliers must be vigilant of suspicious requests and quickly report them to authorities.