

International Trade Statistics for Dies and Tools for Fastener Making Under HS Code 820720, 820730, 820740

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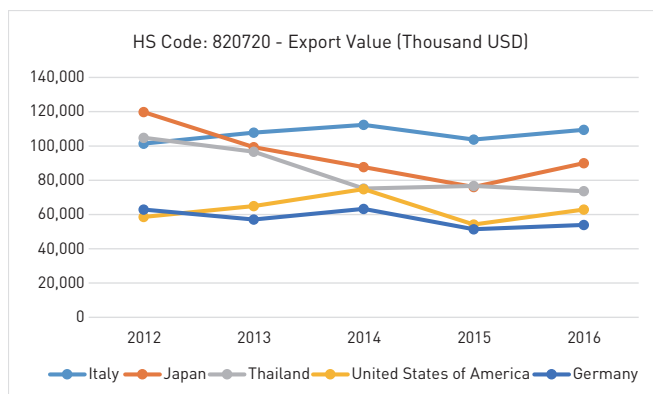
In this article the trade statistics of interchangeable dies for drawing or extruding metal under HS Code 820720, interchangeable tools for pressing, stamping or punching under HS Code 820730, and interchangeable tools for tapping or threading under HS Code 820740 are studied.

Before going through the market value and trade statistics of fasteners tools and dies it would be good to have some brief explanation about these groups of products and their roles in fastener manufacturing and production.

Basically, there are two most commonly manufacturing processes for fasteners, specifically for screw and nuts. One is forming (hot and cold) without cutting and the other one is machining. **The majority of fasteners in modern fastening technology are made using the cold forming procedure. In any of these manufacturing processes various types of dies are required which make die one of the important components in fastener production.**

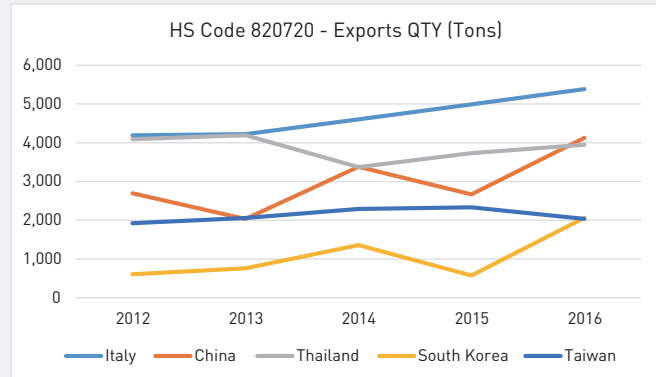
Taps and dies are metal threading tools, used to cut and restore internal and external threads precisely. A tap is used to form the female component of the assembly, as in the case of a nut or socket, a die is used on the male component, as in a screw or bolt. In other words, a tap is used to create the internal threads in a hole and a die is used to make or repair external threading on a round rod, screw, or bolt. This could elaborate the importance of these products in the fastener industry.

The first group of products we study is about dies for drawing or extruding metal under HS Code 820720. As recorded in United Nations Comtrade Database, **the top exporters of dies for drawing or extruding metal, in 2016, were Italy (\$109.5M), Japan (\$90M), Thailand (\$73.6), the United States (\$63M), and Germany (\$54 M).**

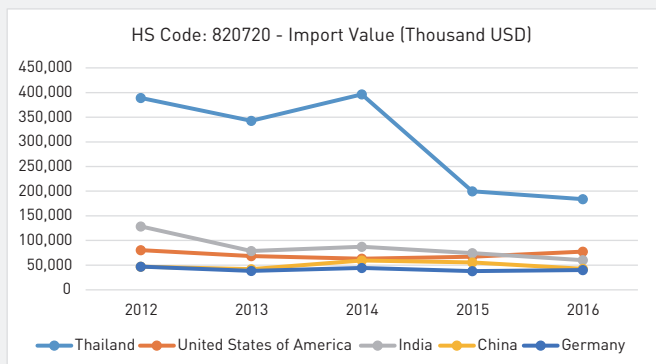


Italy's manufacturing sector is the second largest in the Eurozone, following Germany, and the sixth in the world. This country is the world's eighth largest exporter, with EU countries accounting for nearly two-thirds of its trade. Around one-fifth of fastener production in Europe, in terms of the value, is registered in Italy. Specifically, in fastener dies production, under HS Code 820720, in last 5 years, Italy has been ranked as world's top 3 exporters without any major changes in the value of its exports. On the other hand, for example, Japan which has seated in the 2nd place has experienced a drastic changes in the last few years in its export value.

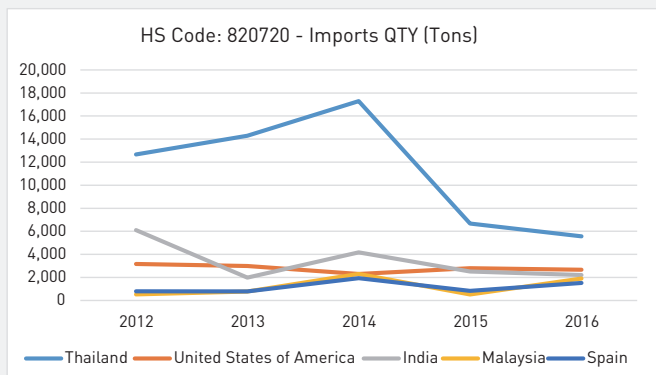
The quantity of exports in Italy has increased in last few years with the significant distance from the second and third exporters, China and Thailand. This shows that Italy has a great positioning in this market and is known as a market leader by having the highest number of exports.



With regard to dies imports, under HS Code 820720, in the global fastener market, the top importers are Thailand (\$184M), the United States (\$77.5M), India (\$60.2M), China (\$42.7M), Germany (\$40M) and Malaysia (\$34.1M).



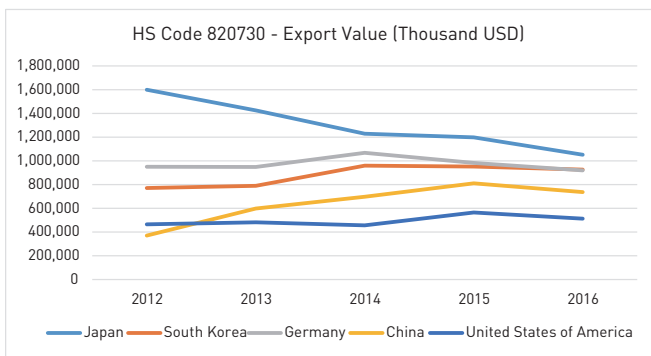
As illustrated in the following charts, the top importers are mainly Asian countries (i.e. Thailand, India, China, and Malaysia) which could be derived from their economic growth and industrialization. The growth of investment in automotive and construction is driving fasteners demand within these countries. Their continuous growth of durable goods manufacturing industries and rising demand for industrial parts for infrastructure are other key market drivers for them.



It is notable that the total export value and import value of the main category (HS Code 8207) are about USD 20.23 billion and USD 19.83 billion in 2016 respectively. Whereas, fastener dies under HS Code 820720, as one of its subcategories, have registered about USD 820 million imports and USD 724 million exports in 2016. The total amount has only contributed less than 5% of the overall trade value within this category (HS Code 8207).

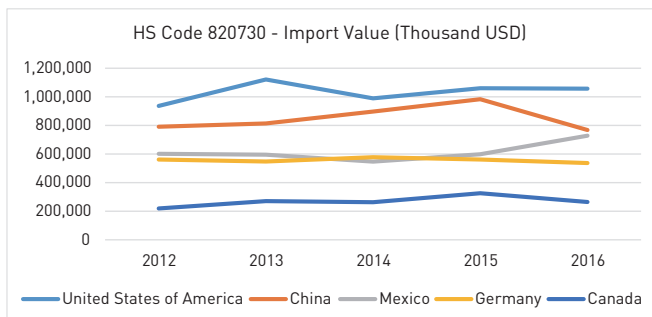
In contrast, by looking at the trade statistics of tools for pressing, stamping or punching under HS Code 820730, we could find out this category recorded about 30% of the overall trade value of products under HS Code 8207, in 2016, which is significantly higher than the other subcategories. In 2016, tools under HS Code 820730 registered about USD 5.62 billion imports and USD 6.2 billion exports.

The top exporters of tools for pressing, stamping or punching are Japan (\$1.05B), South Korea (\$927M), Germany (\$920M), China (\$737M) and the United States (\$514M). Japanese fastener manufacturers, according to the Fasteners Institute of Japan, are making efforts to build their assembly processes more efficient while maintaining high quality.



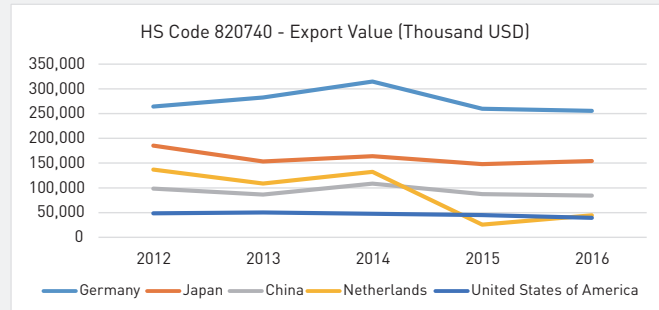
To meet such needs, the Japanese fastener industry develops new fastening methods and materials to help manufacturers make their assembly processes safer and more efficient which could be a good support for their high export value in this category of tools.

On the other hand, **the top importers are the United States (\$1.06B), China (\$768M), Mexico (\$728M), Germany (\$537M) and Canada (\$265M).** The U.S. accounted for the highest share of the industrial fasteners market in 2016. This country is the leading market in North America and Europe by acquiring more than half the market share.



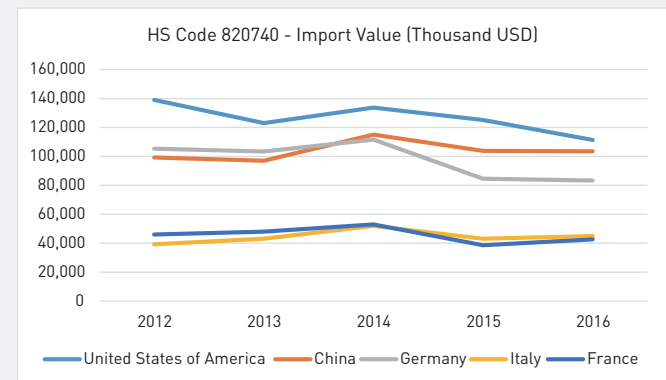
The third group of tools which is studied in this article is about the tools under HS Code 820740 which are used for tapping or threading in fasteners. The value of trade statistics for this group is much lower than tools used for pressing, stamping or punching under HS Code 820730. However, this value is very close to the group of products under HS Code 820720 which are dies for drawing or extruding metal. The comparison charts for all the 3 group of products have been illustrated at the end of this article.

The top exporters of tools for tapping or threading under HS Code 820740 are Germany (\$255.6M), Japan (\$154.2M), China (\$84.3M), the Netherlands (\$44.7M) and the United States (\$39.4M).

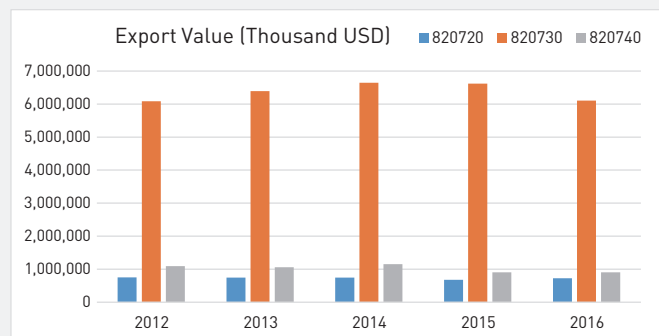
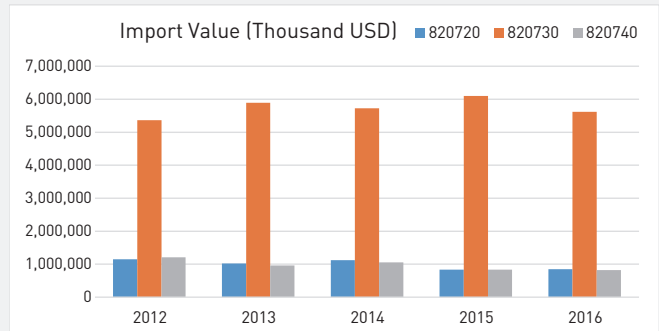


Although the industrial fasteners industry in the Netherlands is a moderately conservative industry and the fastener industry is not a leading sector, in this group of products, Netherlands has been placed as one of the top five exporters in the last five years in terms of the value of exports.

In this category of tools, the top importers, in terms of the value, are the United States (\$111.4M), China (\$103.6M), Germany (\$83.3M), Italy (\$45M) and France (\$42.7M).



At the end, we could have a comparison with all the 3 groups studied earlier by looking at their overall export and import values in the last five years.



As mentioned earlier, the value of trade and the quantity of imports and exports for tools under HS Code 820730 are much higher than the other 2 categories of products. This shows how widely tools for pressing, stamping or punching are utilized in the global fastener market. Perhaps, this could be a good insight for tools and dies manufacturers all around the world on how efficiently they set their strategic goals and business directions.