



Mexico: Mold Making Segment

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October 13

Summary

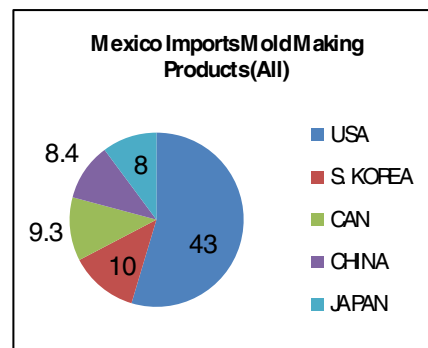
Mexico's automotive industry provides the ideal environment for the development of secondary industries like the metalworking, assembly and plastic manufacturing and tertiary industries like material analysis, material finishing, material treatment, automation and mold making. The automotive sector is growing very rapidly and today, it is capturing the attention of Tier 2 and Tier 3 foreign suppliers that are arriving to establish their operations near their clients. The automotive industry grew over 12% in 2012 with \$34.5 billion exports, compared to the previous year. By May 2013, production reached the 255,474 units and 1,221,811 units were exported, that was 3.7% and 6.4% respectively as compared to 2012. As this sector grows, the opportunities for the secondary industries will be even higher; a recent report revealed that \$1.5 billion investment is expected in 2013 - not just for the automotive but also driven by the dynamic growth of the aerospace, packaging, agriculture and chemical sectors.

The value of the plastic market in Mexico represents 2.7% of Mexico's manufacturing GDP and 0.5% of Mexico's overall GDP, nearly \$3.6 billion; these numbers are for plastic production only but can be used as a guideline to determine current mold making trends.

Market Demand

In general terms, Mexico imports 43% of mold making products from the United States followed by South Korea with 10%, Canada with 9.3%, China 8.4% and Japan with almost 8%¹. The Mexican mold and die market demands the design, construction, maintenance and repair of plastic injection molds and stamping tools; these are currently being supplied by only seven companies established in Mexico (some of them of foreign ownership, predominantly from USA, Canada, and Portugal). These manufacturers do not have sufficient capacity to cover national demand and thus, molds are imported from Germany, England, Spain and India. The mold repair business in particular is an opportunity in Mexico; companies want to avoid the cost of sending their molds abroad for repair and are opting to use domestic suppliers.

Volkswagen, for instance, buys and repairs molds in Germany, some of their molds weigh more than 20,000 pounds and the turnaround is six months; in some cases a technician is brought from Germany at the company's expense². As a result, some companies have identified the opportunity to establish specialized repair shops near the largest auto assemblers. Companies like Imoplastic, Mexmolde (Portugal), Moldblade (Spain) and Quality Mold (USA) have maintenance shops in Queretaro and Mexico City.



Market Data

According to the National Institute of Statistics and Geography (INEGI), in the last three years, the value of imports of molds in the country has exceeded U.S. \$ 1 billion on average, while exports were almost U.S. \$ 200 million. In this sense, according to the Ministry of Economy, the molds sector is not fully developed in Mexico; among other reasons, because of the existence of very few companies engaged in the production of molds (to

¹ Revista Manufactura (2013). Sector de Moldes en Mexico. Aprovechar la Coyuntura. (Docs. #83178 and #92794). Mexico City. Retrieved from <http://www.metalmecanica.com>

² Shaila Rosagal (2010). Molds for the Automotive sector in Mexico. CNN Expansion magazine, Mexico. Retrieved on Oct 9, 2013 from <http://www.cnnexpansion.com> (Article)

supply local and international markets), the low level of technical expertise, lack of standards and rules that determine the quality of molds and production costs as well as specification conforming raw materials.

In this regard, a report from the National Chamber of Industry (Canacintra) indicates that, the development of a basic mold requires a minimum capital investment of U.S. \$ 8,600, while a specialized mold requires an investment of approximately U.S. \$ 100,000. Data also shows that, in Mexico, a new industrial mold manufacturer would require a large initial investment but their return on investment may generate on a very long term basis; not for the lack of demand but mostly for unfair competition.³

The value of Mexican imports of injection molds has remained constant since 2008 at above USD\$800 million, according to CEP⁴, a market research firm in Mexico City.

Best Prospects

In addition to completed mold products, the Mexican market shows an increase in capital acquisitions of machinery like five axis machining centers and specialized tools (milling); accessories and mold parts (guide pins and sleeves, ejector pins, bushings, etc.); mold repair and maintenance products (mold coatings, micro welders); quality control devices (roughness measuring, precision measuring tools); mold management systems, technical training (in mold repair, mold maintenance, surface treatment, etc.).

Key Suppliers

In 2012, 50 mold makers were identified in the whole country⁵. Mold makers in Mexico are identifiable by their abilities to design, build, setup and maintain molds as well as by the size of the molds they manufacture. The small mold makers would be able to produce small to medium size molds; they have their own machining centers and EDM type equipment; most of them outsource material treatment. The larger ones are joint ventures, partnerships or collaborating foreign companies operating through a Mexican entity. Their capacities match the requirements of the Mexican plastic industry demand. The best known companies are listed in the following table. The map shows the distribution of companies specialized in mold making in the country, although this is not a comprehensive list and it only has the purpose to identify the locations where these companies operate.

Known Suppliers	
	Mexmolde (Portugal)
	Tecnipet (Mexico)
	Ditensa (USA)
	Mexican Int (Canada)
	Concourse Mold (Canada)
	Deal Plastics (USA)



Numerous brands are already in the market via general distributors. The following list is a collection of brands with representation by Mexican firms or with own establishments in Mexican territory.

³ Manufactura magazine. (2013). Sector de Moldes en Mexico. Aprovechar la Coyuntura. (Doc. #88684) retrieved from <http://www.metalmecanica.com>

⁴ Centro Empresarial del Plastico

⁵ Monica Conde (2012). Presente Futuro de la Industria del Plastico en Mexico. PEMEX. Mexico City

Popular Brands

Metals (Machine Grade)

- Makino
- Blue Star Alloys
- Trend Technologies
- Bocar Group
- FycoMex
- Corporacion POK
- FIMEX
- Gobar System
- KraussMaffei
- Engel Global
- Arburg
- Champion Machining

Tooling

- CNC Fadal
- EDM Aristech
- Concours Mold
- Okamoto & Mitsui
- Ingersoll Cutting Tools
- Haimer
- Darex

Fluids

- CO2 technology
- CIMCOOL
- Polytek
- Araldite
- Huntsman
- Smooth-on
- Frekote
- Adtech

Machinery

- Harrison Lathe
- Bridgeport
- Desma USA, Inc
- Kitamura
- Sodick
- R&D Engineering PI
- Hardinge
- BM Moldes
- Alessio
- Four Stars Cup Machinery
- MDI Systems
- Parco, S.R.L

Software

- Cimatron
- CAD Evolution
- GibbsCam
- Vericut
- Delcam

Spare Parts

- Jomar
- Cofit Intl.
- Champion
- Eutectic
- Alumilite
- Tap Plastics
- Wacker Silicone

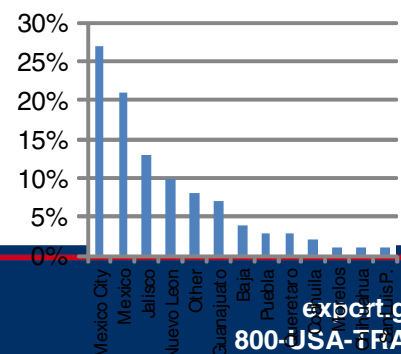
Design

- Aoki Tech
- Cado Company
- ESAB
- Harris Welco
- Profile Solutions

Prospective Buyers

The maquiladora industry (OEM establishments or subcontract manufacturers under IMMEX programs) is by far, the largest consumer of molds. The maquiladora industry includes Tier 1 and Tier 2 suppliers which outsource their new molding projects to tertiary suppliers domestically or abroad. There are more than 3,000 maquiladoras located in Mexican territory, the majority near the U.S. border with Mexico. Almost 2,700 of them are supplying plastic parts to the automotive, appliance, hand tools, toy and home accessories (including DIY) segments. In the last five years, the medical parts manufacturing sector has increased their plastic parts requirements and is becoming popular among micro plastic suppliers. The larger concentration of potential buyers of mold products is

Potential Buyers by State
(Establishments as of 2012)



found in Central Mexico; Mexico State, Mexico City and Jalisco together make up for 61% of national total buyer establishments, as seen in this chart with data from CEP.

Maquiladoras have very stringent supplier approval methods and the process takes, in the best case, six months depending much on the supplier's ability to provide quotations, prototypes, first article samples, etc. Maquiladoras are demanding that their suppliers have representation or their businesses near their plants. In Juarez (just across the US border at El Paso, TX), according to a report by the Northern Economic Development Agency⁶, "the establishment of a reliable and technically fit mold maker could facilitate the potential to substantially increase the domestic supplier base in the maquiladoras". The report notes that, in that city, there are about 334 maquiladoras (INEGI data), of which 68% are potential users of molds.

The national industry, in which products are sold domestically rather than for export, also offers some advantages and the approval process is more direct. However, this segment is price oriented and is mostly supported by domestic mold makers, with some exceptions. Some examples are industries like beverage, packaging, construction, and agriculture.

Market Entry

U. S. exporters seeking to partake in the Mexican market should consider promoting their products and services either through sales representatives or by partnering with a local mold maker. In both cases, the exporter needs to provide technical training to assure the professional levels that will best represent their companies. The second scenario is more promising based in installed capacity and customer base already in place. The size of the U.S. company is relevant in determining the size of the Mexican partner; licensing agreements, budget allowances and investment plans are of great interest to the Mexican prospect. This has been the proven strategy for the few foreign mold makers already in Mexico as stated in "Key Suppliers" section above. OEMs near-shoring their supplier base are bringing opportunities not only to Mexican mold makers but for U.S. mold makers as well. These opportunities may be known by commercial specialists at the U. S. Commercial Service offices located in Mexico City, Guadalajara and Monterrey. Interested companies may contact their local U.S. Export Assistance Center for more information on how to expand their business in the Mexican market.

Market Issues & Obstacles

The Mexican suppliers' first obstacle in providing stable and competitive prices resides in raw materials. Machine grade steel for instance, is scarce and exact specifications most times cannot be guaranteed. Imports of machine grade steel P20 are common from China, India, Russia and Ukraine. On the other hand, Mexican imports of all types of foreign steel are constantly undergoing antidumping investigations (111 totals since 1987) and compensatory fees apply in all cases under investigation. For Russian and Ukrainian steel compensatory fees are at 9%, for US steel 16% and Chinese 32%⁷. Completed mold units that meet HTS 8480.79.00.00 requirements are free of import duties as well as export duties in Mexico. The automotive assemblers are asking their suppliers to move to Aluminum (YH15 QC QC-7-10 HOKOTOL, GIANTAL, WELDURAL, 7075T651, 7475,7050, 2024, 6061, etc.), in light of that, a reduction in machine grade steel imports are predicted, while local aluminum producers will see sales increase. There are no restrictions to the importation of aluminum in Mexico.

Trade Events

- Amerimold, June 12-13, 2013, Rosemont, IL, USA www.amerimoldexpo.com/
- East Pack, June 18-20, 2013, Philadelphia, PA, USA www.packexpo.com/

⁶ Ibid (3)

⁷ DED Statistic Database. (2010). Estadísticas de la UPCI. Ministry of Economy. Mexico City retrieved on Oct 9, 2013
(Report)

- East Pack Mexico, June 18 – 21, 2013, Mexico City, Mexico www.packexpomexico.com/
- Westec, October 15-17, 2013, Los Angeles, CA, USA www.westeconline.com/2013
- Expo Manufactura, March 4-6, 2014 Cintermex, Monterrey, Mexico. www.expomanufactura.com
- PLASTIMAGEN, March 12-15, 2014, Mexico City, Mexico www.plastimagen.com.mx/2013/
- NPE 2015, March 23 – 27, 2015, Orlando, Florida, USA www.npe.org

Resources & Contacts

- Ministry of Economy (Trade Agreements, Statistics)
- <http://www.economia.gob.mx/comunidad-negocios/comercio-exterior>
- National Plastic Association (ANIPAC) <http://www.anipac.com.mx/>
- National Geography and Statistics Institute www.inegi.gob.mx
- Maquiladora Association <http://indexmetropolitana.org.mx/immex/>

For More Information

The U.S. Commercial Service in Mexico can be contacted via e-mail at: Mario.Vidana@trade.gov;
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