

other elastomers in automotive parts, TPC for automotive is expected to increase in the near future. On the other hands, consumption of TPC in electronics and electrical industry decreased mainly because of shift of the electronics industry to other Asian countries. Consumption in automotive industry is dominant; overall consumption is expected to increase by 1.5–2% in the near future.

## Other Asia

In other Asian countries (excluding Japan and China), only South Korea and Taiwan produce TPC whereas other countries consume imported TPC. South Korea is the largest consumer of TPC followed by Thailand because of

their automotive production. In the region, two-thirds of TPC is used for automotive applications. As automotive production is expected to increase in the region, consumption of TPC for automobiles will increase at more than 5.5 % per year for the next five years. As a result, overall TPC consumption growth will be around 4–5 % per year in the region.

## References

- [1] The abbreviated term according to DIN ISO 18064 for thermoplastic copolyester elastomers is TPC, but they are also often referred to as TPE-E, TPEE, or COPE. Thermoplastic polyamides (TPA) sometimes are referred to as TPE-A or PEBA.

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### Thermoplastic Copolyester Elastomers

Chemical Economics Handbook  
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Publishing date 15 December 2017,  
32 p., 4,800 USD  
<https://www.ihs.com/products/copolyester-ether-chemical-economics-handbook.html>

# The Italian market for plastics and rubber machinery, equipment and moulds

## Brilliant full-year forecast

*The Italian Plastics and Rubber Processing Machinery and Moulds Manufacturers Association (Amaplast) has issued its annual market analysis and forecast. The industry association sees a positive trend that continues unabated in the Italian import-export market for plastics and rubber processing machinery, equipment and moulds.*

According to analyses of ISTAT foreign trade data for January–September 2017 by the Amaplast Study Center, imports increased by 12 % and exports by 16 % over the same period in 2016. The increase in the active balance of trade now exceeds EUR 1.7 billion, adding seventeen percentage points.

Thanks mainly to the positive trend in exports – recording double-digit growth throughout the full nine months of the ISTAT data – Amaplast estimates that production at year end could reach a new all-time record of EUR 4.5 billion (the previous record was EUR 4.25 billion in 2007), registering at least five percentage points in growth over 2016.

“The success of Italian manufacturers of plastics and rubber processing machinery



Alessandro Grassi, president, Amaplast

who have dominated the world market for decades along with their German colleagues is the result of the technological innovation offered to their customers, providing origi-

nal, optimal solutions for production, recovery, and recycling of plastic and rubber products within an 'Industry 4.0' regime," states Amaplast president **Alessandro Grassi**.

Sales abroad – absorbing some 70 % of national production in the sector – demonstrate good performance for most machinery types, with the sole exception of plants for mono/multifilament and machines for foamed products. As regards core machinery, above average export figures are registered for thermoforming machines (+51 %) and extruders (+19 %). Flexographic printers (+27%) and various categories of auxiliary equipment such as mills, mixers, etc. also show good performance. Mould exports (+18 %) continue to increase, a category that represents nearly a third of the total.

## Europe

The Old Continent's share has grown to nearly 61 %, with the European Union accounting for 50 % of the total. The strongly positive performance in Europe (+20 %) is according to Amaplast attributable to

- significantly increasing sales to Germany (+25 %), Spain (+11 %) and France (+15 %), the three historical markets for Italian manufacturers, and

- strong continued recovery in sales to Russia (+109 %), finally bringing the country back into the top ten of export destinations.

## The Americas

The trend in exports to the Americas is more than satisfying (+12 %), thanks to new impulse in the NAFTA markets – particularly the United States, while Mexico's performance has shrunk – and to the lasting vitality of the South American markets, where Brazil appears to have achieved a stable recovery and has taken the lead.

## Asia

Sales continue to diminish to the two principal markets in the Middle East: Iran (-5%) and Saudi Arabia (-34 %). Unfortunately, the excellent trend in the United Arab Emirates and Israel is not sufficient to counterbalance this, resulting in an overall negative result (-5 %). Exports to the Far East record overall modest yet positive growth (+4 %), averaged out over significant variations recorded year after year. China and India, the main markets in the area, still show negative or very weak trends (-11% and +1%, respectively). On the other hand, the Thai, South Korean and Japanese markets are characterized by strongly increasing demand.

## Africa

Africa as a whole absorbs less than 3 % of Italian exports of plastic and rubber processing machinery although in January–September sales increased (+22 %) mainly in Mediterranean countries, with Algeria and Egypt leading. "While we recognize the excellent performance in exports," continues Grassi, "we must not overlook the positive trend in the domestic market, represented both by increases in imports and by stability in the order books of our manufacturers, which have resumed impetus, especially in recent weeks, thanks partly to the incentives provided by the National Plan Industry 4.0. Indeed, complementing the ISTAT data on foreign trade, the latest full-year forecast survey completed among Amaplast members in early December 2017 highlighted a positive trend both in revenues – growing for most interviewees in the second half of this year – and in orders, particularly in November. Overall, 55 % of those surveyed foresee improvement in their 2017 year-end results with respect to the previous year.

## Sector exhibition

Through its service company **Promaplast srl**, Amaplast organizes **Plast 2018** (Milan, 29 May – 01 June 2018). Amaplast says that this fair is the industry's most important

event in Europe for 2018, based on numbers from the last edition (1,584 exhibitors from 57 countries and 50,087 visitors from 115 countries). Together with the other four concurring events which join The Innovation Alliance (**Ipack-Ima**, **Meat-Tech**, **Print4All**, **Intralogistica Italia**), **Plast 2018** will cover the entire fairgrounds in Rho-Pero. The fairs – all accessible with a single admission ticket – will feature the technological excellence of various complementary industries in a logic of integrated supply chain: from plastics and rubber processing to industrial moulding, from manufacturing to packaging, from custom graphics for packaging and labels to goods handling and storage. **Plast 2018** will also include three satellite fairs: **Rubber 2018** (for the rubber segment), **3D Plast** (3D printing and associated technologies), and **Plast-Mat** (innovative plastics).

[www.amaplast.org](http://www.amaplast.org)

[www.plastonline.org](http://www.plastonline.org)

The Italian market for plastics and rubber machinery, equipment and moulds (in million euros)

	2016	2017 (estimates)
Production	4,230	4,500
Exports	2,970	3,200
Imports	850	900
Domestic market	2,110	2,200
Trade balance	2,120	2,300

## Global TPU markets 2017 – 2021

*Analysts of Research & Markets have issued a new market study on the development of the international markets for thermoplastic polyurethanes. According to the study the TPU market is expected to grow globally at a CAGR of 6.24 % during the period 2017–2021.*

"One trend in the market is upcoming developments in bio-based products. The interest in bio-based TPUs is rising, owing to their advantageous properties such as biodegradability, low density, recyclability, and cost-effectiveness. These advantages place bio-based TPUs at a commercially competitive position with synthetic TPUs. The industry has observed an opportunity to potentially replace synthetic TPUs with bio-based ones in several applications such as household objects, packaging, automobiles,

and furniture", an analyst from the research team said. According to the report from the Dublin-based market analysis specialists one driver in the market is rise in demand from the automotive industry. Despite the overall slowing down of the demand for automotive, the global automotive industry is now in a better shape than it was five years ago, especially in the US where profits and sales have recovered after the recent economic crisis. In China, the strong growth is consistent. By 2021, the global profits for

the automotive OEMs are expected to rise by almost 50 %. The increase in profits is expected to come mainly from the growth in the emerging markets like India, China, and Thailand and to a lesser extent from developed markets like the US, Germany, Italy, and Japan.

[www.researchandmarkets.com](http://www.researchandmarkets.com)

Thermoplastic Polyurethane Market by Type (Polyester, Polyether, and Polycaprolactone), End-Use Industry (Automotive, Footwear, Engineering, Building & Construction, Wires & Cables, Hose & Tubing, and Medical), and Region – Global Forecast to 2021.