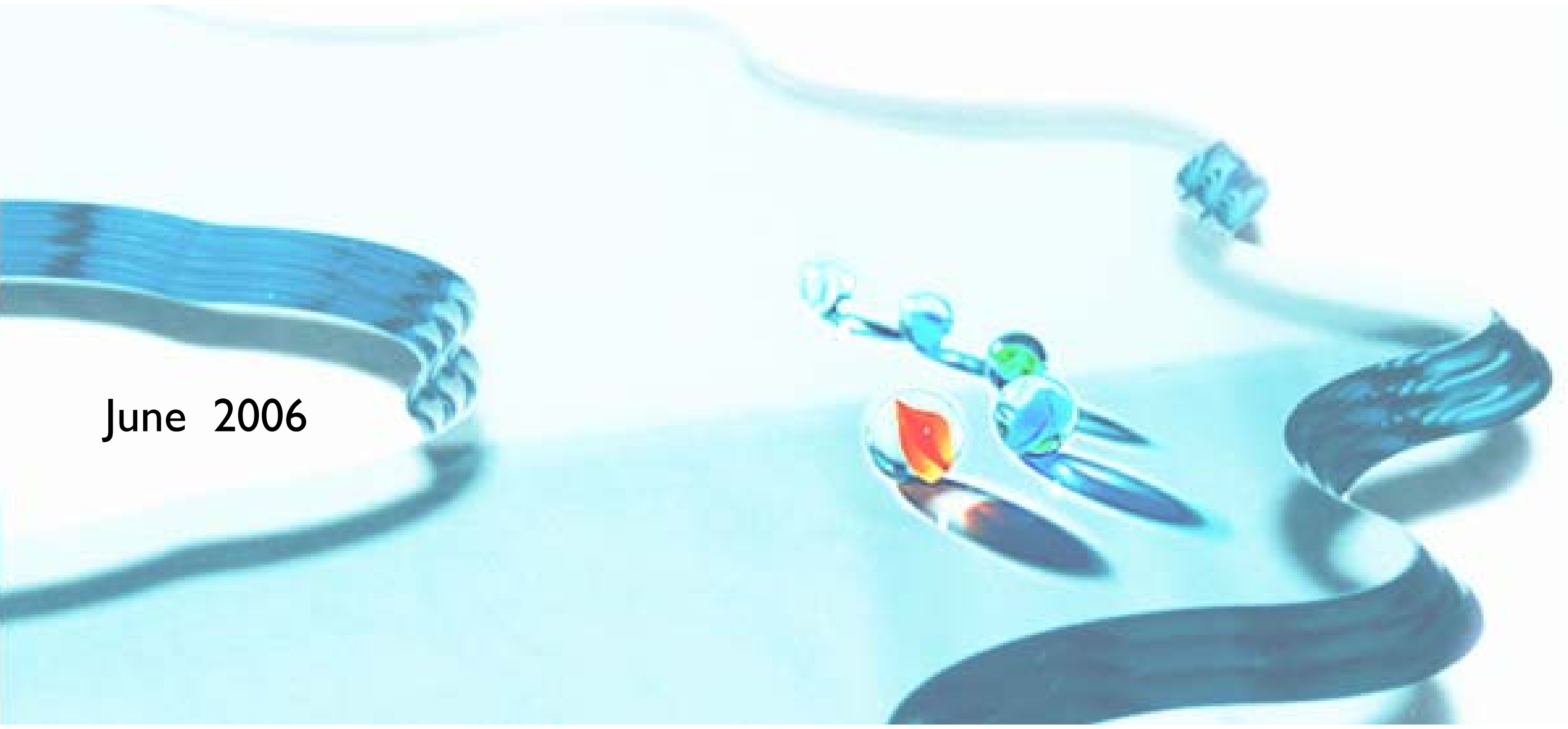
ITALIAN GLASS-PROCESSING MACHINERY
AND ACCESSORY SUPPLIERS ASSOCIATION

GIMAV

2005 INDUSTRY REPORT



June 2006

GIMAV, KNOWN AROUND THE WORLD

Established in 1980 by a small group of businessmen, GIMAV -- the Association of Italian manufacturers and suppliers of machinery, equipment and special products for glass processing – is known today as a guiding force for the industry in Italy and abroad. Its underlying goals are to safeguard the best interests of the industry, to foster the growth and expansion of its business culture, and to carry out activities that boost and support promotion of the Italian product around the globe. As a member of Confindustria, Federvarie and Federmacchine, in its 26 years of activity, Gimav has considerably strengthened its representative presence in the entire glass processing industry. Sales volume of GIMAV member companies makes up more than 80% of the overall turnover of Italian manufacturers of machinery, accessories and special glass-processing products. The value and reliability of the initiatives that form the core of the Association's activities are evidenced by the exceptionally high degree of member loyalty and constant growth of the membership base over the years.

Industry giants have taken their place alongside the founding members of the Association, but it is the small and medium-sized businesses that etched their likenesses upon the industry. Recognizing the importance of each member nurtures mutual respect and gives everyone the opportunity to participate in and contribute to the Associations's political and management decisions -- a policy that has forged a cohesive group that wields some strong international muscle.

STATISTICAL SURVEY AND RESEARCH METHODOLOGY

As is customary at this time of the year, the Association presents the annual industry statistical survey, with the aim of providing a sufficiently complete picture of the sector and information about its structure, sales, production and export markets.

A time-tested research methodology was relied upon for data collection that makes it possible to capture a reliable image of a sector that is homogeneous in terms of final product destination, but dishomogeneous in terms of the categories of the companies that work in it. For example, sales in the category called "GLASS PROCESSING" are generated by firms in the fields of chemistry, plastics, rubber, and many more. The common denominator, upon which the entire chain hinges, is the end client, the one who makes and processes glass.
Given the complexity of the situation, it is quite clear that the only official source -- the Italian Institute of Statistics (ISTAT) -- supplies reliable but incomplete data because it is limited to imports and exports tied to two macro families, identified by Customs product codes that largely come from companies in the machine-building business:
- cold processing of glass (flat glass), divided into two product categories,
- hot processing of glass (hollow glass), divided into three categories.

Since there are no reliable institutional sources, the collection of data regarding domestic turnover is even more complicated.

To bridge the information gap mentioned above, Gimav distributes a detailed questionnaire to all of its members and to key non-member firms, and also conducts phone interviews, when necessary. The return rate of completed questionnaires by members is very high and quite respectable from the others.

THE ITALIAN MACHINE-BUILDING INDUSTRY

Figures for 2005 covering the entire machine-building industry show a 0.3% drop in production compared to 2004, for total of € 21.6 billion.
Only five sectors reported an increase in production: machine tools, robots and automation, machines for the graphics and paper industries, machines for the packaging and packing industries, machines for ceramics, and machines and special products for glass processing.
Once again, overall performance can be attributed to a drop in domestic consumption which, down from 2004, severely penalized deliveries to the domestic market and reduced overall sales by 5.7%, to approx. €6.4 billion.
Results from foreign markets are positive, but not sensational. Italian machinery exports exceeded €15 billion, up more than 2% over 2004. The industries reporting moderate increases in foreign sales are the same sectors that also showed an increase in production.
Exports grew from 68.8% in 2004 to 70.5% in 2005.
A surplus trade balance to the tune of €11.5 billion, represents an increase of 1.3% over the previous year.

Production (in millions of Euros)	**2004**	**2005**	**05/04 diff.**
Acimac – Ceramics machines	1,593	1,777	11.6%
Acimall – Wood processing machines	1,598	1,540	-3.6%
Acimga – Machines for the graphics and paper industries	1,570	1,640	4.5%
Acimit – Machines for the textile industry	2,909	2,532	-13.0%
Assocomaplast – Machines for materials in plastics and rubber	3,870	3,870	0.0%
Assomac – Footwear, leather goods and tanning machines	600	488	-18.7%
Gimav – Glass processing machines and products	1,148	1,176	2.42%
Assomarmomacchine – Natural stone processing machinery	1,245	1,120	-10.0%
Ucima – Packaging and packing goods machines	2,990	3,120	4.3%
Ucimu – Machine tools, robots and automation	4,130	4,309	4.3%
Total	**21,653**	**21,572**	**-0.37%**

Exports (millions of Euros)	**2004**	**2005**	**05/04 diff.**
Acimac – Ceramics machines	1,145	1,320	15.3%
Acimall – Wood processing machines	1,328	1,262	-5.0%
Acimga – Machines for the graphics and paper industries	1,164	1,265	8.7%
Acimit – Machines for the textile industry	2,211	2,000	-9.5%
Assocomaplast – Machines for materials in plastics and rubber	2,267	2,274	0.3%
Assomac – Machines for footwear, leather goods and tanning	444	348	-21.6%
Gimav – Glass processing machines and products	828	851	2.7%
Assomarmomacchine – Natural stone processing machinery	835	770	-7.8%
Ucima – Packaging and packing goods machines	2,590	2,740	5.8%
Ucimu – Machine tools, robots and automation	2,077	2,368	14.0%
Total	**14,889**	**15,198**	**2.08%**

Domestic consumption (millions of Euros)	2004	2005	05/04 diff.
Acimac – Ceramics machines	448	457	2.0%
Acimall – Wood processing machines	270	278	3.0%
Acimga – Machines for the graphics and paper industries	406	375	-7.6%
Acimit – Machines for the textile industry	698	532	-23.8%
Assocomaplast – Machines for materials in plastics and rubber	1,603	1,596	-0.4%
Assomac – Footwear, leather goods and tanning machines	156	140	-10.3%
Gimav – Glass processing machines and products	319	325	1.7%
Assomarmomacchine – Natural stone processing machinery	410	350	-14.6%
Ucima – Packaging and packing goods machines	400	380	-5.0%
Ucimu – Machine tools, robots and automation	2,053	1,941	-5.5%
Total	**6,763**	**6,374**	**-5.7%**

Imports (millions of Euros)	2004	2005	05/04 diff.
Acimac – Ceramics machines	n/a	n/a	n/a
Acimall – Wood processing machines	135	148	9.6%
Acimga – Machines for the graphics and paper industries	719	775	7.8%
Acimit – Machines for the textile industry	573	571	-0.3%
Assocomaplast – Machines for materials in plastics and rubber	625	634	1.4%
Assomac – Footwear, leather goods and tanning machines	21	22	4.8%
Gimav – Glass processing machines and products	52	47	-10.9%
Assomarmomacchine – Natural stone processing machinery	40	22	-45.0%
Ucima – Packaging and packing goods machines	325	260	-20.0%
Ucimu – Machine tools, robots and automation	1,033	1169	13.2%
Total	**3,523**	**3,648**	**3.5%**

Employees	2004	2005	05/04 diff.
Acimac – Ceramics machines	6,894	6,495	-5.8%
Acimall – Wood processing machines	12,000	12,000	0.0%
Acimga – Machines for the graphics and paper industries	7,400	7,300	-1.4%
Acimit – Machines for the textile industry	23,200	23,000	-0.9%
Assocomaplast – Machines for materials in plastics and rubber	12,500	12,500	0.0%
Assomac – Footwear, leather goods and tanning machines	6,400	6,200	-3.1%
Gimav – Glass processing machines and products	4,500	4,500	0.0%
Assomarmomacchine – Natural stone processing machinery	11,300	10,000	-11.5%
Ucima – Packaging and packing goods machines	16,000	16,900	5.6%
Ucimu – Machine tools, robots and automation	31,330	31,330	0.0%
Total	**131,524**	**130,225**	**-1.0%**

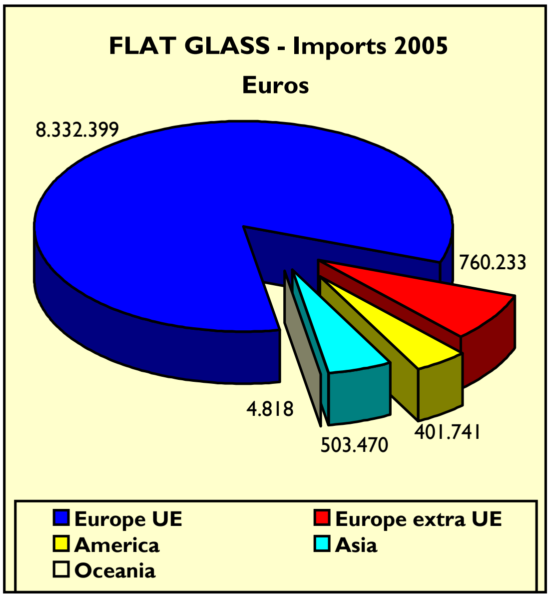
THE ITALIAN INDUSTRY OF MACHINERY, ACCESSORIES AND SPECIAL PRODUCTS FOR GLASS PROCESSING

As stated in the previous section, the industry for glass processing machines, accessories and special products (along with the manufacturers of machine tools, robots and automation, machines for the graphics and paper industries, machines for packaging and packing, and ceramics machines), is one of the five producer goods sectors to post an increase in production in 2005 over the previous year's results.
Though beset by difficulties during the first quarter, by mid-year a growth trend began to take hold and brought steady gains throughout the rest of the year.
The lively upward thrust that ended 2005 bodes well for a positive outcome in 2006, based on early interim data from ISTAT, and keeping in mind the limitations discussed at great length in the introductory part of this report.
Even the domestic market, in a slump for quite some time, is beginning to show timid signs of recovery.

IMPORTS

Foreign imports in 2005 declined considerably **(-10.99%)** versus 2004, in both categories that make up the sector – with a much milder effect on flat glass, than on the severely stricken hollow glass sector.
Specifically:
- Machines and accessories for cold processing (flat glass): - 1.20%
- Machines and accessories for hot processing (hollow glass): - 13.31%

Machines and accessories for processing flat glass accounted for 10 million Euros on total imports of just over 47 million, while Italian firms that manufacture and process hollow glass purchased foreign capital goods worth 37.2 million Euros.
The table below illustrates the trend over the past three years: 2003, 2004 and 2005, by geographic area and origin of goods. The last column on the right shows percentage changes between 2005 and 2004.



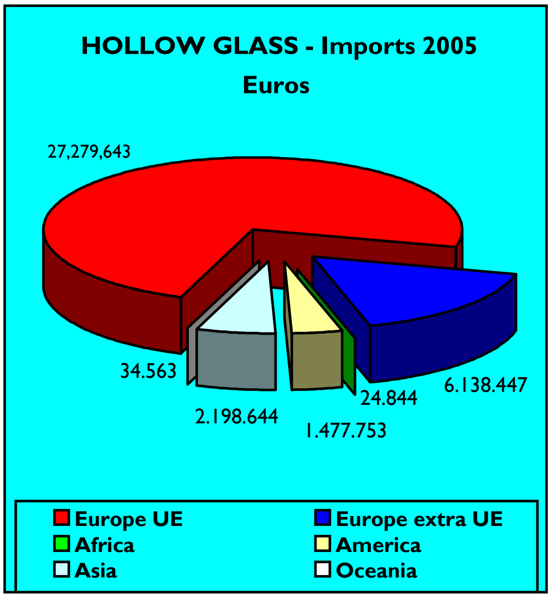


Table 1 – 2005 Imports

IMPORTS OF MACHINERY, ACCESSORIES AND SPECIAL PRODUCTS FOR GLASS PROCESSING				
Sectors Areas of origin	2003 Euros	2004 Euros	2005 Euros	% change 2005/2004
FLAT GLASS				
Europe EU (25 countries)	9,150,091	7,818,970	8,332,399	6.57
Europe non-EU	1,246,365	505,150	760,233	50,5
Africa	33,134	101,641	-	-100.00
America	243,704	863,820	401,741	-53.49
Asia	359,511	834,291	503,470	-36.65
Oceania	-	-	4,818	100.00
Total flat glass imports	**11,032,805**	**10,123,872**	**10,002,661**	**-1.20**
HOLLOW GLASS				
Europe EU (25 countries)	22,597,345	36,326,360	27,279,643	-24.90
Europe non-EU	4,898,361	4,431,025	6,138,447	38.53
Africa	28,398	186,654	24,844	-86.69
America	2,887,312	1,109,357	1,477,753	33.21
Asia	544,370	778,036	2,198,644	182.59
Oceania	-	25,240	34,563	36.94
Total hollow glass imports	**30,955,786**	**42,856,672**	**37,153,894**	-13.31
Total - flat + hollow glass	**41,988,591**	**52,980,544**	**47,165,555**	**-10.99**

Table 2 indicates imports from the most important countries of origin, by geographic area and sector

Table 2 – 2005 Imports, principal countries of origin

Origin		**Flat glass**	
Geographic area	**country**	**Euros**	**% share**
Europe EU	Germany	3,720,348	37.19%
	France	3,293,918	32.93%
	Austria	952,540	9.52%
Europe non-EU	Switzerland	191,428	1.91%
America	United States	325,835	3.26%
Asia	China	287,382	2.87%
Geographic area	**country**	**Hollow glass**	
Europe EU	Sweden	12,865,194	34.63%
	United Kingdom	4,436,388	11.94%
	Germany	3,545,541	9.54%
Europe non-EU	Croatia	3,939,603	10.60%
	Turkey	1,726,226	4.65%
America	United States	1,040,973	2.80%
Asia	China	1,342,210	3.61%

Table 2 (cont'd.) – Imports, main countries of origin, entire sector

Origin		Entire sector	
Geographic area	**Country**	**Euros**	**% Share**
Europe EU	Sweden	12,865,194	27.28%
	Germany	7,265,889	15.41%
	France	5,298,623	11.24%
	United Kingdom	4,447,080	9.43%
	Belgium	2,216,214	4.70%
Europe non-EU	Croatia	3,950,073	8.38%
	Turkey	1,798,438	3.81%
America	United States	1,366,808	2.90%
Asia	China	1,629,592	3.46%

Source: Istat data processed by Gimav

The following table illustrates domestic consumption, obtained by adding the imports and the machines, equipment, accessories and special products manufactured in Italy.
Import figures are for the last three years, and the column on the right shows the percentage change in 2005 from 2004.

Table 3 – Domestic consumption

DOMESTIC CONSUMPTION				
Sectors Product origin	2003 Euros	2004 Euros	2005 Euros	% change 2005/2004
FLAT GLASS				
Imports	11,032,805	10,123,872	10,002,661	-1.20
Domestic production	226,671,294	242,538,285	247,801,366	2.17
Total flat glass	**237,704,099**	**252,662,157**	**257,804,027**	**2.04**
HOLLOW GLASS				
Imports	30,955,786	42,856,672	37,153,894	-13.31
Domestic production	71,042,296	76,304,834	76,549,009	0.32
Total hollow glass	**101,998,082**	**119,161,506**	**113,702,903**	**-4.58**
Total Flat + Hollow	**339,702,181**	**371,823,663**	**371,506,930**	**-0.09**

EXPORTS

Overall, exports grew by 2.68%, for a total of €851 million. The percentages were different, but both sectors posted gains in their exports:

- **machines, accessories and special products for flat glass + 3.45%**
- **machines, accessories and special products for hollow glass + 0.81%**

With 29.90% of overall exports moving in its direction, the European Union remains the main area of destination for Made-in-Italy products, but suffered a significant drop in consumption, compared to 2004, when it accounted for 37%.

Upon closer inspection, Germany is beginning to recover from a significant slump in consumption over the last few years. Always a key outlet for Italian glass processing products, especially for flat glass, the German market had dropped to sixth place on the list. The first signs of a turnaround appeared in 2004 and continued to strengthen throughout 2005.

On the whole, exports to North and South America grew by about 5% over 2004, thanks to increased sales to the United States (+10.88%), Argentina (+90%) and Paraguay.
Though down from 2004, Mexico, with its 1.34% share of total exports, is still the number two client, after the US, for our sector.

The following table shows export values over the last three years, with comparisons of percentage changes in 2005 vs. 2004.

Table 4 – Exports 2005

EXPORTS OF MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR GLASS PROCESSING				
Sectors	**2003 Euros**	**2004 Euros**	**2005 Euros**	**% change 2005/2004**
Flat glass	542,343,029	588,442,186	608,743,452	3.45
Hollow glass	224,432,838	240,232,910	242,178,796	0.81
Total Flat + Hollow	**766,775,867**	**828,675,096**	**850,922,248**	**2.68**

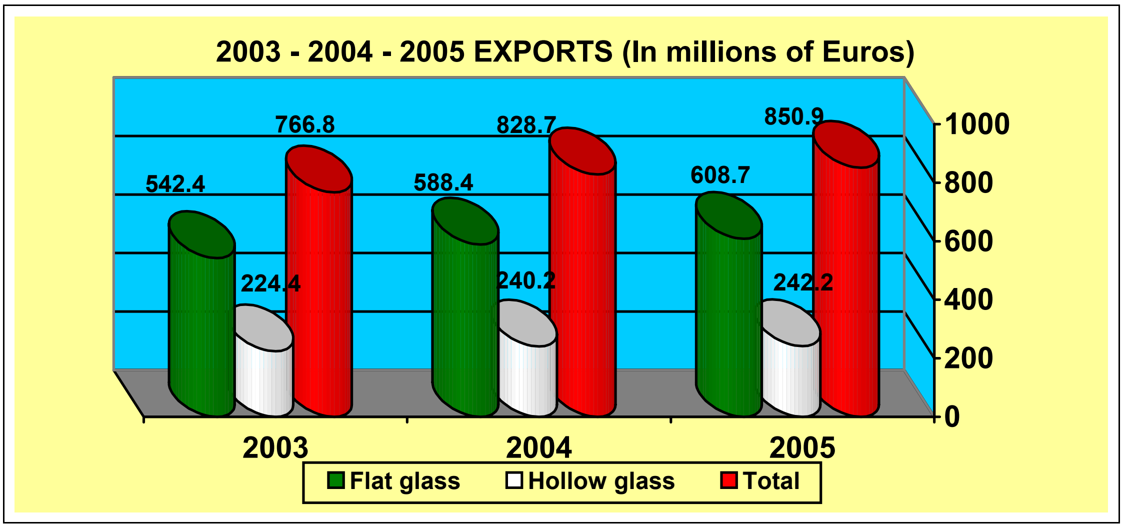
Source: Istat data processed by Gimav

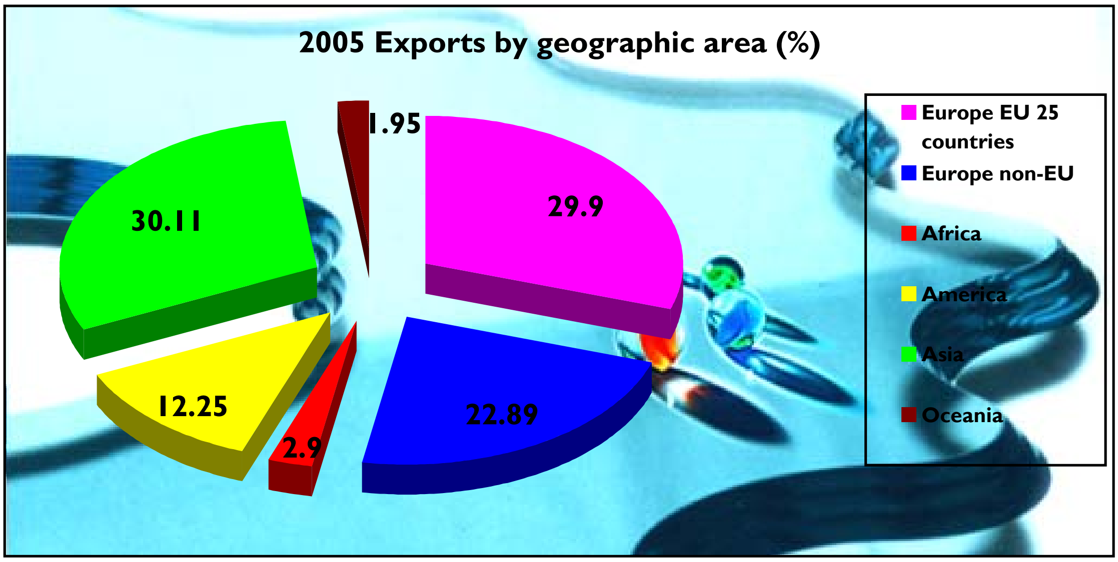
The following table illustrates the trend in exports (percentage share) over the last three years in the various geographic areas, for the entire sector (flat glass + hollow glass).

Table 5 – Export shares for the entire sector

% SHARE BY GEOGRAPHIC AREA EXPORTS FOR THE ENTIRE SECTOR			
Areas of destination	**2003**	**2004**	**2005**
Europe EU (25 countries)	32.54	37.70	29.90
Europe non-EU	25.44	19.87	22.89
Africa	3.64	4.05	2.90
America	14.13	13.01	12.25
Asia	21.46	23.38	30.11
Oceania and free ports	2.79	1.99	1.95
Total Exports entire sector	**100.00**	**100.00**	**100.00**

Source: Istat data processed by Gimav





The following tables list the primary countries of destination for Italian products for each of the macro areas indicated above, by sector: flat glass (table 6), and hollow glass (table 7).

Table 6 – Flat glass: main countries of destination

MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR FLAT GLASS MAIN COUNTRIES OF DESTINATION		
Geographic areas	**Countries**	**% share of exports flat glass sector**
Europe EU	Germany	6.56
	Spain	6.39
	United Kingdom	4.53
Other European countries	Russia	6.34
	Turkey	4.58
	Bulgaria	1.09
Africa	South Africa	0.92
	Algeria	0.42
	Egypt	0.35
America	United States	10.12
	Brazil	1.4
	Mexico	1.28
Asia	China	11.67
	India	4.42
	Japan	2.12
Oceania	Australia	3.63
	New Zealand	0.17

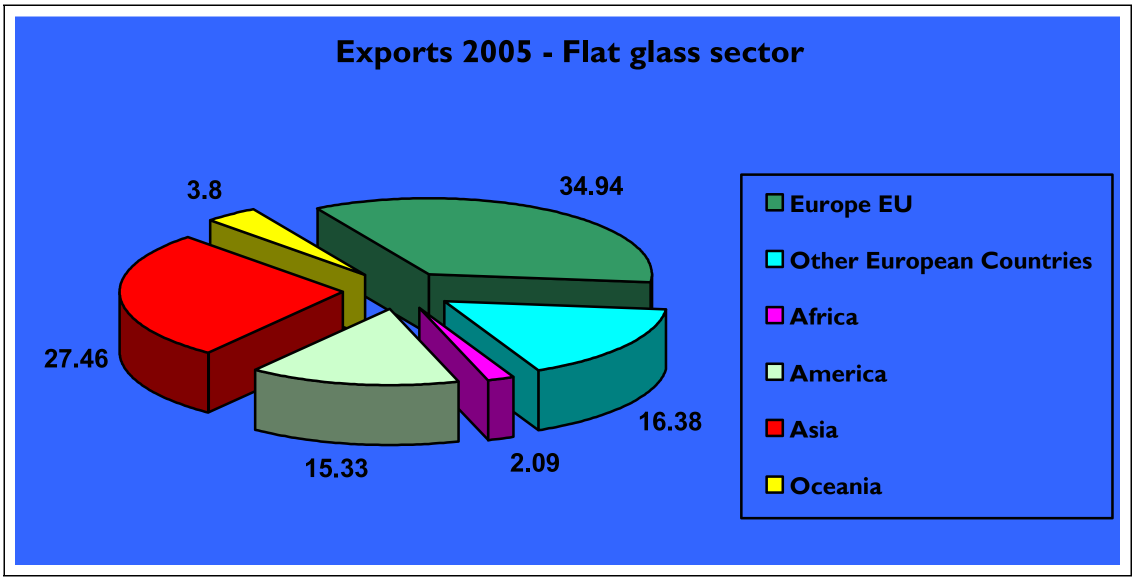
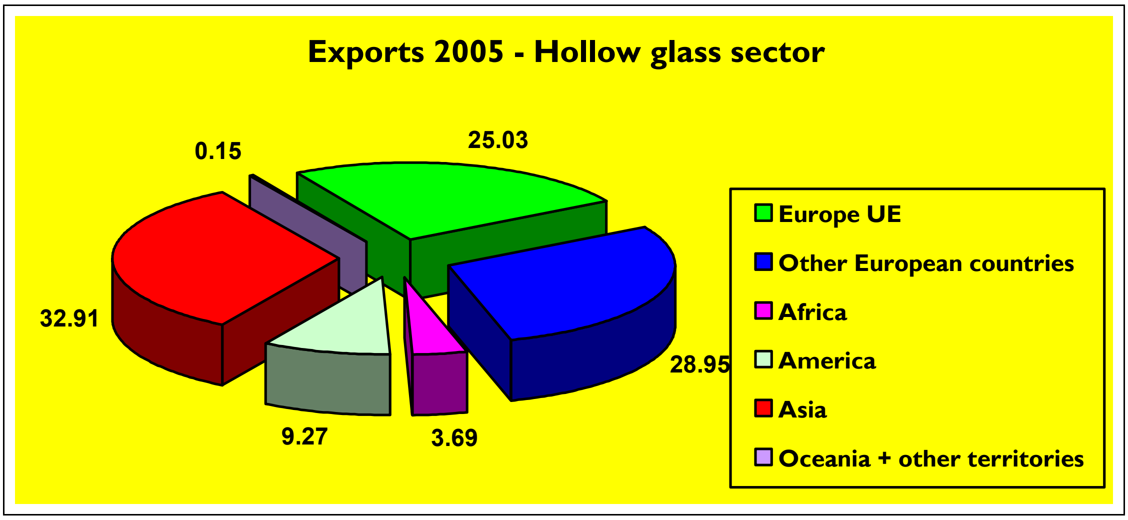


Table 7 – Hollow glass: main countries of destination

MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR HOLLOW GLASS MAIN COUNTRIES OF DESTINATION		
Geographic areas	**Countries**	**% share of exports hollow glass sector**
Europe EU	France	7.55
	Spain	4.00
	Hungary	2.97
Other European countries	Russia	17.05
	Turkey	6.75
	Croatia	1.28
Africa	Egypt	1.59
	South Africa	0.74
	Nigeria	0.42
America	United States	3.51
	Mexico	1.40
	Paraguay	1.10
Asia	Iran	22.53
	India	2.60
	Thailand	2.23
Oceania and other territories	Australia	0.08
	Other territories	0.06

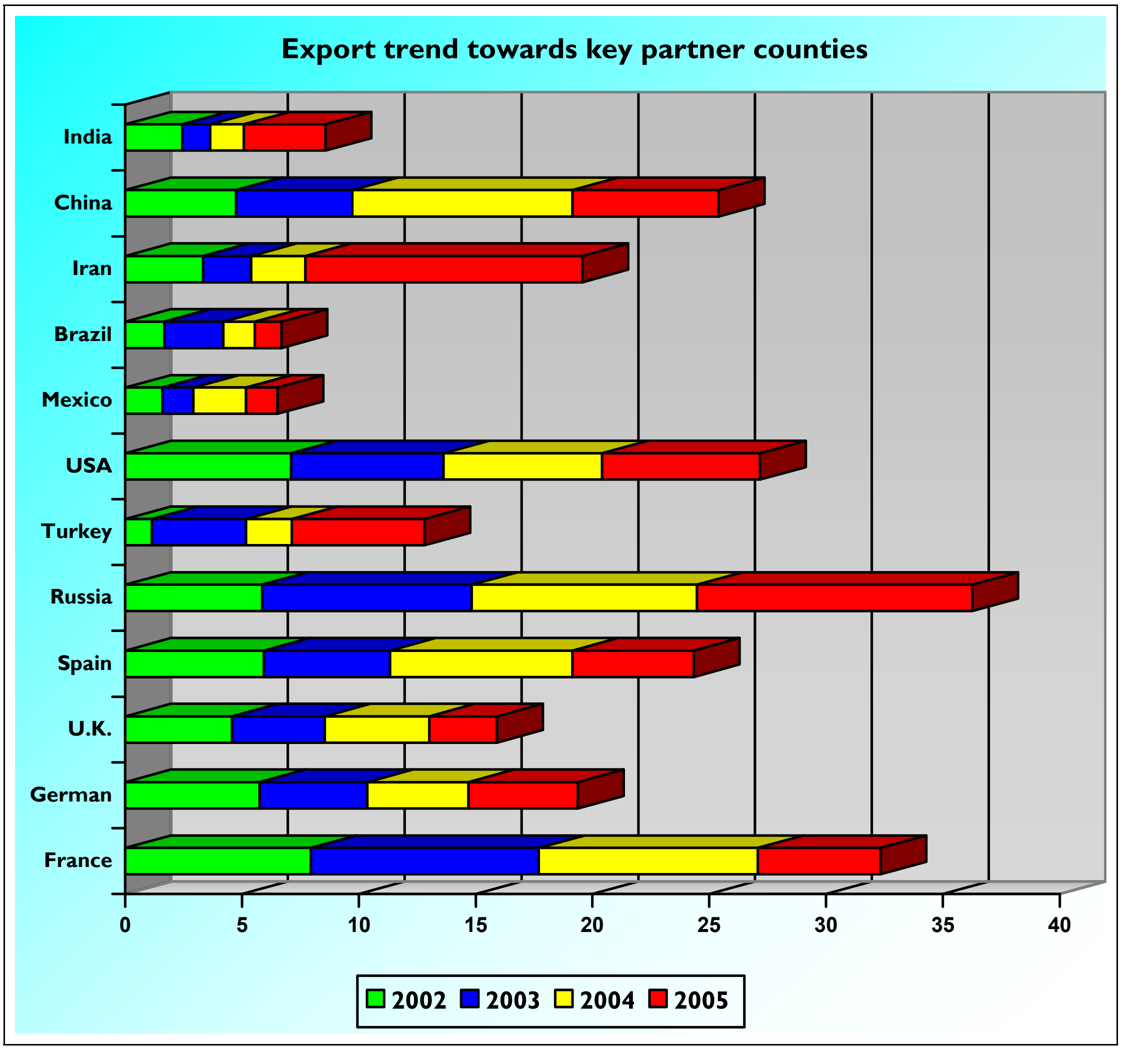


The following table also lists the main countries of destination for the entire sector, compared to overall exports, while at the same time also showing the same country's share of total exports in 2004.

Table 8 – Total exports: main countries of destination

EXPORTS -- ENTIRE SECTOR MAIN COUNTRIES OF DESTINATION			
Geographic areas	**Countries**	**% share of total**	
		exports 2004	**exports 2005**
Europe EU	France	9.37	5.25
	Spain	7.82	5.18
	Germany	4.33	4.69
	United Kingdom	4.48	2.89
	Portugal	1.21	2.08
	Hungary	0.40	1.73
	Poland	1.43	1.27
	Greece	2.17	1.10
Other European countries	Russia	9.64	11.78
	Turkey	1.96	5.68
	Bulgaria	1.64	0.89
	Croatia	1.51	0.86
Africa	Egypt	0.41	0.98
	South Africa	0.92	0.83
	Algeria	0.75	0.31
	Morocco	0.93	0.13
America	United States	6.79	6.76
	Mexico	2.26	1.34
	Brazil	1.35	1.14
	Paraguay	0.01	0.59
	Canada	0.77	0.51
Asia	Iran	2.32	11.86
	China	9.43	6.25
	India	1.45	3.49
	Thailand	1.93	1.77
	Japan	0.77	1.14
	South Korea	1.23	0.33
Oceania	Australia	1.75	1.83

This graph illustrating the trend of Italian exports toward its key partner countries from 2002 to 2005 is particularly revealing.
Each block of color refers to a country's share of total exports for each year under study.



INDUSTRY SALES

In spite of increasingly ferocious competition, the Italian machines, accessories, and special products for glass processing industry managed to close 2005 on a positive note, increasing sales in both the flat glass and hollow glass sectors. Holding at 72%, it's share of foreign sales remains unchanged.

Table 9 – Sales by sector and % change 2005/2004

SALES OF ITALIAN MACHINES, ACCESSORIES AND SPECIAL PRODUCTS FOR GLASS PROCESSING				
Sectors	2003 Euros	2004 Euros	2005 Euros	% change 2005/2004
FLAT GLASS SECTOR				
Domestic sales	226,671,294	242,538,285	247,801,366	2.17
Exports	542,343,029	588,442,186	608,743,452	3.45
Total flat glass sales	**769,014,323**	**830,980,471**	**856,544,818**	**3.08**
HOLLOW GLASS SECTOR				
Domestic sales	71,042,296	76,304,834	76,549,009	0.32
Exports	224,432,838	240,232,910	242,178,796	0.81
Total hollow glass sales	**295,475,134**	**316,537,744**	**318,727,805**	**0.69**
Total Flat + Hollow	**1,064,489,457**	**1,147,518,215**	**1,175,272,623**	**2.42**

% SHARE OF DESTINATION ON 2005 SALES			
Destination area	**Flat glass**	**Hollow glass**	**TOTAL SECTORS**
Domestic sales	28.93	24.02	**27.60**
Exports	71.07	75.98	**74.40**
TOTALS	100.00	100.00	**100.00**

Source: Istat data processed by Gimav

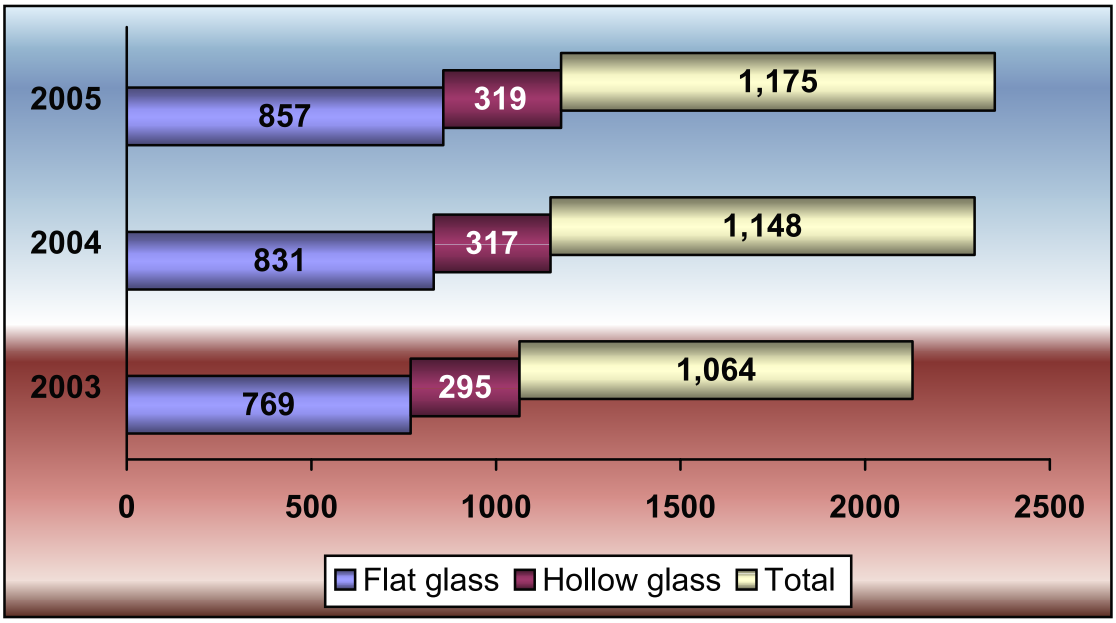


Table 10 – Summary chart

Summary Machines, accessories and special products for glass processing industry Years 2003 – 2004 - 2005				
Variables	**Unit of measure**	**2003**	**2004**	**2005**
Sector sales	Euros	1,064,489,457	1,147,518,215	1,175,272,623
Exports	Euros	766,775,867	828,675,096	850,922,248
Imports	Euros	41,988,591	52,980,544	47,156,555
Trade balance	Euros	724,787,276	775,694,552	803,765,693
Domestic orders	Euros	297,713,590	318,843,119	324,350,375
	% change	+ 3.92	+7.10	+1.73
Foreign orders	Euros	766,775,867	828,675,096	850,922,248
	% change	+1.56	+8.07	+2.68
Employees	individuals	4,500	4,500	4,500

Source: Istat data processed by Gimav

Table 11 – Foreign trade

Italy's foreign trade with key partners Main countries of origin			
2004		**2005**	
Countries	**% share**	**Countries**	**% share**
Sweden	26.43	Sweden	27.28
Germany	20.50	Germany	15.41
France	12.19	France	11.24
United Kingdom	9.68	United Kingdom	9.43
Finland	5.,29	Croatia	8.38
EU countries (25)	83.06	EU countries (25)	75.52
Main countries of destination			
2004		**2005**	
Countries	**% share**	**Countries**	**% share**
Russia	9.64	Iran	11.86
China	9.43	Russia	11.78
France	9.37	United States	6.76
Spain	7.82	China	6.25
United States	6.79	Turkey	5.68
United Kingdom	4.48	France	5.25
EU countries (25)	37.70	EU countries (25)	29.,09

Continuing stagnation in the domestic market, the economic crises faced by many countries, that force businesses to constantly expand their range of activity into an ever-increasing number of international markets, and the tightening of profit margins are undoubtedly elements that work against Italian companies.
In spite of this, Italy's machines, accessories and special products for flat and hollow glass processing industry retains its strong global leadership position, gained through years of hard work, product reliability, responsive after-sales assistance and its enormous ability to engender loyalty among its clients.

THE ITALIAN GLASS INDUSTRY

For the first time, in 2005 the entire glass industry closed the year with a negative performance (-0,2%), after a long period of moderately favorable results. This figure portrays a fairly solid sector, despite the ups and downs that played out in the market during the year.

Flat glass

Generally speaking, in 2005 the flat glass sector enjoyed a modest increase in production (+2.8%), that should be seen as a positive result, taking into account that this increase mirrors the kinds of gains made in the years before 2002, when the Manfredonia furnace made its debut, firing a +15% leap in 2003.

Hollow glass

Overall, the hollow glass manufacturing sector was down by –1.06% at the end of 2005, wiping out the gains made the previous year. There's a message here, given the extremely positive trend displayed in the second half of the year.

The same negative results can be seen in the sub-sectors that comprise the sector:

- - 0.84% for bottles
- - 2.51% for vases
- - 4.18% for vials
- - 0.13% for housewares

Fibers

The glass fibers sector managed in 2005 to reverse a downtrend for a +1.84% increase in sales, exceeding even the volume it recorded in 2003.

Exports dropped by 4.98%, slipping from euros 1,966 million in 2004 to euros 1,868 million in 2005.

Imports declined considerably, as well: from euros 1,358 million in 2004 to euros 1,307 in 2005, for a -3.75% drop.

At euros 561 million, **the balance of trade** has held onto its positive trend, despite a drop from the previous year, when it established a surplus of euros 608 million.

However, if the figures for 2004+2005 are added together, erosion of the trade balance is quite clear: -7.74% compared to the previous year, which had posted an increase of 8.96% over the year before.

GLASS INDUSTRY Trade			
Items/period	**2004**	**2005**	**totale**
Exports	1,966	1,868	3,834
Imports	1,358	1,307	2,665
Two-year trade balance	608	561	**1,169**

(Gimav processing, Assovetro data)