

Invest in MECHANICS in Emilia-Romagna

The **mechanical cluster** in Emilia-Romagna is known not only as a leader on an international level, but also presents a cluster which is highly competitive and subdivided into a number of sectors and sub-sectors, noted for their globally important "prototypes" and for their numerous small and medium-sized enterprises all highly specialized and leaders in their respective niches.

The **most important sectors** are: mechanics and industrial equipment, motor industry, agricultural machinery, hydraulics and precision machining. A collection of highly specialized technical skills that together make up and attract a great deal of interest to our region.



LEADING FACTORS

- Export figures of 27.4 billion Euros in 2008, 15% of national exports of mechanics and 58% of exports from the region
- Brands such as Ferrari, Ducati and Lamborghini are synonymous with leadership and excellence at an international level and are supported by local networks and specialized suppliers
- Large investments made in innovation, supported by a network of laboratories and leading research centres
- More than 13 trade fairs that promote the different sectors of the cluster
- A cluster that goes across the board and links with other renowned clusters from the region (biomedical, food-farming, ceramics, construction, etc.)

Invest in High Technology Mechanics

Companies in the mechanical industry in Emilia-Romagna together represent a cluster which is not only at the forefront when it comes to technology but also focuses on innovation in order to maintain its position while competing in the global market. Laboratories from the regional network specialize in strategic technological areas such as nanotechnology, mechatronics, design materials, automation and robotics etc. Innovative and dynamic research laboratories and leading companies make up the HI-MECH Technological District, which has been singled out by the Italian Ministry of Research due to the large concentration of knowledge and competence present in the region.

The cluster on an international level

The mechanical industry in our region is highly competitive on an international level. Regional exports from this cluster exceed 27 billion Euros and account for more than half our total regional exports. Moreover, these figures are following a good growth trend and this has also been confirmed by the 2008 figures. The goods and products are supplied to all the main markets globally some with brand names that have become synonymous with the prestige and quality of such goods from our region. The region hosts 13 international trade fairs with a specific focus on mechanics, however there are many others which involve companies from the cluster in specific sectors.

Invest in local specialization

The mechanical industry is actually a cluster that is spread all over the region in quite a well-organized and blended way. The main specializations are: motor industry, transport vehicles, agricultural machinery, hydraulics, turbines and pumps, industrial machinery, automation, biomedical and precision machining. In all of these sectors, particularly outstanding niches are: sports cars and motorbikes, robots and machine tools, machinery for packaging, the food industry, ceramics, construction, wood, energy production, electromedical as well as measuring, checking and surveying instruments.

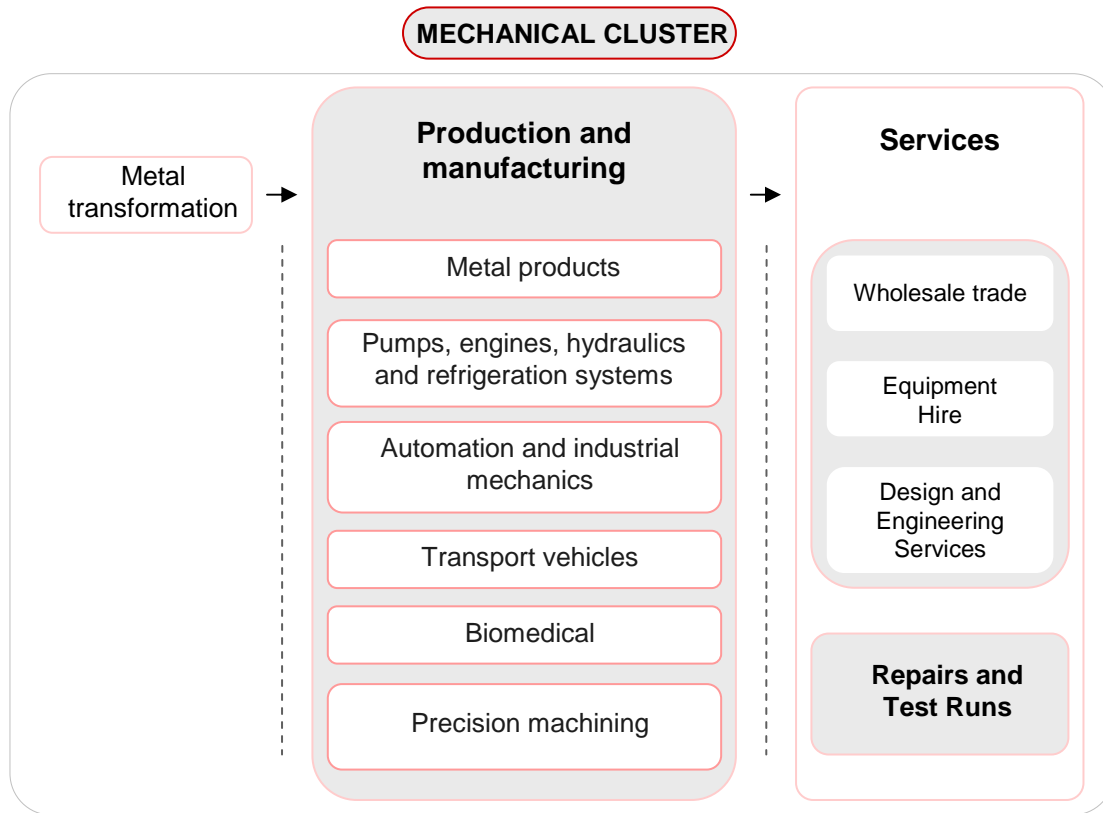
SOME COMPANIES FROM THE REGION





The mechanical cluster: its structure and its sectors

The **mechanical cluster** is divided into **three main sectors: metal transformation, production and manufacturing** and a sector that offers various **services**.



Companies and the number employed

The mechanical cluster as listed below – Local businesses and number employed: absolute values and quotas of the totals in this regional cluster.

Source: Asia Data Bank - 2005

Divisions and sectors	Number employed	Quota of number employed in the cluster	Local businesses	Quota of local businesses in the cluster
Metal transformation	9,126	2.8%	424	0.7%
Production and manufacturing	225,579	68.2%	20,684	34.0%
Metal products	87,128	26.3%	11,826	19.4%
Pumps, engines, hydraulics and refrigeration systems	30,352	9.2%	1,206	2.0%
Automation and industrial mechanics	62,090	18.8%	4,583	7.5%
Biomedical	9,316	2.8%	1,569	2.6%
Precision machining	4,087	1.2%	192	0.3%
Transport vehicles	32,606	9.9%	1,308	2.1%
Wholesale trade/Equipment hire/Design and Services	65,120	19.7%	30,579	50.2%
Repairs and Test Runs	30,852	9.3%	9,214	15.1%
Total	330,678	100.0%	60,901	100.0%



The regional mechanical cluster

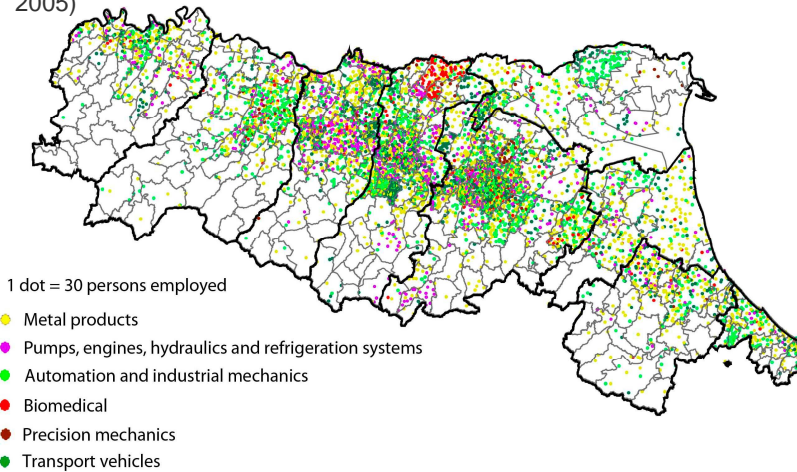
Source: Asia Databank - 2005

The mechanical cluster, unlike the other clusters in the Emilia-Romagna production system, goes across the board into other sectors and is consequently spread all over the region. An analysis of the sub-divisions shows high density productive areas for some these sectors.

The "Metal transformation" sector is not considered particularly important in this cluster, the number employed is not so substantial and therefore does not have such a widespread presence in the region.

Production and Manufacturing

Mechanical cluster – Number employed in all the Production and Manufacturing sectors of the Mechanical Cluster (Asia 2005)



The **Production and manufacturing** sectors are the ones which are the most interlinked with other regional production clusters. Grouped together and in some especially important sectors such as **Metal products, Automation and industrial mechanics**, they have a tendency to be spread all over the regional area.

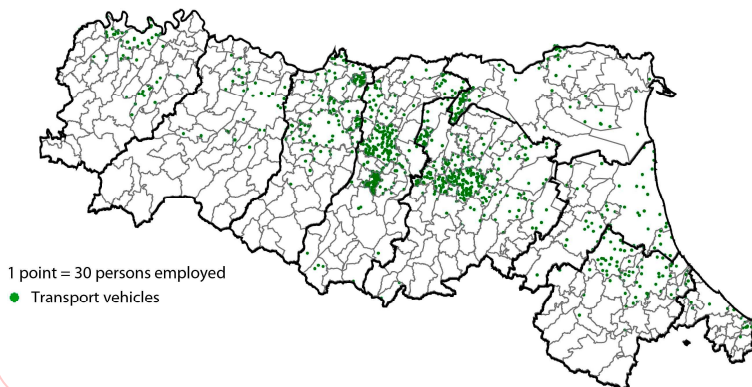
Mechanical companies in sectors such as the **Biomedical** are concentrated in corresponding production districts. In this case, the most extensive spread is in Mirandola (Mo).

The **Pumps, engines, hydraulics and refrigeration systems** sector has important production activities concentrated in the provinces of Bologna and Modena but the sector can be seen all over the region.

The **Precision mechanics** sector has a sizeable concentration of people employed in the provinces of Bologna (municipality of **Bentivoglio, Calderara di Reno and Castel Maggiore**), Parma (**Parma, Sala Baganza, Fontevivo**), Reggio Emilia (Correggio) and Modena (Concordia, San Felice sul Panaro, Modena).

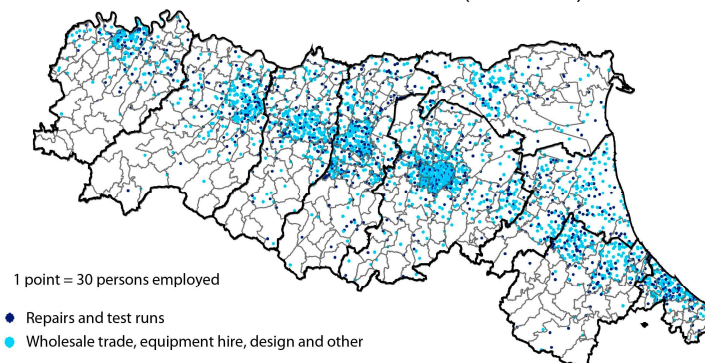
The **Transport vehicles** sector is linked to the motor industry and is particularly present in the mechanical sector (10% of local businesses) and has a high concentration of people employed in the provinces of **Modena** (especially in the municipalities of Modena and Maranello) and **Bologna**.

Mechanical cluster - Number employed in Transport Vehicles sector (Asia 2005)



Services

Mechanical cluster – Services sectors (Asia 2005)



The "Repairs and test runs" and "Wholesale trade, equipment hire, design and other services" sectors are spread all over the region with a high concentration along the Via Emilia axis.



The mechanical cluster on an international level

Exports

Source: Istat Coeweb Databank

In 2008 exports from the mechanical cluster in our region amounted to around 27.4 billion Euros, 15.1% of the national total. The different mechanical sectors cross over into many other clusters in the region which put together represent 57.9% of total exports from Emilia-Romagna.

Where we export to

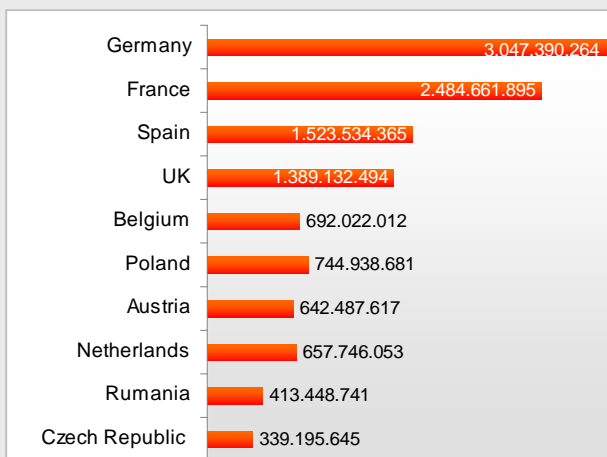
Percentage of total exports per destination – 2008

EU 27	Other European countries	North America	Asia	Middle East	Central and South America	North Africa	Other countries
52.4%	10.4%	9.8%	6.9%	4.9%	4.3%	2.8%	8.5%

We mainly export to Europe, however, export figures in absolute value terms to all the other countries listed in the table are also worth noting. All the worldwide destination areas not mentioned have been put in the "other countries" column. This confirms the role of our mechanical cluster on the global scene.

The main EU countries we export to

Exports in 2008 (data in Euros)



Export trends

Variations in the long and short term show a **steady growth in exports** from the cluster as a whole. Exports rose from 18.9 billion Euros in 2004 to 27.4 in 2008 (+ 45.5%). All the individual elements of the cluster have also followed this positive trend. Between 2004 and 2008 **Metal transformation** almost doubled its export figures (+ 82.3%). **Production and Manufacturing** experienced less spectacular growth but nevertheless followed the growth trend both as a whole and in its individual sectors (see graph). Of these, the performance of "Pumps, engines, hydraulics and refrigeration systems" is particularly positive, followed by "Transport vehicles" and "Automation and industrial mechanics"

Mechanical Cluster
Export variations in %

2004-2006	+ 22.2%
2006-2008	+ 19.0%
2004-2008	+ 45.5%

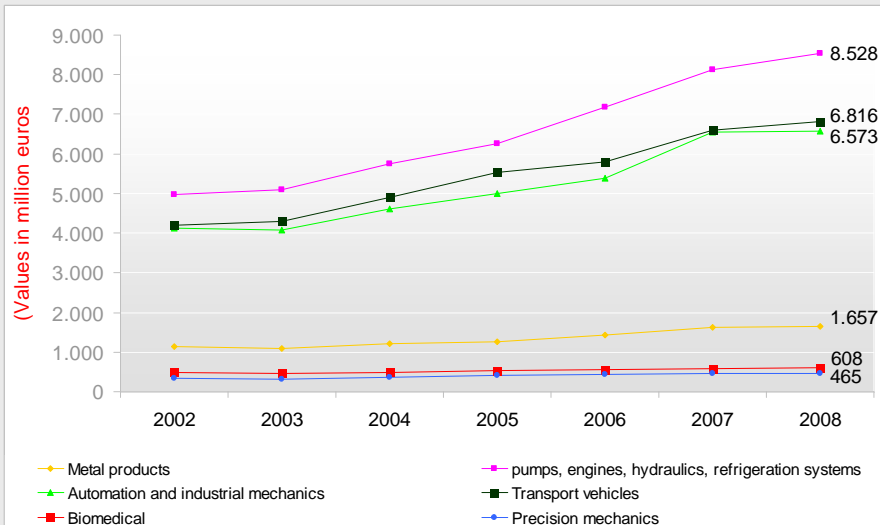
Metal transformation

2004-2006	+ 47.8%
2006-2008	+ 23.4%
2004-2008	+ 82.3%

Production and
Manufacturing

2004-2006	+ 19.9%
2006-2008	+ 18.5%
2004-2008	+ 42.2%

Export trends in the Production and Manufacturing sectors. Source: Istat Coeweb





The mechanical cluster on an international level

International Trade Fairs

	MECSPE www.senaf.it	Specialized Mechanics trade fair, held in Parma on 42,000 m ² of exhibition space, with over 1,000 exhibitors in 2007.
	LAMIERA www.lamiera.net	International show specifically devoted to the metal forming machines manufacturing sector. 28,000 m ² of exhibition space and over 560 exhibiting companies.
	AUTOPROMOTEC www.autopromotec.it	International Biennial show of Equipment and Products to Assist and Accompany transport vehicles . 1,443 exhibitors took part and 101,000 visitors attended in 2009.
	R2B - Research To Business - www.rtob.it	International Expoforum on Industrial Innovation – Participants include companies and research bodies - some of which are part of the mechanical cluster.
	EIMA INTERNATIONAL www.eima.it	International Showcase for Agricultural Machinery held at Bologna Fiera. 1,635 exhibitors (36.3% from abroad) and over 140,000 visitors attended in 2008.
	SIMAC www.simac-fair.it	International Salon for machinery and technology for the footwear and leather goods manufacturing industry held at Bologna Fiera. 300 exhibitors on 14,000 m ² of exhibition space in 2007.
TANNING-TECH	TANNING TECH www.tanning-tech.it	International Salon for machinery and technology for the tanning industry , held at Bologna Fiera. It covered 30,300 m ² of exhibition space, hosted 272 exhibitors and received 37,000 visitors in 2007.
	TECNARGILLA www.tecnargilla.it	International Salon for supply to the ceramic and brick industry , held at Rimini Fiera. It covered 80,000 m ² of exhibition space, hosted 700 exhibitors and received 31,432 visitors (39% from abroad) in 2008.
	MACFRUT www.macfrut.com	International Exhibition of plants, technologies and services for the production, conditioning, marketing and transport of fruit and vegetables held in Cesena (FC). It covered 30,000 m ² of exhibition space, hosted 684 exhibitors (25% from abroad), saw the presence of 74 foreign countries and received 21,500 visitors in 2008.
	GEOFLUID www.geofluid.it	International exhibition & conference of Technologies and Equipment for Prospecting, Extracting and Conveying Underground Fluids held at Piacenza Fiera. Over 25,000 m ² of exhibition space with 11,847 exhibitors (19.8% from abroad from 69 foreign countries) and 400 brands in 2008.
	MEC for PACK www.mecforpack.it	Precision machining, innovative materials, engineering, technology, electronics and components required for the Manufacture of Automatic Packaging Machines . First edition held at Bologna Fiera in 2009.
	H2O – Accadueo www.accadueo.com	International exhibition of technologies for treatment and distribution of drinking water and wastewater treatment held in Ferrara. 6,747 visitors and 251 exhibitors in 2008, on 15,000 m ² of exhibition space.
	CIBUS TEC www.fiereparma.it	Innovations in the Food industry Trade fair. It covered 27,318 m ² with 858 exhibitors from 27 countries and received 21,762 visitors from 105 countries in 2007.

Other trade fairs which involve companies from the various mechanical sectors are:

Sigep sigep.it	Cosmoprof cosmoprof.it	Sana sana.it	Saie saie.bolognafiere.it	Sib sibinternational.com	Food & Beverage saporerimini.it
					

**Top investors**

Some important foreign investors in the mechanical industry in Emilia-Romagna

Company	Investor	Country of Origin	Type of business
Phase 1: Metal transformation			
GONVARRI ITALIA SPA	GONVARRI INDUSTRIAL SA	Spain	Metalworking and alloy processing
Phase 2: Production and Manufacturing – Metal Products Division			
IMPRESS SPA	IMPRESS COOPERATIVE U.A.	Holland	Metal products
SICAM SRL	GRUPPO BOSCH	Germany	Machinery and mechanical equipment
ARCELOR MITTAL	ARCELOR MITTAL STAINLESS EUROPE	France	Metal products
MATTHEW INTERNATIONAL SPA	MATTHEW INTERNATIONAL SPA	United States	Metal products
Phase 2: Production and Manufacturing – Pumps, Engines, Hydraulics and Refrigeration systems Division			
WITTUR SPA	WITTUR GMBH	Germany	Machinery and mechanical equipment
TYCO VALVES & CONTROLS ITALIA SRL	TYCO INTERNATIONAL INC.	United States	Machinery and mechanical equipment
Phase 2: Production and Manufacturing – Automation and Industrial Mechanics Division			
KPL PACKAGING SPA	KOERBER AG	Germany	Machinery and mechanical equipment
CULLIGAN ITALIANA SPA	CLAYTON DUBLIER & RICE INC.	United States	Machinery and mechanical equipment
CPS COLOR EQUIPMENT SPA	CPS COLOR OY	Finland	Machinery and mechanical equipment
TETRA PAK CARTON AMBIENT SPA	TETRA LAVAL AB	Sweden	Machinery and mechanical equipment
HARRIS CALORIFIC SRL	LINCOLN ELECTRIC HOLDINGS INC.	United States	Machinery and mechanical equipment
Phase 2: Production and Manufacturing – Transport vehicles Division			
MOTORI MINARELLI SRL	YAMAHA MOTOR CO. LTD	Japan	Ship and railway construction
TITAN ITALIA SPA	TITAN EUROPE PLC	Great Britain	Machinery and mechanical equipment
LAMBORGHINI	VOLKSWAGEN	Germany	Cars
MANITOU COSTRUZIONI INDUSTRIALI SRL	MANITOU B.F.	France	Machinery and mechanical equipment
Phase 2: Production and Manufacturing – Biomedical Division			
HOSPAL SPA	GAMBRO AB	Sweden	Equipment and precision machining
Phase 2: Production and Manufacturing – Precision Mechanics Division			
BIFFI ITALIA SRL	TYCO INTERNATIONAL INC.	United States	Equipment and precision machining
ARCOTRONICS Industries	KEMET Corporation	United States	Electronic components
C.I.A.P. - COSTRUZIONE ITALIANA APP. DI PRECISIONE SPA	HONDA MOTOR LTD	Japan	Gearboxes and motorcycle gears
Phase 3: Wholesale trade, equipment hire, design and other services			
ALCAN DISTRIBUZIONE SRL	ALCAN INC.	Canada	Wholesale trade
WAGO ELETTRONICA SRL	WAGO KONTAKTECHNIK GMBH	Germany	Wholesale trade
Fase 4: Repairs and test runs			
ELMAN SRL / B.B.F. SRL	UNITED TECHNOLOGIES CORP.	United States	Lift installation and maintenance, goods lifts



Focus: Packaging Division

The **packaging** division is an important production specialization in the regional mechanical cluster and numbers **488 local businesses with a total of 14,228** people employed (Asia, 2007).

This benchmark sector is composed of design, manufacturing and trade of machinery, equipment, general packaging devices and fittings, packing and refilling in addition to design services, labelling, distribution and sales.

The **highest concentration of people employed** is seen in **province of Bologna**, followed by **Parma** and **Modena**. Other districts in the sector are also seen in **Reggio Emilia** and **Rimini**.

Mechanical cluster– Number Employed in the “Production of automatic machinery for dosing, packing and packaging” sector (Asia 2007)



Sales turnover of this division

Mechanical Cluster - Packaging Division

Source AIDA

Companies with turnover > 900,000 Euros

Variation % of turnover

2004-2006	+ 13.7%
2006-2008	+ 65.0%
2004-2008	+ 87.6%

There are **182 companies with a sales turnover of over 900,000 Euros**. Their **total turnover in 2008 was 4,769,000 Euros** (source: Aida). Here we can see a steady **growth trend** which shows their progressive competitiveness. The positive variation was higher in the 2006-2008 period compared with the previous two years. (see table).

Some leaders in the Packaging Industry

The following companies had the highest turnover in the Emilia-Romagna packaging sector in 2008. Many of them have foreign investments which confirms the profitability of Direct Foreign Investment in the region.

Company	Description
SACMI (SACMI LABELLING, SACMI FORNI, SACMI FILLING)	Produces: a complete range of automatic machinery for labelling glass, plastic and metal containers for the beverage, food, detergent, pharmaceutical and packaging sectors; packaging and palletizing for the ceramic industry; refilling machinery.
I.M.A. INDUSTRIA MACCHINE AUTOMATICHE S.P.A. (IMA SAFE, IMA FLAVOUR)	Produces: packaging solutions, mainly with IMA SAFE S.R.L. and IMA FLAVOUR S.R.L. for the Pharmaceutical & Nutraceutical, Cosmetic & Other, Tea & Coffee sectors.
G.D. SPA	Leading international manufacturer of machines to produce and package cigarettes (maker and packer).
MARCHESINI GROUP	Produces machines for: cosmetic labelling, phial labelling, flacons, thermoformers, Wallets, cartoners, vertical type cartoners, Wrapping & Overwrapping, Case packing & Palletizing.
TETRA PAK PACKAGING SOLUTIONS S.P.A.	Produces: containers,, treatment systems (for milk and dairy products drinks, cheese, ice cream , convenience foods), refilling machines, distribution systems, assistance.
SIDEL S.P.A.	Produces: tooling (Blow Molds and Personalization Parts for Blowers), dry preform decontamination, blowers, coating, fillers, rinsers, closing units, bottle washers, labellers, etc.
OCME - SRL	Company which specializes in the Beverage industry. It supplies complete production lines for: Beer, Mineral water, Soft drinks, Wine & liquors. It also focuses on FTC (Food, Toiletries and Chemicals) for which it supplies filling systems for viscous liquids packaging and palletizing systems.
AETNA GROUP S.P.A.	Produces and sells on an international level wrapping machines for fully automatic stretch film packaging , shrink wrappers, shrink wrapping machines with film thrusting systems , wrap around case packaging, taping machines.



Facilities available to mechanical businesses in Emilia-Romagna

Research and innovation

Advanced Technology Laboratory Network Mechanical Platform and Materials

ASTER - www.reteaster.it

AERTECH-LAB - Automation, Electronics and Bioengineering: Technologies for Manufacturing and People (University of Bologna)

INTERMECH - Mechatronics: design and development of new products and industrial processes. (University of Modena-Reggio Emilia and Ferrara)

MATMEC - Laboratory of materials for mechanical design and engineering - (University of Bologna, ENEA, CNR and University of Parma).

MUSP - Machine tools technology (Piacenza, Politecnico of Milan).

PROMINER - Micro and nano-technology for industrial and civil applications.

CICLOPE - Experimental laboratory for measuring turbulence. (University of Bologna) www.ciclope.unibo.it

Innovation centres

ISML - Innovation and development of materials and light metal alloys. www.isml.it

DEMOCENTER SIPE - Centre for innovation and technological transfer. www.democentersipe.it

REGGIO EMILIA INNOVAZIONE (REI) - Centre for innovation and technological transfer

www.reinnova.it

National associations covering the sector

Main associations for machine manufacturers and suppliers to the mechanical cluster.

Acimac www.acimac.it Machinery for ceramics

Acimit www.acimit.it Machinery for the textile industry

Acimall www.acimall.com Woodworking machinery manufacturers

Acimga www.acimga.it Graphic, converting and paper industry

Anima www.anima-it.com Various Mechanics

Ascomut www.ascomut.it Machinery, technology, machine tools

Assiot www.assiot.it Gears and transmission elements

Assocomplast www.assocomplast.org Plastic materials and rubber

Assofoodtech www.assofoodtec.it Agro-food machinery

Assomac info.assomac.com Footwear, leather goods and tanning

Gimav www.gimav.it Glass manufacturing

Ucima - www.ucima.it Packing and packaging

Ucimu - www.ucimu.it Machine tools, robots and automation

Unacoma www.unacoma.it Agricultural machinery

Ucispap www.ucispap.it Precision moulds, dies and tooling manufacturers

Universities

University of Bologna www.unibo.it

Engineering degree courses: mechanical, electric, electronic, automation and energy.

University of Modena and Reggio Emilia

www.unimore.it

Engineering degree courses: mechanical, mechatronics, electronic, automotive.

Masters courses in Engineering: Hydraulic Fluid Power, automotive.

University of Parma www.unipr.it

Engineering degree courses: mechanical, electronic, mechanics for the food industry.

Politecnico of Milan, Piacenza branch

www.sede-piacenza.polimi.it - **Engineering degree course** in Mechanics (Machinery and production systems, transport and logistics).

Professional training courses

Aldini Valeriani Foundation - www.fav.it

Courses: material technology, metrology, design and use of machine tools and numerical control systems, welding, hydraulics, air pumps for packaging, automation, etc.

IAL - Centre for the automation and mechanics

www.ialautomazione.it - Offers courses on design, mechanical production and industrial automation.

ECIPAR - <http://www.eciparbologna.it> - Bologna

Courses in: efficiency in production processes in third party mechanic manufacturing, 3D designing using specialized software, understanding and interpreting technical drawing, metrology, etc.

CSPMI - Centre providing Services to Small and

Medium Enterprises www.cspmi.it Courses for the mechanical industry, design; F.E.M. and fatigue design; surface treatments ; machine tool assembling, product/process techniques; draughtsmanship ; techniques in industry automation; etc.

IFOA - Training Institute for Company Employees

www.ifoait.it Training and Consultancy Centre of the Chambers of Commerce - Reggio Emilia. Courses in mechanic design.

FUTURA S.p.a. - www.cfp-futura.it - San Giovanni in

Persiceto (Bo) - Courses in: industry automation, welding.

Invest in mechanics
in Emilia-Romagna



For further information:
www.investinemiliaromagna.eu
investinemiliaromagna@ervet.it