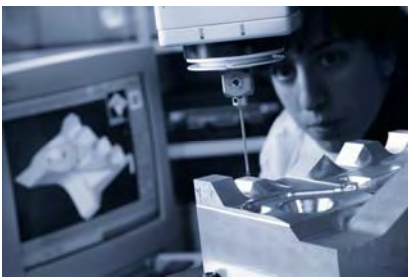
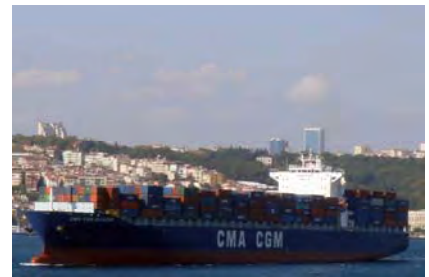
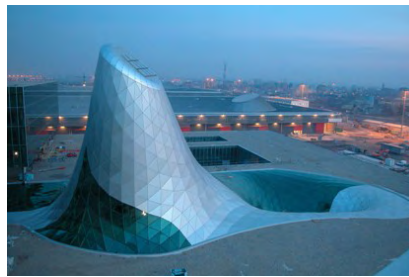




# cecimo

## magazine

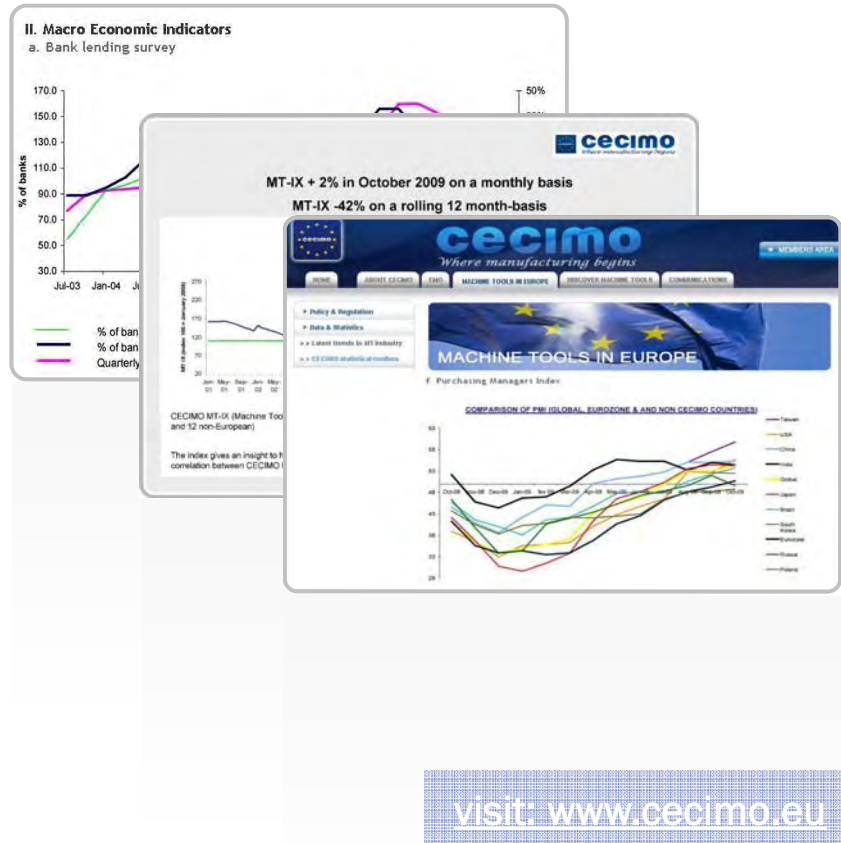


conclusions on the Swedish presidency ■ EMO 2009: EU day, innovation, figures, trends and lots more ■ CECIMO London general assembly ■ what can we expect from the EU-South Korea Free Trade Agreement? ■ reform of the european standardisation system ■ CECIMO opts for self-regulation under the EuP

# CECIMO Statistical Toolbox is online!

Check out CECIMO's new online tool box. Get up-to-date information on the Machine Tool Industry and start forecasting your company's future activity...

- CECIMO toolbox is comprised of some macro economical indicators that have a strong correlation (over 75%) with orders of machine tools countries.
- CECIMO has also created the MT-IX, a monthly index made of the historical series of the market capitalizations of 24 machine tool companies (12 European and 12 non-European).
- CECIMO also tracks quarterly trends in terms of orders and external trade (imports and exports) of machine tools in CECIMO and other large manufacturing countries.



## 2010 Dates for your diary...

**13 January**

CECIMO Technical Managers meeting

**14 January**

CECIMO EuP Working Group

**18 February**

CECIMO Statistical Project Team meeting

**19 April**

CECIMO General Managers Meeting Izmir

**29 April**

Future MT Exhibitions: Brainstorming Session

**15 - 18 May**

CECIMO Spring General Assembly Leipzig

## Next EMO set for 2011 in Hannover!



**EMO  
Hannover**  
19-24.9.2011

EMO is the most important event of the metalworking industry. The German Machine Tool Association, VDW, will host the 19<sup>th</sup> edition of EMO on 19-24

September 2011 at Deutsche Messe exhibition centre in Hannover.

Attracting visitors from all over the world, EMO is an innovative, inspiring and unrivalled technology and networking platform. In 2007, EMO HANNOVER counted 2,118 exhibitors, and more than 166,000 visitors.

CECIMO assumes the promotion of the show. EMO® is a registered trademark by CECIMO



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# foreword



Dear readers,

CECIMO estimates that 2010 will be a year of transition for the machine tool (MT) industry. The recovery in the sector will follow the take-off in end-user industries. There is a general consensus in public and private spheres that 'innovation' will be the driver of a sustainable recovery.

We interpret innovation in its broader sense, so as to cover both industrial efforts to upgrade the technological base of industry through R&D and public efforts which set the right legislative framework and policy incentives to enable and stimulate the transformation of industry.

2009 has been a year of important EU initiatives which support innovation. The European Recovery Plan introduced the Factories of the Future Public-Private Partnership (PPP) initiative, a couple of European legislations aimed at energy-efficiency were adopted and the European Year of Creativity and Innovation hosted hundreds of events dedicated to innovation throughout the EU. EMO (the world machine tool exhibition) in Milan was a successful show in the midst of the economic meltdown. The vivid interest of both MT builders and customer industries in innovative machines and solutions exhibited at EMO confirmed that innovation will be the catalyst for recovery. This issue of CECIMO magazine focuses on 'innovation' in line with trends in industry and European public policies.

We offer a glimpse of new industrial trends and of the recent economic indicators in the MT sector in the 'CECIMO News' section. The following 'EU Policy and legislation' section analyses the six months of the Swedish Presidency from a sectoral perspective. There are ongoing EU efforts to create an innovation-friendly legislative environment for the manufacturing industry. The Eco-design directive is analysed together with CECIMO's self-regulation initiative which introduces an innovative methodology to meet the energy reduction targets set by the Commission. The revised machinery directive entered into force in December and it introduces among other novelties stronger rules to ensure effective market surveillance. In a separate article, CECIMO argues that the proper functioning of the internal market will enhance the competitive advantage of innovative companies in the EU. Finally, the impact of the FTA between the EU and Korea on the European MT industry is examined from a sector-specific point of view as a complementary tool to the innovation policy.

CECIMO now has a new President, Michael Hauser. We thank former President Mr Javier Eguren for his invaluable services to our industry during two successful years in this position. Under the presidency of Michael Hauser, CECIMO will continue to support the European machine tool industry which will underpin the competitiveness of the European manufacturing industry and help prepare for ever stronger global competition in the coming years.

We strive to ensure a sound European manufacturing base which is the guarantee of jobs and higher living standards for European citizens.

Filip Geerts, Director General

## 3 London General Assembly:

Michael Hauser has become the new President of CECIMO. He explains in an interview his feelings and plans for his term in office.

## 4 EMO Milano

124,660 visitors from 99 countries flocked to EMO Milano 2009, the international machine tool exhibition.

EMO proved once more to be the international showcase of technology and innovation. The EU Day organised by CECIMO brought machine tool builders and EU officials together at a round table discussion.

## 5 Swedish Presidency: So, what is the outcome for the machine tool industry?

The Swedish Presidency pushed Europe for transition to an eco-efficient economy. The machine tool industry is committed to support the process but manufacturers expect to see equal efforts from their counterparts on a global level.

## 6 EuP directive: CECIMO opts for self-regulation

CECIMO Self regulation initiative on the eco-design directive brings a new and innovative methodology to meet the energy reduction targets determined by the European Commission.

## 7 What will the FTA with Korea bring?

The EU signed the most ambitious free trade agreement ever with Korea. The Machinery & Appliances sector will get the lion's share from the potential trade generated by the reduction in custom duties.

## 7 The new Machinery directive

The revised machinery directive is more user-friendly. It expands the scope of health and safety requirements and ensures more effective market surveillance.

## CECIMO General Assembly



Hosted by the Manufacturing Technologies Association (MTA) in London.

At the CECIMO Fall General Assembly in London on 6-7 November, Mr Michael Hauser replaced Mr Javier Eguren as new President of CECIMO. Mr Detlev Elsingerhorst was made the General Commissioner for EMO. He will be the head of the team which will promote around the globe the next edition of the

world machine tool show in 2011 in Hannover. Finally, Mr Alberto Tacchella became President of the recently created Communication Committee. He will supervise CECIMO's activities which aim at increasing the awareness of the manufacturing industry in the eyes European decision-makers

**Highlights:** Michael Hauser elected new President of CECIMO. Detlev Elsingerhorst appointed General Commissioner for EMO 2011. Alberto Tacchella appointed chairman of Communication Committee.

and the European society.

Innovation and effective regulation to stimulate economic recovery were the focal point of the presentations at the GA. Guest speaker Mr Manenti presented operational excellence as a strong tool to exploit new business opportunities in the post-crisis period. Moreover, he pointed to better levels of customer services, the reduction of the time lag time between invention and marketisation and increased quality as complementary to manufacturing excellence. Dr Hatrick analysed the new business and technological trends in the energy, aerospace and automotive industries. He argued that companies which can catch up with the significant

technological changes (ie. flexible production, reconfigurable supply chains) and to direct their investments towards growing markets will benefit from new business opportunities. He set out cost-effectiveness (for example through lean thinking) as the third pillar of his formula for success.

### Guest Speakers

**Prof. Stewart Williams**, Cranfield University: "Metal additive layer manufacture, Technology for a sustainable future"

**Pierfrancesco Manenti**, Research Director at EMEA - IDC Manufacturing Insights: "The value of operational excellence"

**Dr David Hatrick**, Managing Consultant from PA Consulting: "Emerging from the downturn as a winner".

## Michael Hauser becomes the new President of CECIMO

Hauser undertook the presidency from Javier Eguren in London. In an interview he explains his perspectives for CECIMO.



**Mr Hauser, you will be in the driver's seat of CECIMO for the next two years. What are your feelings and plans for CECIMO?** CECIMO is one of the longest-standing Brussels-based European associations and represents a strategic industry which generates 44% of total world production. I am aware I assume a very important responsibility.

Our top priority is guiding machine tool builders out of the economic crisis which still hampers their business. Once the storm dies down, Europe must remain in its leadership position in the world with its competitive companies, skilled workforce, technological

superiority and its share of global markets.

**Why should Europe remain a leader in the MT industry?**

The machine tool industry is first in the manufacturing chain which supplies technological solutions to industries such as automotive, aerospace and energy generation. These are key sectors in the European economy as providers of jobs. Moreover, the manufacturing base of Europe is at the origin of innovative ideas and solutions which improve our standards of living. We need to maintain a sound manufacturing and research base to face future challenges such as the climate change, the ageing population

and energy security. The manufacturing industry has the right answers to these challenges. Following a possible shift of production from Europe to other continents, the research activity may also leave Europe, which would have drastic consequences on jobs in the whole supply chain. Moreover, Europe would risk becoming dependent on technology imports whilst today it exports technology and promotes environmentally friendly industry practices worldwide.

**How does CECIMO support the machine tool industry?**

CECIMO observes the machine tool industry and compiles statistics and market data at a European level. We put this data at the disposal of European MT companies to help shape their business strategies. Moreover CECIMO monitors European legislation and policies, reports to national member Associations and collects feedback. We provide this industrial feedback and economic data to the European Commission as input for industry policies.

Finally, CECIMO takes part in European research initiatives such as ManuFuture and Factories of the Future and

contributes to the shaping of the European research agenda.

**What is your perspective on 2010?**

An economic upturn is on the horizon, as well as new challenges. We see the outgoing crisis as an opportunity to update our technological infrastructure and improve our business models to prepare for ever greater competition on global markets. However, we need the right market conditions, effective legislation and accessible financing instruments to achieve this. We will stay in close contact with European policy-makers to brief them on our industry's needs. Public-private partnership is key to creating the right environment in which the European industry will rejuvenate and thrive.

### Who is Michael Hauser?

With 20 years experience in the MT industry, he currently holds the position of CEO at GF AgieCharmilles, Switzerland.

Previously, he worked in management positions at many prestigious companies (Mikron Technology Group, Donau Werkzeugmaschinen GmbH, Maho Graziano Spa and Maho).

## EMO Milano 2009

### The world machine tool show



The show was hosted in the state-of-the art exhibition centre, fieramilano.

#### Positive outcome

124,660 visitors from 99 countries flocked to the international machine tool exhibition (EMO) in Milan between 5 and 10 October 2010. More than 1400 companies from 39 countries exhibited at the show, reported the organiser EFIM, subsidiary of UCIMU - SISTEMIPER PRODURRE. Confirming the EMO's reputation as a global exhibition, non-European exhibitors represented 41.1% of all participants.

Mr. Pier Luigi Streparava,

General Commissioner of EMO Milano 2009, stated in the final press release issued by UCIMU: "... despite the difficult economic context, [the event] proved its appeal by attracting the public attendance and approval and attracted the interest of operators from all over the world."

#### Trends in the sector

When walking through the exhibition halls at EMO Milano, one could immediately notice that companies compete to offer the most effective solutions to reduce the life-cycle cost of

#### Highlights

*EMO: World showcase of technological innovations 41,1% record international participation rate. Environmentally-friendly solutions are on the rise. 2010: A year of transition to a recovery in 2011.*



machines and improve environmental performance. This is mainly achieved by ensuring reduced energy consumption and waste generation throughout the whole life-cycle of machines. Advanced materials are increasingly used to build lighter and non-stiff machines.

Furthermore, the integration of ICT in the machine tools aims to provide users with cost-efficient and effective solutions to help reduce production risks and improve productivity. ICT-assisted production includes virtual simulations and improved control of information flow throughout the entire supply-chain. Additionally, advanced safety control systems and ergonomic control panels are developed to improve the user-machine interaction and ensure greater safety for workers.

Besides the current economic situation and customer demand, environmental pressures and government regulations on

energy reduction and security and safety at work place are the drivers of innovation in the sector.

#### Latest economic indicators

CECIMO and other international MT associations (US, JAPAN, India etc.) meeting at EMO confirmed a 60-70% drop in machine tool orders in the 12-month period of October 2008 - 2009.

Moreover, CECIMO estimates a 37% drop in MT production in 2009 compared to 2008. The majority of companies reacted to the economic crisis by extending the use of flexible working hours and stepping up efforts to innovate.

However, a rapid return to pre-crisis production levels seems unlikely. Generally, the MT industry follows the general industrial trend of an average 6-9 months time lag, forecasts CECIMO.

A real recovery is not expected any earlier than 2011.

## EU officials met machine tool builders at the EU Day

EU officials visited the booths of machine tool builders and were able to inform themselves on the latest innovations.

CECIMO delegates and General Managers of CECIMO member Associations met with EU officials at a round table discussion at the EU Day on 8 October 2009, at EMO Milano.

The participants exchanged views on four key European initiatives which aim to create a **competitive and sustainable European manufacturing industry**: reform of the European standardization system, Factories of the Future Public-Private Partnership initiative, a voluntary agreement to improve the energy efficiency of machine tools and the impact of free trade agreements (FTA) on manufacturing technologies exports.

The Commission officials hailed a more SME-friendly Standardisation System which is underpinned by the ongoing

reform process. As regards research funding, machine tool manufacturers were invited to benefit fully from the 1.2 billion Euros made available to industry under the FoF funding scheme which was introduced by the EU economic recovery plan. Furthermore, the Commission officials appreciated CECIMO's efforts to comply with the eco-design directive (see p. 6 - CECIMO self regulation initiative) and stated that the Commission gives priority to voluntary agreements. Finally, CECIMO delegates expressed full support for FTAs; however they expressed concerns about the international IPR rules which fail to protect the new inventions on global markets and stop companies from benefiting fully from their innovation potential. EU officials invited machine tool builders to share individual



trade dispute cases with the Commission to help the EU build up the dossier of MT sector and protect their rights.

A guided visit to the booths of some MT companies from CECIMO countries followed the meeting. The EU officials

appreciated the possibility to see on the spot the latest innovations in the manufacturing technologies. They said that they could get first-hand information about the needs and problems of the European machine builders during the visit.

## Swedish Presidency: So, what is the outcome for the machine tool industry?



### TOP ISSUES

#### Creating Eco-efficient Europe

One ambition of the Swedish Presidency of the EU was to set up the conditions for the transition towards an eco-efficient economy. This should create the conditions to stimulate sustainable growth, employment and open markets of the Post-Lisbon strategy, also called "EU Strategy 2020". Eco-Efficient Economy is about creating more wealth while using fewer natural resources and causing less negative impact on the environment. It is about combining competitiveness with environmental responsibility.

The Swedish gave priority to improving legislation in different policy areas to help achieve this objective. They turned up the heat in debate on the revision of the 2006 Energy Efficiency Action Plan which is expected to introduce binding energy-saving targets on Member States. Furthermore, the Commission backed by the Presidency accelerated the implementation of the Eco-design directive of energy-using products. Finally, the Swedish managed to push through the European Parliament the expansion of

energy labelling directive (ie. to tyres and household appliances) and the recast of the directive on Energy performance of buildings.

#### Climate change negotiations

Swedish plans announced that the transition to eco-efficient economy coupled with a successful outcome from the climate change talks in Copenhagen would lead to the creation of millions of jobs. The MT industry's expectation from the climate change negotiations is a binding agreement which oblige all parties to cut carbon emissions. The overhaul of the entire industry would result in a boom in business opportunities for MT manufacturers.

However, everything did not go as planned. The summit in Denmark ended without the adoption of binding international rules on countries to slice carbon emissions. Additionally, the lack of consensus among EU member States delayed the adoption of the new Energy Efficiency Action Plan.

#### IMPACT ON THE MT INDUSTRY Updating the manufacturing base

The major implication of the eco-



### Highlights



*Transition to eco-efficient economy through innovation.*

*Resource-efficiency and climate change were on top of the agenda.*

efficiency agenda for the machine tool industry was an even stronger stimulus to innovate. The EU's ambitions to improve energy efficiency in customer sectors are expected to have a positive impact on machine tool orders.

Furthermore, the MT industry is aware of the environmental challenges the world society is faced with and supports the fight against climate change. The MT industry is keen on doing its part to support endeavours to this end and it has been one of the first industries to launch a self-regulation initiative to comply with the requirements of the eco-design directive (see p.6). The eco-design directive requires MT builders to make significant cuts in energy use.

#### Financial instability threatens innovation

The worst part of the economic crisis may be far behind. However, its effects still hamper the entire manufacturing industry. The Swedish Presidency did not do much to bring the economy back on its feet. Banks still lack confidence on the financial markets to lend to investors which are supposed to revitalize the manufacturing business. They are equally reluctant to lend to machine tool manufacturers (85 % being SMEs), especially the innovative ones. Moreover, the standstill in consumer markets discourages MT manufacturers from investing in innovative products which has a knock-on effect on

customer acquisition. If not reverted, the stagnation in the manufacturing industry may affect more jobs and businesses.

#### What for the next Presidency?

The MT industry urges the EU to convince other countries to help untie the Gordian knot in climate change negotiations at the second round of climate talks in Mexico in 2010. The final deal should introduce equal obligations on rich countries and the developing world should be associated to the process.

Mitigating climate change is an urgent task but it is not the only one. The MT industry calls on the EU to secure a sound, predictable European economic structure linked to a reliable global economic and financial system. This is the pre-condition for full recovery and the uptake of businesses.

The Spanish should keep up the work started by the Swedish to streamline the EU innovation policy. The EU should come up with an integrated response to the need to update the technological infrastructure of the European industry and to create markets for the new environmentally-friendly products. No innovative company can survive without customers who are willing to buy its products. An effective innovation policy will help bring more energy-efficient products into the market; it will help create new jobs and a healthier environment for citizens

## CECIMO met Swedish MEPs

CECIMO's Swedish member met with MEPs to exchange opinions on current EU dossiers with an impact on the MT industry.

CECIMO, together with its Swedish member (FVM - Swedish Machine Tool and Cutting Tool Manufacturers Association), met with Swedish MEPs in Brussels on 7-8 September 2009.

The objective of the visit was three-fold: Raising awareness about Machine Tools amongst

MEPs; reviewing of the current EU dossiers that have an impact on the European machine tool manufacturers, namely the eco-design directive, structural funds, market surveillance and trade issues; and developing long-term working relationships with MEPs. This final objective was paramount to help forward

the position of the European machine tool industry on certain dossiers and was met with enthusiasm by the MEPs. They highlighted that both a quick response to dossiers and strong business cases, presenting relevant and pragmatic case studies which demonstrate explicitly the consequences that

legislation has on the industry, are always valued.

In order to get a broad view of the position of the European Machine Tool Industry, CECIMO forwards dossiers that are on the European Parliament's agenda to member associations on a regular basis and collects feedback.

## The Energy-using products directive (EuP): CECIMO opts for self-regulation

CECIMO presented the Self-Regulation Initiative on eco-design to the European Commission on the EuP consultation Forum.

The Self Regulation Initiative (SRI) is CECIMO's response to the European Commission's plan on evaluating mandatory requirements for the metalworking industry. The machine tool industry prepares to commit itself, through a voluntary agreement with the Commission, to meet the energy reduction targets set by the eco-design directive.

"We have the Implementation Plan. We did a lot of work in a short period of time. There are concrete results, not least the creation of an ISO WG" stated Mr. Filip Geerts, CECIMO Director General, at the EuP Consultation Forum on 17 November 2009. At the meeting, the Commission welcomed the SRI on eco-design presented by CECIMO and decided to launch the sectoral evaluation study of the machine tool (MT) industry at the beginning of 2010.

### Innovative, clear and transparent methodology

CECIMO EuP Steering Committee as well as CECIMO EuP Energy Efficiency Working Group composed of experts, researchers and design engineers were created to conduct the study on SRI. The CECIMO SRI is a unique initiative in terms of the number of manufacturers involved (1600 manufacturers associated with CECIMO).

### Modular approach

The methodology of the concept

is based on a modular view of a machine tool. This approach allows manufacturers to indicate the potential for energy improvement of a large variety of products without unnecessary comparison with any other competitive product. This ensures the confidentiality of information. This method gives each manufacturer the opportunity to declare their energy saving achievements by a product declaration.

*"A very interesting concept bringing to the root of Eco-design" the Commission commented.*

"This is a very interesting concept bringing to the root of Eco-Design. [...]It is clearly defined but it leaves to the manufacturer the freedom/choice how to do it", the Commission commented.

### Implementation plan

The implementation plan allows MT builders to calculate their energy improvements and report it to national MT Associations (CECIMO members). This information will be passed to the CECIMO Open Task Force which will compile European data and present it to the Commission to show that MT industry reached the targets on energy reduction. Standardization bodies as ISO/CEN will be involved in providing necessary standards on measurements methods. A new working item proposal related to the concept has been already introduced to ISO working levels.



Photo: CHIRON

A Working Group under ISO/TC39 dealing with Environmental Evaluation of Machine Tools has already been established.

### Why SRI?

The most important benefit is that the complexity as well as the variety of products is taken into account. The individual evaluation of machines allows the manufacturers to protect themselves from unfair competition. The CECIMO Open Task Force will update the concept inline with the technological developments and help integrate the latest technologies in the list of improvement potentials.

### Strong industrial commitment

The industry has been very active in R&D focusing on green

*Machine tool industry is one of the first sectors that want to show its environmental improvements are inline with EuP.*

technologies and eco-design (FP6 NEXT project, FP6 PROLIMA project etc.). The principles of eco-design are broadly implemented by the machine tool builders and the industry fully supports the Commission initiative as a milestone in reducing the energy use. CECIMO's 60 years of experience in providing data and statistics on the MT industry puts it in an excellent position to lead the initiative. The MT industry is confident about its ability to implement the Self-regulation and achieve the energy reduction targets.

## Reform of the European Standardisation System

"2020: Outlook for European Standardisation" - Awaiting the expert report on review of the European Standardisation System

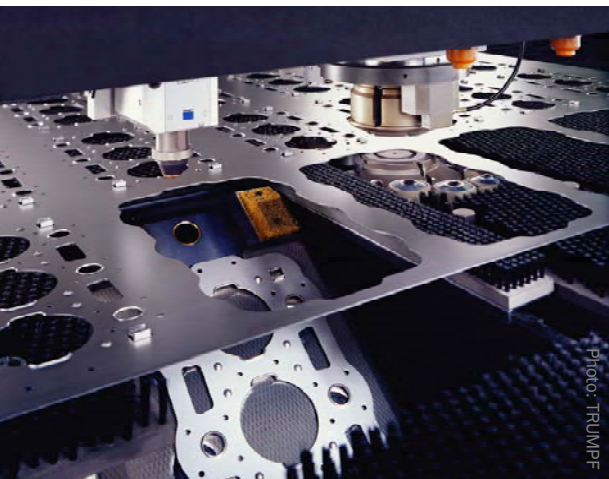


Photo: TRUMPF

The European Commission set up an Expert Panel (EXPRESS) in January 2009 to discuss the review of the European Standardisation System. CECIMO is awaiting the final report, expected to be published in 2010, as it will include recommendations to shape the future structure of the standardisation in Europe.

The machine tool Industry recognizes the current challenges to the standardisation system. The initiative is expected to improve access to standardisation for SMEs, and raise awareness of standards and of the standardisation system. CECIMO expects the report to bring a clear statement on how the future standardisation will evolve. The new model should incorporate the progress made in research and development and it should support innovation in the manufacturing sector.



## What will the EU-South Korea Free Trade Agreement bring?

The FTA between the EU and South Korea is considered to be the most ambitious agreement ever.

The EU-South Korea Free Trade Agreement was signed on 15 October 2009. This is the most comprehensive free trade agreement ever negotiated by the EU. The FTA will remove €1.6 billion of customs duties each year. The Machinery & Appliances sector will represent 25% of total savings. The removal of customs duties will be done over a transitional period so that domestic producers can gradually adapt.

As a result, customers will benefit from cheaper products, and exporters from a strengthened competitiveness. Besides import duties that will be eliminated on nearly all products and a far-reaching liberalisation of trade in services, the FTA is the first one of its kind to also include some specific sectoral disciplines for non-tariff barriers such as standards and certification. Additionally, an ambitious chapter on Intellectual Property,

*“€1.6 billion of customs duties will be removed each year. The Machinery & Appliances sector represent 25% of total savings.”*

crucial to the European competitiveness, has been integrated in the agreement. As regards trade remedies, the FTA includes traditional trade defence instruments from the WTO legislation (antidumping, anti-subsidy and global safeguard). The 'Duty Drawback' issue was the concern of some industries, namely the automotive and consumer electronics. Duty drawbacks are the duties paid on parts used for the production of a final product (e.g. a car), which are refunded when the final product is exported. Such schemes have finally been allowed under the EU-Korea FTA.

However, in case there was a significant increase in foreign sourcing (and therefore an



*Import duties will be eliminated almost on all products. A far reaching liberalization of trade in services will be achieved.*

impact on the total cost of production for one of the parties), the FTA foresees, after 5 years from entry into force of the agreement, a special clause, which can result in a limitation of the duties on parts that can

be refunded to a maximum of 5%.

Now that the European Commission has validated the FTA, it needs to be adopted by both the Council and the European Parliament. Under the newly ratified Lisbon treaty, Trade falls under the Co-decision procedure. Final adoption of the agreement is expected at the end of 2010.

## The New Machinery Directive: What's new?

The EU aims for a higher level of protection for workers and enhanced free movement of machinery in the Single Market



On 29th December 2009, the revised machinery directive entered into force. The European Commission organised a conference called 'Machinery in Europe' on 9th December in Brussels to present the new directive to a large group of stakeholders from the manufacturing industry. At the conference it was underlined that the entry into force of the first machinery directive was a milestone in ensuring the free circulation of machines in the European internal market. The

new Directive was introduced as being more practical and user-friendly compared to its predecessor.

The directive is adapted to the current needs of industry. For example, the scope of health and safety requirements is broader and the directive ensures enhanced market surveillance to fight against unfair competition by non-complying products. Market surveillance cooperation is strengthened through effective information exchange on national and European levels.

At the meeting, the Commission announced the publication of the first edition of a Guide which provides comprehensive information about the practical application of the directive. The Guide aims to encourage uniform application throughout the EU. It also includes the list of other directives which are applicable to machinery and explains how harmonized standards are developed and

published. It also provides information on the structure, functioning and the coordination of notified bodies.

*Enhanced market surveillance will end unfair competition*

CECIMO contributed to the preparation of the Guide through its participation in the Orgalime Machinery Directive Core Group and the Machinery Directive Working Group (MDWG) set up by the European Commission. CECIMO played a bridging role between the machine tool industry and the European legislation-making level by communicating timely the industrial feedback to the attention of the MDWG. Recently, taking into account CECIMO's remarks, the MDWG (met on 7 December 2009) decided to further investigate the deficiency in the EN ISO 13849-1:2006 related to the safety-related parts of control systems and to prolong the date

of cessation of EN 954-1.

The conference hosted a panel dedicated to the machinery industry in Europe. Mr. Xabier Eguren, vice-president of CECIMO, welcomed the new Machinery Directive on behalf of the machine tool industry.

He said that enhanced market surveillance will guarantee fair competition and encourage innovation. Furthermore, commenting on ways to enhance the European regulatory environment for the manufacturing industry, he stated that he sees the adoption of a single European patent as key to encourage innovation in the machinery sector by reducing costs related to patent applications. Additionally, he called for the continuation of market oriented R&D funding, the simplification of participation rules to European R&D programmes and better adaptation of Joint Technology Initiatives (JTI) to the needs of SMEs.

## NEXT Generation Production Systems

“Committing the European production to new frontiers”; this was the main message of the NEXT project, launched in 2005. Many significant advances in four major research areas were made in four years: environmentally friendly machines, the user centric autonomous machine, process oriented high performance production equipment and new business paradigms for machinery. Final results were exposed to public view at EMO Milano on 5-10 October 2009, at the NEXT conference and the NEXT booth.

Funded by the European Commission’s FP6 programme. NEXT project brought together 23 partners from 9 countries.

### NEXT Conference

At the NEXT Conference, research partners presented the scientific results whilst industrial partners briefed the audience on how research results were applied in their business and validated in the form of demonstrators. During the guided tour which followed the conference, participants had the chance to see the industrial

applications of project results at the booths of industrial partners such as the EDM machine auto-cleaning filter produced by ONA and a magnetic head table developed by Tekniker and manufactured by DANOBAT.

Conference presentations and information on the project are available on [www.nextproject.eu](http://www.nextproject.eu)

The Commission selected NEXT as an FP6 success story and published it in the official catalogue: Transforming the tools of production.

### NEXT booth

The NEXT booth was open to the public at EMO Milano. The parallel kinematic robot developed by the project leader Fatronik-Tecnalia was exhibited among other demonstrators and simulations shown at the stand. The event was organised by CECIMO which cooperated with Fatronik (project leader) and ASCAM.

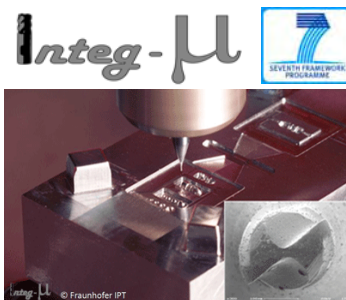
Dissemination activities aim at helping increase the awareness and knowledge of industry of state of the art research in manufacturing technologies.



## Integ-Micro seeks new frontiers in micro-machining technologies

In the automotive, bio-medical and aerospace industries, critical components depend more and more on higher geometric accuracy and micro structured surfaces for higher performance and reliability. The growing demand for complex 3D micro-engineered devices opens up important business opportunities for the European moulds and dies, micro-tooling and micro-devices markets.

However, the current micro-engineering technologies fall short of capacity to meet user demands for rapid delivery of customised ultra high precision components, in large volumes and at low costs. The manufacturing of 3D micro-parts requires a chain of different machining processes in different set-ups, which have a negative effect on precision, productivity, cost and lead-time. There is an obvious need to accelerate R&D in this field.



The Integ-Micro project, funded under FP7, sets out the aim of integrating different machining processes on one single set-up (hybrid multitasking machines). The aim is to reduce the number of machining operations and achieving ultra high precision in micro-machining (10:±0000 micron range) of hard materials such as ceramic or hardened steel. The new hybrid machines will be reconfigurable to give the necessary flexibility to the manufacturer to respond to changing order amounts and to adapt to the speed of change in technology and customer

demand. Integ-Micro is an industry driven project. The research work on five Integ-Micro technology platforms will lead to the fabrication of industrial prototypes to demonstrate the industrial applicability of research results. A survey on user requirements was launched upfront to identify real industry needs.

To give an example, one technology platform works on the integration of micro-milling-turning-cutting with laser ablation for laser softening and hardening operations will allow to cut hardened steels for micro moulds and titanium alloys for biomedical devices. Another platform aims at integrating EDM sinking with milling in order to achieve the machining of hard and brittle material such as ceramic and to get complex 3D shapes which are highly required in the sectors like biomedical (moulds) and aeronautic (machining of micro

features such as blade cooling). Besides greater accuracy and faster throughput, Integ-Micro seeks to achieve product miniaturisation which will help to reduce handling and plant area. Furthermore, exploitation of dry cutting in the field will contribute to minimising the impact on the environment and workers’ health.

Composed of 20 partners from 6 countries, the project is led by Scuola Superiore Sant’Anna based in Italy. CECIMO is responsible for the dissemination of the project results in cooperation with the project leader. The last dissemination activity was organised at EMO Milano 2009 at a joint booth with the NEXT project. CECIMO will continue bringing research results to industry at the upcoming dissemination activities in METAV and MACH in 2010.

More info: [www.integ-micro.eu](http://www.integ-micro.eu)

## ManuFuture Conference: Implementation of a Sustainable European Manufacturing Industry

### The ManuFuture conference in Goteborg pointed to sustainability as a solution to remain competitive in the long term

The economic crisis, energy and raw material crisis coupled with climate change shape drastically the current business environment for the manufacturing industry. Moreover, growing competitive pressure from low wage countries forces European manufacturers to seek sustainable solutions to remain competitive on an increasingly unstable global market.

The ManuFuture Conference in Goteborg (30 November - 1 December 2009) looked into the question of sustainability from three perspectives: economic, ecologic and social. It was concluded that *economic sustainability* could be built up in two directions: service-driven and technology-driven. The former highlights the importance of the shift from a product focus

to a product/service focus in meeting customer demands and reducing life cycle costs whilst the latter points to technology development as a catalyst to boost competitiveness.



As for *social sustainability*, it puts emphasis on the training of personnel and the dissemination of knowledge across the enterprise. Finally, it was stated that *ecological sustainability* should be achieved by reducing energy and material consumption so as to

produce eco-efficient products which generate the least impact on the environment during the operation phase and after use.

Mr Javier Eguren, Managing Director of Nicolas Correa, S.A. - Vice-President CECIMO, stated in his presentation that 'flexisecurity' should be one of the major management principles for manufacturing companies to sustain their business and remain competitive. He said; "Innovation must be driven across the whole organisation through new business models affecting: value proposal, management methods, organisational structure to unleash the people's contribution and the supply chain management in order to pave the way to a sustainable economic growth". Undoubtedly,

new processes and technologies will require better knowledge and skill management.



The Strategic Annual Roadmap of the Factories of the Future (FoF) Public-Private Partnership initiative identifies sustainability as one of the four key components of high added value technology development. Environmentally friendly technology development will receive the biggest part of the FoF funding alongside with ICT enabled manufacturing. More info: [www.manufuture.eu](http://www.manufuture.eu)

## New appointments within CECIMO



### GENERAL COMMISSIONER EMO 2011

CECIMO London General Assembly (November 2009) appointed **Dr. Detlev Elsinghorst** General Commissioner for EMO Hannover 2011. Dr. Elsinghorst, is well-known in the European Machine Tool Industry. He has held several leading positions in German machine tool manufacturers, inter alia Managing Partner at Bêché&Grohs GmbH, Hückeswagen, Germany, and Managing

Director at Siempelkamp Pressen Systeme GmbH, Krefeld. Since 2004 he has been operating his own engineering business. In 1997 he became Chairman of the Exhibition Committee at VDW. He has already occupied the post as General Commissioner for previous EMOs held in Hannover.

Dr Elsinghorst states that the global economy is expected to have recovered in 2011. He comments: "EMO Hannover, the biggest event of the metal working industry in the world will show the performance and innovation capability of the machine tool industry at the right time."



### COMMUNICATION COMMITTEE

CECIMO London General Assembly appointed **Mr. Alberto Tacchella** as **Chairman** of the newly created Communication Committee. Mr Tacchella states: "The Communication Committee is created to streamline the overall communication actions of CECIMO both internally and externally. We aim to explain to policy-makers and the general public the strategic role that the machine tool industry

plays in generating prosperity, jobs and high standards of living in Europe. The Communication Committee strives to create a business environment which will allow European machine tool companies to increase their market share and to market the most competitive manufacturing solutions worldwide.

Another important objective of our committee is to increase the awareness of technology and engineering in the society and attract young people to engineering studies. Finally, CECIMO will continue to disseminate information on the state-of-the-art research within European research projects."



### THE BOARD

**Jarmo Hyvönen**, M.Sc. has been working in Manufacturing Enabling Industries (mainly with Machine Tools, Flexible Manufacturing Systems and Robotics) in Finland for nearly 30 years in different positions. Fastems is one of the world leading companies in the field of Factory Automation having direct presence in Europe., Asia and the US. "I strongly want to

contribute that Europe also in the future should have strong Enabling Industries to support Manufacturing Industries providing new job opportunities of high quality and promote sustainable use of natural resources in manufacturing."



### TECHNICAL COMMITTEE

**Mr Dag Jacobson** has held the position of **Chairman** of the CECIMO Technical Committee since June 2009.

He states his perspective for the Technical Committee as follows: "Our target is to broaden the knowledge about priority technical issues between members and

timely reaction towards the authorities. Over the next few months the Technical Department will mainly be working on further elaboration under the EuP Directive framework and related obligations: Self Regulatory Initiative as much as the possible mandatory implementing measures."



*AFM, the Machine Tool Manufacturers' Association of Spain, joined CECIMO in 1962. It was created in 1946 and represents practically the entire production capacity of the Spanish machine tool sector (92% of its turnover for 2008).*

## Support for an innovative & competitive industry

AFM has its own technology unit, INVEMA, the Machine Tool Research Foundation. INVEMA works to foster technological development and improve industrial management amongst companies in the sector, in close cooperation with their R&D&i, Quality and Industrial Safety departments and technology centres. AFM is also backed by other specialist bodies such as IMH (Elgoibar Machine Tool Institute), an innovation centre in vocational training. PROSCHOOLS is a specialist organisation which belongs to AFM and focuses on educational knowledge transfer through the promotion of vocational technical training centres in emerging countries.

## Innovative and sustainable best practices

### AFM promotes a full offer of services and activities

- Promoting Competitiveness of industry
- International Promotion
- Technology
- Marketing and Communication
- Industrial Management
- Educational and Training Knowledge Transfer
- Institutional Relations
- Studies, Reports and Databases

In 2008 Spanish machine tool production rose to 1,056.7 million Euros, a 0.9% increase compared to the previous year. Spain is third in the European Union ranking of the main machine tool producing and exporting countries. It comes ninth in the world ranking as a producer and as an exporter.



In 2008 exports represented 69.7% of the total production value which rose to 736 million Euros, a 18.4% increase with respect to 2007. Exports/ imports coverage ratio stood at 155.5%. Main export destinations were Germany (21% of the total exported by the sector), Italy (10.3%), France (8.9%), China (5.8%), India (4.8%), Portugal (4.4%), Mexico (3.9%), Argentina (3.8%), Brazil (3.5%) and Russia (3.1%). The sector develops its own technology (allocating on average 6% of its turnover to R+D+i) and its Competitive Strategy is based on factors, such as Internationalisation, Technological Innovation, Training and Inter-company Cooperation.

Spain is well-known for its capacity in offering reliable productive and precise solutions for heavy industries and the machining of big industrial parts. Spain is the world leader in the construction of moving column big size milling machines.

## Third biggest producer and exporter in Europe



AFM participates actively in technology development projects in the machine tools sector. Here are some successful examples:

**CENIT:** The CENIT project, called "eEe - Advanced Technologies for Equipment and Manufacturing Processes in 2015" is currently the largest scale R&D&i action

concerning machine tool-related issues, and the largest scale research project ever embarked upon by this sector. The budget amounts to approximately 30 million Euros and a total number of 20 companies are involved, representing over 60% of the sector's production. 16 research organisations are associated to the project. 80 demonstrators and test benches, more than 5 patent

applications, more than 35 publications in scientific-technical publications, 11 R&D&i projects have derived from this project. Led by four of the most significant companies in the sector, namely Danobat, Etxe-tar, Fagor Automation and Nicolás Correa, the aim of this CENIT is to place Spanish machine tools in a strategic position in the world market in 2015.

**PROLIMA:** The principal objective of PROLIMA has been to supply European SMEs that produce machine tools with the means to help them generate the minimum environmental impact and optimize global life cycle costs (including design, machine usage, discard and so on). The final product of the project was a Best Environmental Practice Manual that contains more than 100 environmental regulations for a more environmentally friendly design and use of machines. Some other relevant projects in development are related to machine foundation, eco-labeling and noise protocols.



### Message from General Manager

The machine tool sector and manufacturing technologies are the basis of modern industry. The engine applied to a machine tool was the origin of industrial revolution that enabled the world economy to boost by being able to produce goods with unknown standards of quality and repeatability.

Today, it would be unconceivable to think about the existence of a car, a plane, a power turbine or a train without the involvement of machine tools in their production processes. Yes, there is no single industrial product that can be manufactured without a machine tool. Even indirectly all machines and their components are possible because of the mother machine: the machine tool.

The machine tool sector encapsulates the capabilities and the knowledge of how to manufacture products, and provides competitiveness to all industry.

Europe is the homeland of machine tools, let's protect our most precious pearl and cultivate the future of industry.

Xabier Ortueta

AFM General Manager

# CECIMO Member Associations



# cecimo

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Makina Imalatçilari Birliği

## **United Kingdom: MTA**

The Manufacturing Technologies Association

## cecimo

is the European Association representing the common interests of the European Machine Tool Industries. We represent 15 National Associations representing over 1400 industrial enterprises in Europe, 85% of which are SMEs. Innovation and R&D are high on our agenda to promote the development of the industry in the fields of economy, technology and science.