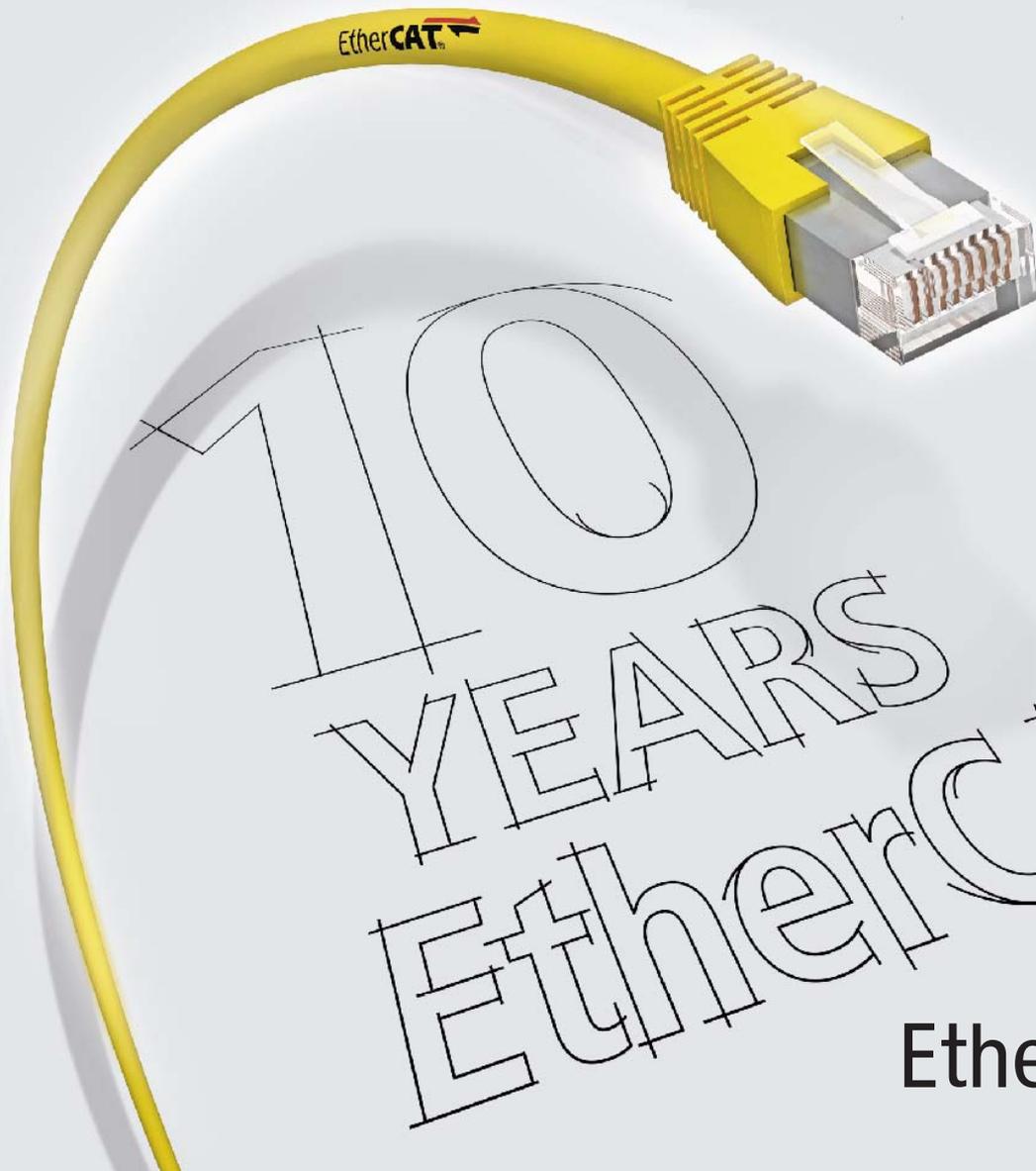


ETG Newsletter

March 2014 | #25



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www.ethercat.org

EDITORIAL

Dear Members,

We are using the ETG 10 year anniversary milestone as the catalyst to revive our organization's newsletter! The information will be presented in a more concise format, and we plan to publish it with more frequency.

At the recent ETG membership assembly, we celebrated the 10th anniversary – and there are many reasons to celebrate: EtherCAT is widely accepted worldwide, the adoption rate among users and device makers alike is outstanding, and our organization has become the largest of its kind. This success was not achieved simply through organizational activities: it is the EtherCAT technology itself that is so convincing. EtherCAT is the engineer's choice, and we have the privilege to market what so many consider the best fieldbus technology!

We hope you enjoy this newsletter revival and look forward to meeting many of you at one of the upcoming ETG events.

With best regards on behalf of the entire EtherCAT Technology Group Team,



Martin Rostan, Executive Director



10 YEARS ETG

openautomation Report: 10 Years Diversity of EtherCAT Applications

Taking our 10th anniversary as occasion, we've recently published a special edition of the magazine openautomation Report in cooperation with the renowned publishing house VDE VERLAG GmbH. In addition to the printed version, the magazine is now available online.

Users, developers, and manufacturers of innovative automation solutions are the main target groups for the publication's focal topics such as informative technology articles, indicative interviews, and exciting application stories about EtherCAT.

The printed version of the openautomation Report was issued in time with SPS IPC Drives 2013 with a total run of 24,000 copies in German language. Next occasion to get your personal copy of the openautomation Report is the ETG Joint Booth at Hannover Messe, taking place April 7–11, 2014.

For the online version of our openautomation Report please visit the Download Section (see EtherCAT Publications) or use the following link:

[openautomation Report \(PDF\)](#)

EtherCAT Adoption Rate

EtherCAT is wide spread in different markets as well as countries. Please have a look at the following impressive figures:

124 EtherCAT Drive Vendors

159 EtherCAT Master Vendors

90 EtherCAT I/O Vendors

Playing with figures

We have more than **2700** members from **56** countries and **6** continents. EtherCAT is implemented on **33** different RTOS and over **530** products are entered in the official EtherCAT Product Guide. ETG organized **26** EtherCAT Plug Fests so far. ETG booths were shown at **100** tradeshows and roadshows took place in **21** different countries and **59** cities. The world record EtherCAT multi-vendor drive demo contains **35** axis from **24** different vendors within **1** EtherCAT network. **404** new members joined the ETG in **2013**.

HOT TOPIC

EtherCAT – Motion Control Refined: Beckhoff XTS + KUKA Robot

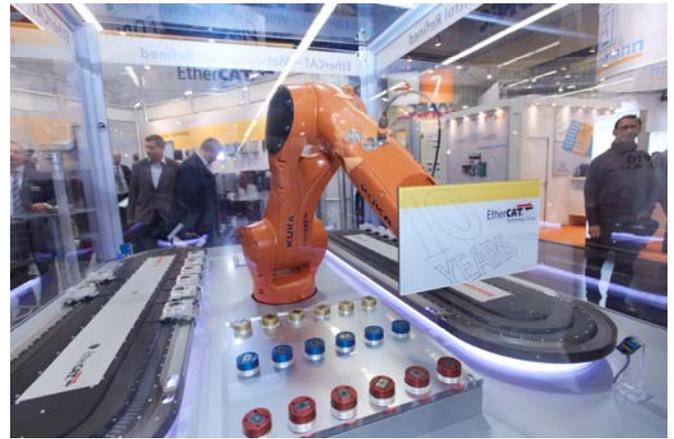
Last year's SPS IPC Drives was a very special event for the EtherCAT Technology Group (ETG) which represented EtherCAT technology with a total of 58 co-exhibitors and more than 330 products at ETG's tradeshow booth in Nuremberg, Germany: Exactly ten years ago the EtherCAT Technology Group was founded at this important exhibition – then starting with 33 founding members. Today more than 2.700 companies join forces to support, promote and advance the EtherCAT technology within the EtherCAT Technology Group.

In celebration of the ten year anniversary of EtherCAT and the ETG the EtherCAT Technology Group presented a motion control application with a KUKA robot and two Beckhoff XTS systems at its tradeshow booth which turned out to be one of the tradeshow highlights and attracted reams of visitors. XTS stands for eXtended Transport System and is a unique drive technology combining the advantages of rotary and linear systems, resulting in a drive system that extends the former linear motor principle by adding a critical component: continuous, cyclic flow.

Thomas Rettig, Senior System Expert at the ETG, explained: "The Beckhoff EtherCAT master controls two XTS systems ensuring a cycle time of 250 microseconds and about 2 kilobyte of data being transferred every 250 microseconds per XTS. To implement a safety control system we've used Safety over EtherCAT. The KUKA robot, though integrated as a slave, has an internal EtherCAT master with safety control. Our live demo shows that it works perfectly well to combine all types of motion systems without any gateways."

Beckhoff's XTS system provides completely new advantages and engineering possibilities, especially for high speed material handling applications. With EtherCAT it is possible to manage the highly demanding communication requirements

of the XTS system reliably and efficiently. The technology is a successful example for an EtherCAT-based approach that simply wouldn't have been possible with traditional fieldbus systems. For the tradeshow demo application TwinCAT automation software is used for configuration and control of the XTS systems. The KUKA robot is integrated into the application by EtherCAT communication.



Bernd Fiebiger, Senior Developer System Engineering at KUKA Roboter GmbH, stated: "Here at the tradeshow we are showing the integration of the KUKA robots into the EtherCAT PLC world which means that we are now acting as EtherCAT slave, too. The fact that we have an installed base of more than 25.000 systems worldwide using EtherCAT technology shows that EtherCAT was the right choice for our control systems. We do appreciate the high availability, high bandwidth and extremely fast communication that EtherCAT provides."

[Watch Youtube Video](#)

ETG TEAM

ETG Team Worldwide

A team of 23 people is supporting you around the globe. Here are the faces of the ETG team!

We will start personal interviews introducing one team member each upcoming newsletter.



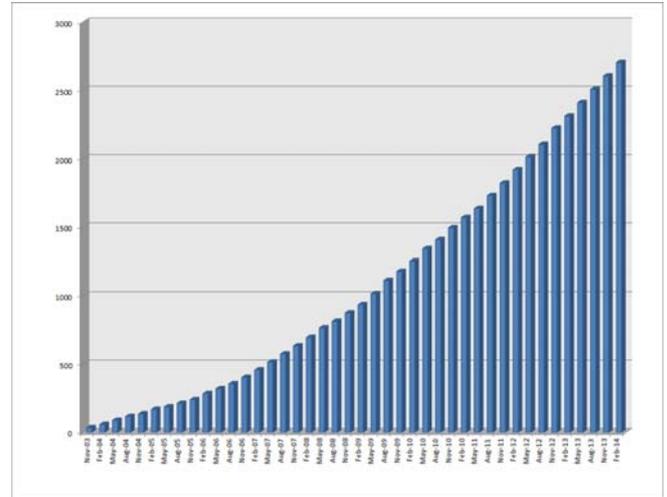
ETG Membership Development: >2700 Members

After EtherCAT as a technology already celebrated its 10th anniversary at last year's Hannover Messe it is now the EtherCAT Technology Group's turn.

Since its foundation in November 2003, the organization stands for the approach that everyone should be able to use and implement EtherCAT. The success of this vision speaks for itself: Almost in perfect timing with the 10th anniversary of the organization, the ETG has reached another significant membership milestone: 2700 Members (as of February 2014).

The number of 404 new members in 2013 means more than one new member each day!

We are firmly convinced that the demand of fast Industrial Ethernet systems like EtherCAT around the globe will continue to grow.



EtherCAT Technology Group — Milestones

Year	Milestones	Additional Info
2003	<ul style="list-style-type: none"> EtherCAT introduced ETG founded 	EtherCAT was first introduced in April at Hannover Messe 2003. In November 35 companies founded the EtherCAT Technology Group.
2005	<ul style="list-style-type: none"> Safety over EtherCAT 	First TÜV certified products using the Safety over EtherCAT technology became available in 2005.
2007	<ul style="list-style-type: none"> EtherCAT is IEC Standard 	Having been an IEC specification since 2005, EtherCAT became an IEC International Standard (IS) in 2007.
2008	<ul style="list-style-type: none"> EtherCAT Conformance Test Tool 	The official EtherCAT Conformance Test Tool was released in 2008. Having the Tool and passing the test is a mandatory requirement for device vendors.
2009	<ul style="list-style-type: none"> Member 1000 Test Centers in Germany and Japan 	ETG opened official EtherCAT Test Centers in Germany and Japan in 2009. In April member no. 1000 joined the EtherCAT Technology Group.
2011	<ul style="list-style-type: none"> EtherCAT interface in Standard $\mu P + \mu C$ 	EtherCAT is the first dedicated Industrial Ethernet hardware interface integrated in standard microprocessor product lines: EtherCAT is mainstream!
2012	<ul style="list-style-type: none"> Member 2000 Semiconductor Profiles 	Member 2000 in July. Semiconductor Technical Working Group elaborates set of device profiles, making EtherCAT the network of choice for this industry.
2013	<ul style="list-style-type: none"> Member 2500 Test Center in China 	10 Years of ETG! In November member no. 2500 was honored. Official EtherCAT Test Center in China accredited. Safety over EtherCAT Conformance Test Tool approved by TÜV.

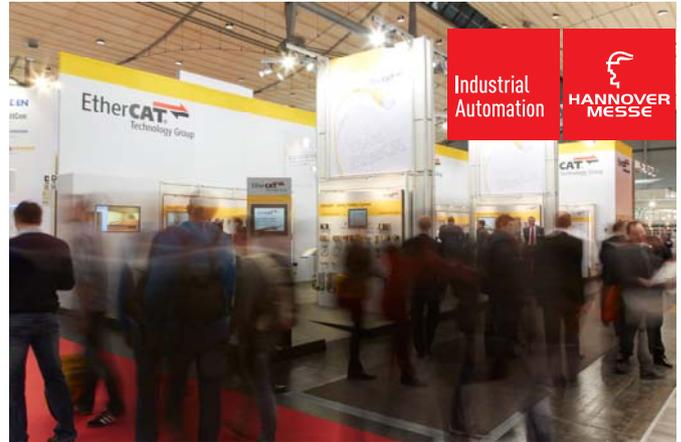
ETG Joint Booth at HANNOVER MESSE 2014: Hall 9-D18

Together with 59 co-exhibitors and a total of more than 330 different EtherCAT products we're once again sending out a clear message at our ETG Joint Booth at Hannover Messe 2014: We're the fieldbus organization exhibiting the most devices at the same time anywhere.

Still in the name of our 10th anniversary we cordially invite you to visit our ETG Joint Booth D18 in hall 9 at this year's edition of Hannover Messe. We'll show an impressive variety of EtherCAT products directly on booth and inform all visitors about EtherCAT technology in general and the work of the EtherCAT Technology Group.

Additionally, we bring along our enhanced Safety Presenter as well as a really impressive EtherCAT demo you must not miss! Live on booth we show how a KUKA robot deals with two Beckhoff XTS systems at a time using EtherCAT – and thus enabling groundbreaking new application possibilities in motion (read more on page 2!). Our EtherCAT experts on-site as well as our supporting ETG members can't wait to answer your questions, show the EtherCAT devices on our product walls and inform you about our organisation.

Just stop by or make an appointment in advance by contacting us. We're looking forward to welcome you at our ETG Joint Booth D18 in hall 9!



Visit the tradeshow website here:

www.hannovermesse.de

ETG Joint Booth Exhibitors and supporting ETG Members:



Latest Press Releases

Please read through the latest ETG press releases and find more online.

EtherCAT Test Centers expanded ([EN](#), [DE](#))

SPS IPC Drives 2013: Celebrating 10 years of the EtherCAT Technology Group ([EN](#), [DE](#), [CN](#))

www.ethercat.org/press

Website Updates

Please use the enhanced search on our website to find things easier and faster:

www.ethercat.org/search

Select your country which helps you to find an ETG event close to your city:

www.ethercat.org/events

Upcoming EtherCAT Roadshows: Singapore, Australia, New Zealand

These seminars hosted by EtherCAT Technology Group will provide comprehensive information about the opportunities of using EtherCAT as an Ethernet-based real time communication system.



Explore and understand EtherCAT technology, see best practice approaches and learn about the benefits and the challenges of Industrial Ethernet. This seminars are an educational event delivered by EtherCAT professionals. Attendees will get the opportunity to talk with the experts face-to-face, discover the additional table-top exhibition and

see how EtherCAT can accelerate your application! Participation is free of charge. Join us for a one-day event in Singapore, Australia or New Zealand this year!

Registration and detailed agenda is available for the following dates and locations:

EtherCAT Roadshow Singapore

[March 18, 2014: Singapore](#)

REGISTER 
online today - it's free!

EtherCAT Roadshow Australia & New Zealand

[March 20, 2014: Auckland, New Zealand](#)

[March 21, 2014: Christchurch, New Zealand](#)

[March 25, 2014: Melbourne, Australia](#)

[March 26, 2014: Sydney, Australia](#)

[March 27, 2014: Brisbane, Australia](#)

REGISTER 
online today - it's free!

Technical Committee Meeting

Mar 11, 2014 | Frankfurt, Germany

The Technical Committee (TC) conducts the specification work within ETG. On the semi-annual meeting the Technical Working Groups (TWG) and Task Forces (TF) present the results of their work and up-to-date specification topics are discussed. Joining the TC Meeting keeps you a step ahead.

The first meeting in 2014 takes place on March 11, at the Cosmopolitan Conference Center, Frankfurt am Main, Germany. One day before ETG offers a Technical Training Class (full day) as well as a Safety Seminar (half day).

[Download Invitation \(PDF\)](#)

[Online Registration Form](#)

Technical Training Class

March 10, 2014 | Frankfurt, Germany

This seminar gives you detailed information regarding the EtherCAT technology and puts you in the position to plan your application and/or to start your development afterwards. The communication protocol is introduced in detail and hardware and software requirements are shown. The meeting is intended for developers and product managers of ETG members.

The EtherCAT Technical Training Class takes place on March 10, at the Cosmopolitan Conference Center, Frankfurt am Main, Germany.

[Download Invitation \(PDF\)](#)

[Online Registration Form](#)

EtherCAT 

Safety over EtherCAT Seminar

March 10, 2014 | Frankfurt, Germany

The seminar gives you a comprehensive overview about today's requirements for safety machine architectures with the focus on safety communication with the Safety over EtherCAT protocol (FSOE). The highlights and technical features are shown and implementation aspects are provided. Decision makers, product manager as well as R&D engineers who are involved in their companies safety product strategy are invited to this seminar.

The seminar takes place on March 10, at the Cosmopolitan Conference Center, Frankfurt am Main, Germany.

[Download Invitation \(PDF\)](#)

[Online Registration Form](#)

Safety over
EtherCAT 

EVENTS **Tradeshow Participations | Q1/2014**

Visit us, see new EtherCAT devices, meet experts here:



Mar 03-05 | SIAF 2014
www.siaf-china.com/english



Mar 04-07 | Automation World 2014
<http://automationworld.biz>



Apr 07-11 | HANNOVER MESSE 2014
www.hannovermesse.de/en



EtherCAT Technical Training Class

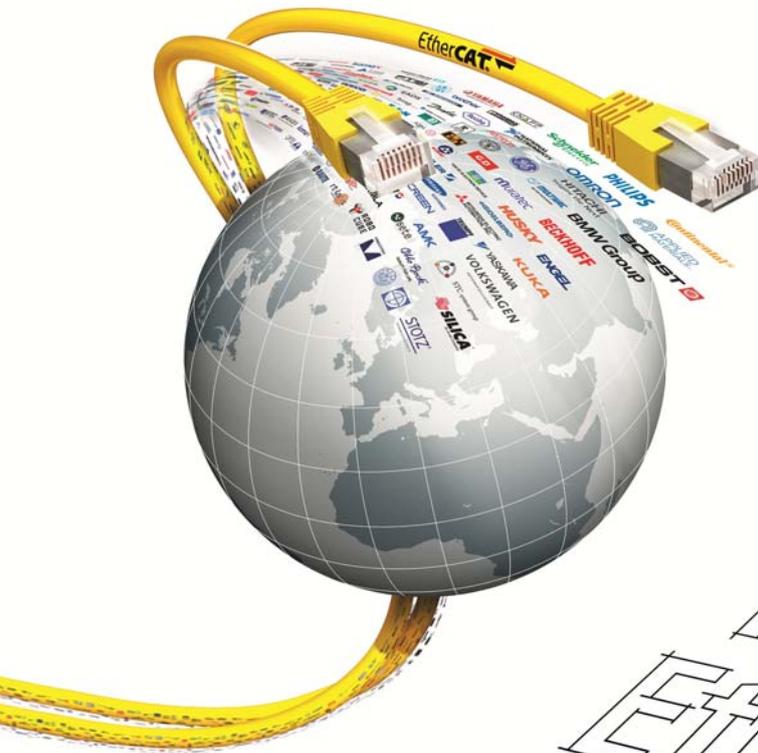
March 05 | Shenzhen, China

Our ETG Office China invites all members to the EtherCAT Technical Training Class on March 5, 2013 in Shenzhen, China.

The training class is available in Chinese language, so members located in mainland China, Taiwan or even Singapore are invited for this event.

For detailed agenda and registration please see invitation link below:

[Invitation](#)



10
YEARS
EtherCAT

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