NEWSLETTER September 2013



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We in EFEE hope you will enjoy the present EFEE-Newsletter. The next edition will be published in October after the conference and council meeting in Moscow in September 2013, where this is being written. Please feel free to contact the EFEE secretariat in case:

- You have a story you want to bring in the newsletter.
- You have a future event for the next EFEE-newsletter upcoming events list.
- You want to advertise in a future newsletter.

Or any other matter.

Johan Finsteen Gjødvad, Chairman of the Newsletter Committee and Vice president of EFEE

Dear EFEE members, the president's voice

13 years ago in 2000 the first EFEE Conference took place in Munich being the birth place of the EFEE World Conferences of explosives and blasting. Given the Conference's great success in Munich, the second Conference was organized in 2003 in Prague. Since then this series of conferences has become an important part of EFEE work. Further conferences were held every two years: 2005 in Brighton, 2007 in Vienna, 2009 in Budapest and 2011 in Lisbon. Continuing this tradition, it was decided to hold the 7th EFEE World Conference on Explosives and Blasting in 2013 in Moscow and in 2015 and 2017 we will all meet in Lyon and Amsterdam, respectively.

I am delighted to welcome you all in Moscow. As the acting EFEE president I am especially honoured to open the 7th EFEE World Conference on Explosives and Blasting. Together with Russia's National Organization of Explosives Engineers (NOEE), we are quite pleased that you will follow our invitation to attend our conference. Moscow as this year's conference location once more underlines the fact that the circle of EFEE partners and members has expanded in almost every direction in the past years. The past EFEE conference locations were situated in central Europe, thus making Moscow a strategic starting point for making new contacts in the blasting sector between East and West, exchanging experiences and opening up new business relations.

Ladies and Gentlemen, dear EFEE members I now wish you all an interesting and high-level conference. Please make use of all the opportunities to exchange experiences, meet new partners and make new business contacts. The trade exhibition which I would like to point out again and [BACK TO TOP]

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which accompanies the conference should well provide such an opportunity. Last but not least I would like to thank all the sponsors supporting our Moscow conference. Without them all this would not have been possible.

Finally, I wish us all a pleasant and productive conference and all the best to you.

 \sim

Jörg Rennert, President of EFEE

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Breaking the record ?

- 13.000 m3 of reinforced concrete with a single shot

The blast subject was a duct of the Rhine-Herne-canal over the Emscher River at Castrop-Rauxel in the North of the Ruhr region in West-Germany. Shipping had to be halted until one hour before the blast. Pre weakening had been allowed only in a very small extent. Seeping water running through cracks and gaps in the walls of the 85 year old construction had to be pumped out permanently.

The duct was surrounded by several sensitive buildings. The single charges had been limited to 6 kg/delay. With a delay of some minutes the may be biggest demolition blast in Europe was initiated. The blast operation was carried out under the water filled canal.

Already a few seconds after the initiation of the first charges the floods poured into the diked excavation. The result was very good. Only the upper part of the front walls had to be jack hammered. The prognosticated vibrations have not be reached by far. Fly rock was restricted at the site field.

Executing responsible blast company: Thueringer Sprenggesellschaft Ltd

Involved experts:

- Consultant on demolition planning Dr. Rainer Melzer, Dresden (project, drill and blast design, static calculation
- Dr. Ulf Lichte, Munich, (vibration prognosis and monitoring)
- Eng. Gerd Vogel, Dresden (initiation project and in cooperation with ORICA instalment of the electronic initiation circuit
- Walter Werner, Stolberg (supervision by order of the waterway authorities)



Subject to be blasted:

- 13.000 m³ (~ 17000cubic yards)
- side walls up to 42 m length, 15 m heights and 3 m thickness
- foundations up to 7 m thickness
- 3 tubes with walls of 0,85 m to 3,5 m

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- 7.9992,2 kg explosives (when the inside coating of the shock tubes as well as the alienating charge are added it will have been ~ 8 tons)
- 4.550 electronic detonators with 24 loggers and 2 blasters
- 1.200 shock tube detonators
- 6.500 m² geo textile as protection against fly rock
- 5.650 drill holes up to 15 m depth



Staff and equipment:

- 5 drilling rigs for 8 weeks
- 20 licensed blasters and trained helpers party in 2 shifts
- 12 days for charging and installation of the initiation circuits
- 15 vibrations recording instruments
- 45 policemen, firemen and other helpers for closing the blast area



Walter Werner, Germany

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EFEE conference in Lyon

- in 2015 we welcome you to Lyon France together with

Lyon is the third biggest city in France and one of the oldest. Located at the confluence of the Rhône and Saône rivers, Lyon is influenced by the Mediterranean and the Continental Europe climates.

Located in an important crossroads and in a fertile plain, the area knew human settlements from the prehistory. The first records as a city come from Antiquity, when Phoenician traders, sailing upstream the Rhône river, founded a trading post on the right bank of the Saône and Rhône Rivers.



During the Roman Empire, the Romans used the crossroads facilities to make Lyon as the main town and the administrative headtown of Roman Galia Important remains from this period are preserved. During the Middle Age, Lyon remains an important trade center and market place for wine, corn, cattle and crafts, keeping trade connections with many western European areas.

Lyon is, since 1536, a very important center for silk spinning and weaving. This craftmanship was promoted by some well known agronomists that developed, in the Cevennes hills, the breeding of silkworms and the growing of white mulberries to feed the worms. This is done nowadays in an industrial way.



With the industrial era, Lyon becomes an important center for diversified industries as mechanical, automotive, textile, chemical and building materials production.

Lyon has an international airport (Satolas) connected to almost all the biggest towns in Europe, and is an important railway crossroad, connected to the main cities in France. The Paris Charles de Gaulle airport in is at 2 hr trip to Lyon Part-Dieu station by the Fast Speed train (TGV).

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For outdoors activities, Lyon is ideally located, and offers Mountaineering and Skiing in the Alps (150 km or 90 Miles), hiking in the Alps, the Jura mountains (100 km or 70 miles) and the Central Mountains, swimming and other sea shore activities in the Mediterranean coast (300 km or 200 miles), angling in the Central and Jura mountains, etc.

Albert Armangue, EFEE Delegate France

In Memoriam

- Joep Peeters

EFEE's first secretary Peter Johann (called Joep) Peeters passed away in the age of 72 years. Joep Peeters was a trained miner and joined later the Netherlands Navy. He served as a marine in New Guinea and was honoured with several medals.





In 1988 Joep Peeters was among the founders of EFEE at Aachen (Germany) and worked as the first secretary until 1997.

(From left to right: Legard (B), Thiard (F), Siffre (F), Braodhurst (GB), Ebner (D), Diggers (GB), Solenthaler (CH), Peeters (NL), Jonasson (S), Werner (D), Holluba (A), Hansen (DK), Fardel (CH), Groves (GB), Behind the camera Grünfeld (NL))

The Austrian Federation of Explosives Engineers honoured him with the medal "Dynamite for Peace". (Right: Joep Peeters, Left: Herbert Holluba)

Joep grown up near the border he spoke several languages. We have lost an optimistic and experienced colleague.

We offer our condolences to his wife and his son Roland.

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New solutions

- for tracking and tracing explosives

Since 2008 and 2012, when the COMMISSION DIRECTIVES 2008/43/EC and 2012/4/EU where published, manufacturers, distributers, shippers and end users have to consider many additional requirements for the identification and traceability of explosives for civil uses.

Every civil explosive has to be marked with a worldwide unique ID-number and every company within the supply chain has to be able to provide information about the explosives position to the inspecting authority. The number has to be placed on every single explosive together with a plain text and a Data-Matrix-Code containing respective information.



The identification guide line applies to manufacturers, distributers, shippers and end users

Challenges and solution

The determinations of the EU-identification directive contain several challenges. Basically every company needs to have an appropriate software and hardware solution. The realization of the commission directive causes extra staffing as well as trainings for the employees. The extra data, which has to be transferred between all partners of the supply chain generates additional effort. Every company is liable to disclosure on request of the competent authority. Furthermore a number has to be registered for every single explosives item. This has to be managed by a system, which allows fast information to a request of an inspecting authority around-the-clock. Above this, the data has to be audit proof and collected for a period of 10 years. Every company that produces, ships, handles or uses explosives within the EU has to fulfill these requirements from 5th of April 2015 on.

A meaningful considered solution to meet the demands of the EU-identification directive is an electronic information system with data processing like "TTE" of the company TTE-Europe GmbH. The development of the TTE-systems was made in close collaboration with the German Blasting Association, national explosives organisations and EFEE. To provide even faster information to their customers and react to all new changes in the EU-identification directive regulation, TTE-Europe GmbH became a company member of the EFEE in 2013.

The TTE-solution is made for manufacturers, distributers, shippers as well as end users. Besides fulfilling the demands of the EU-identification directive and offering a customized solution for tracking and tracing of explosives, TTE provides extra benefits for the user. Since it can be used by all explosives manufacturers and suppliers, TTE provides the best possible compatibility. By the





means of TTE-Trustcenter it defines a pan-European standard for exchanging data within the explosives supply chain.

The TTE-solutions can easily be connected to existent IT Systems of the customer. Furthermore all data are securely stored in certified European data centres or on local systems within the customer's enterprise network, which enable high data security and protection. The base system was developed by regarding the needs of the customers. It can always be extended to customized and individual products for all companies with different modules and applications. But TTE is not only a simple software product. The pan-European partner network of TTE-Europe GmbH supports their clients with continuous services and maintenance and thus provides a complete solution out of one hand.

3 base systems and an efficient information disclosure to authorities

TTE-Online is a cloud-based solution, which allows a comfortable and demand-orientated work. This spares any installation effort and facilitates the maintenance of the software. The TTE-Online solution facilitates a high data safety and security and ensures the data never to leave Europe. The usage of TTE-Online is possible from any PC with internet access. The user registers by entering a password into a data secure system. All required software as well as its data are available on the internet and are filled in the TTE-Web Archive where TTE guarantees the secure data storage for 10 years. Just on demand of the customer itself a one-time access can be granted for the responsible authority to do a single data query to the TTE-Web Archive.

TTE-Enterprise is a server based solution. The software has to be installed on an enterprise server and may be used from any PC within a local network or on mobile devices. Data storage and archiving can be done by the use of the TTE-Web Archive or on the local server system.

Because of the modular structure, TTE-Online and TTE-Enterprise fit perfectly to all customers' demands.

TTE-Small Business is a solution for small companies with no internet connection and can be installed on a simple laptop.

Highly efficient by further functionalities

A fast, secure and efficient data transfer is possible by using the TTE-Trustcenter. The system respects the packaging hierarchy and the specification by FEEM. Relevant processes are supported by simple solutions with easy and transparent handling. TTE-Trustcenter as a secure pan-European data exchange platform is the answer to the challenge of a standardized electronic communication across the complete explosives supply chain.









By scanning incoming and outgoing goods TTE proofs and stores automatically the data.

Further benefits and strategic aspects

Data from the TTE-systems can also be used for the handling of an electronic explosives register in accordance with national legislation.

Also delivery notes, control samples, redemptions, return deliveries, consignments or assistance in inventory can be realized or handled with TTE.

The pan-European partner network enables the system to be available in all languages of the European Union. This allows a global service and support for all European TTE customers. TTE-Europe GmbH presents information about Tracking in Tracing on many events all over the world.

The next opportunity to learn more about this topic and get information about TTE will be at the 7th **World Conference on explosives & blasting in Moscow,** Russia (15th September 2013, Workshops on New Rules for Track and Trace of Explosives according to EU Directive 2008/43). All partners, TTE supporting and more information can be found on the website of TTE: www.tt-e.eu.

Frank Ille, TTE-Europe GmbH, Germany

New EFEE members

EFEE likes to welcome the following Members who recently have joined EFEE.

Company Members

TTE-Europe GmbH

http://www.tt-e.eu

TTE-Europe GmbH is an owner-managed medium-sized company situated in Dresden, Germany. Within their company group, TTE-Europe GmbH can draw on over 20 years of expertise in the field of logistics software and tracking systems.

The scope of products and services includes software solutions and consulting in stock-, transportation- and production logistics. Thereby TTE-Europe GmbH has specialized in tracking and tracing of explosives in the civil sector. Basic parts of the scope of supply are overall, costumer-orientated solutions, which fulfill the demands of the EU-identification directives 2008/43/EC and 2012/4/EU. These directives are

Pohjois-Karjalan aikuisopisto - North Karelia Education Centre / Mining and Quarrying team educated mining

http://www.pkky.fi/aiko

North Karelia Adult Education Centre in Finland is a provincial and versatile institution which specialises in adult education and competence-based vocational qualifications in the fields of services, technology and welfare.

North Karelia Adult Education Centre has units in Joensuu, Kitee, Lieksa and Outokumpu.

In addition North Karelia Summer University and North Karelia Apprenticeship Training Centre are located in Joensuu.

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part of a European package of measures to support the pan-European counter-terrorism.

The tracking solutions of TTE-Europe GmbH are conceived for all companies of the process and supply chain (manufacturers, distributers, shippers and end users). Different national particularities are being considered as well. Therefor TTE-Europe GmbH uses amongst others modern technologies like cloud computing. By means of a pan-European partner network, TTE-Europe GmbH can consult clients in the respective national language and adapt solutions to special customer and national requirements. The mining and quarrying sector education concerns ADR training courses, Blasting Industry training courses, Blaster refresher training, Rock Constructors and Miners recruitment and targeted training.

Qualifications in Mining, Quarrying and Excavation.

Individual Members

Valdir Costa E Silva, VALMON CONSULTORIA E TREINAMENTO LTDA, Brazil Richard Battrick, MAST Ltd, UK Herman Daelman.WOLF bvba, Belgium Frank van Snick, WOLF bvba, Belgium







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SURFEX TECHNOLOGY & TRADING - STT

STT is a consulting and design engineering firm that specializes in projects involving commercial and mining explosives with extensive experiences in a large number of different emulsion, water gels and ammonium nitrate manufacturing facilities in Australia, South-East Asia, USA, Canada, Sweden, Spain, Russia, Kazakhstan and South-Africa.

PRINCIPAL CONSULTANT & OWNER

Michael Cechanski is the inventor of the first commercially applied PIBSA based emulsifiers and holds a number of international patents.

He is a Chartered Engineer in Australia and Europe with an MSc in Chemical Engineering and Technology. Michael also has an MBA Graduate Diploma from AGSM (Australian Graduate School of Management, Sydney, Australia). He speaks English, Swedish, Polish and Russian and is conversational in French, German and Spanish.

Michael has over 30 years of professional experience gained within the following companies;

- Nitro Nobel AB Sweden, Australia & S-E Asia Research Director and Technical Manager
- Atlas Powder USA / Dyno Australia, USA, S-E Asia

Research Director and Project Manager for design, construction and installation of a number of modern and large bulk and cap-sensitive emulsion plants

- Maxam Australia, Kazakhstan Operations Manager
- Orica Australia
 Project Management
- STT- Australia, New Zealand, S-E Asia, Russia, Scandinavia

Principal Consultant and Owner

STT provides consultancy services on:

- Explosives formulations, manufacture, handling, research and development, product and process safety, product tailoring for specific conditions and applications
- Technology audits including recommendation for upgrades, improvements, safety and process efficiency
- Design and upgrade for new and existing processes and plants, emulsion explosives technology, equipment, process management, regulatory compliance and technical support
- Explosives Hazards Operability Studies (HAZOP) and studies involving new establishments
- Marketing and sales support

Michael Cechanski P: +61 400 227 582 E: surfex@bigpond.com



СУРФЕКС ТЕХНОЛОГИИ И ТОРГОВЛЯ - СТТ

СТТ - компания, которая занимается

консультированием и проектно-конструкторской работой в проектах с взрывчаткой для коммерческих и горных работ; имеет большой опыт работы с предприятими по производству разнообразных эмульсий, водяных гелей и нитрата аммония в Австралии, Юго-Восточной Азии, США, Канаде, Швеции, Испании, России, Казахстане и Южной Африке.

Главный Консультант и Владелец:

Михаил Сечански является изобретателем первого коммерчески применяемого эмульгатора на основе полиизобутинилсукцинангидрида (ПИБСА) и имеет несколько международных патентов.

Он является дипломированным инженером в Австралии и Европе и имеет степень магистра химического машиностроения и технологии. Г-н Сечански также имеет диплом магистра бизнеса от Австралийской Выпускной Школы Мэнэджемента, Сидней, Австралия). Он свободно говорит на английском, шведском, польском и русском языках и на разговорном французком, немецком и испанском языках.

Г-н Сечански имеет более 30 лет профессионального опыта работы со следующими фирмами:

- Nitro Nobel АВ Швеция, Австралия и Южно-Восточная Азия
 Руководитель по научно-исследовательным работам и технический директор
- Atlas Powder США / Dyno Австралия, США, Южно-Восточная Азия
 Руководитель по научно-исследовательным работам и управляющий проектами по дизайну, строительству и запуску нескольких
 современных и крупных заводов по производству эмульсионных ВВ
- Махат Австралия, Казахстан Директор по производству
- Orica Австралия
 Управление проектами
- STT- Австралия, Новая Зеландия, Южно-Восточная Азия, Россия, Скандинавия Главный консультант и владелец

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- Планирование и апгрейд новых и существующих процессов и предприятий, технологий производства эмульсионного взрывчатого вещества, техники, управления процессами, соблюдения нормативных требований и технической поддержки
- Анализ опасностей на производстве взрывчатых веществ и исследования новых разработок
- Маркетинг и поддержка сбыта



Upcoming events

2013	Sept.15-17	The 7 th EFEE World Conference on Explosives and Blasting <u>http://www.EFEE.eu/</u>	Moscow, RUSSIA
2014	Feb. 9-12	ISEE's 40th Annual Conference on Explosives & Blasting Technique <u>www.ISEE.org</u>	Denver, Colorado, USA
	March 4-8	CONEXPO-CONAGG <u>www.conexpoconagg.com</u>	Las Vegas, Nevada, USA
	May 9-15	World Tunnel Congress 2014, <u>www.wtc2014.com.br</u>	Iguassu Falls, Brazil
	May 11-15	CIM Conference and Exhibition http://vancouver2014.cim.org/	Vancouver, BC, Canada
2015	April 26-28	The 8 th EFEE World Conference on Explosives and Blasting <u>http://www.EFEE.eu/</u>	Lyon, France



