



## WELCOME TO BAUMA 2016 – THE “HEARTBEAT OF OUR INDUSTRY”

At RATEC our hearts beat for intelligent formwork solutions for the production of precast concrete elements. Traditionally, it is our objective to become better and always come up with the better ideas for our customers.

That's why we put a lot of work and passion in the development of optimal solutions and are always prepared to accept every challenge. RATEC components and formwork systems have come to set industry standards all round the world.

And this with good reason: thanks to our ambition and commitment RATEC stands for innovative and well-thought-out solutions, down to the last detail.

Whether it comes to spectacular projects such as installing a production solution for the facade elements of the Italian Pavillon for Expo Milan 2015, or the daily business in precast concrete production – our team of experienced engineers and technicians and the engineering and project consulting team of Reymann Technik develop creative, innovative and practicable solutions for each assignment.

With this news issue we are pleased to give you an insight into the world of RATEC.

We wish you an exciting and successful experience at bauma!

Yours sincerely,

Andreas Reymann

Jörg Reymann

Mathias Reymann

## SPECIAL MANUFACTURING TECHNIQUES FOR ITALY'S NATIONAL PAVILION AT THE EXPO IN MILAN



The Palazzo Italia – the icon of the Expo 2015 in Milan

The Rome-based architect's office Nemesi & Partners designed the Italian Pavillon Palazzo Italia for the Expo 2015 world exhibition in Milan with a façade that is equally good-looking and pragmatic. Styl-Comp Group was awarded the contract to produce these elements. The majority of the façade elements for the Italian Expo pavilion were manufactured upright in a battery mould using upcrete® technology in order to be able to implement the particularly delicate “branches” of the façade.

According to Nemesi & Partners the pavilion is “inspired by a natural architecture, within which the branching fabric of the external ‘skin’ of the building generates alternating light and shadow, fullness and emptiness and thus creates a scenario that reminds one of the works of the Land Art.”

**2.200 TONS OF CEMENT,  
725 UNIQUE ELEMENTS,  
9.000 SQUARE METER FAÇADE**

Only with upcrete® it was possible to create this unique structure and produce elements with such highly complex geometry.

The use of pressure filling in this project ensured that the particularly thin ramifications were also ideally formed. 2.200 tons of cement and 725 unique elements result in over 9.000 square meters façade from recycled material, proving that upcrete® offers new and

previously undreamt-of possibilities for the prefabrication of concrete elements. Thus, upcrete® provides creative impetus for those who plan and design the buildings of the future and those who turn these buildings into reality. The Italian architects Nemesi & Partners and the precast element manufacturer Styl-Comp have succeeded with the Palazzo Italia in creating a masterpiece that is trend-setting for such visions that are realizable today with modern upcrete® production technology.

The Palazzo Italia is designed to be a permanent installation and remains as the best proof for a vision turned to reality. ■



## UPCRETE® GOES USA

Especially for the North American market RATEC produces regional products in its American headquarters in Clearwater, FL. Currently a new upcrete® production plant is installed, which was partly manufactured in Clearwater.

The project includes three battery systems, from Germany and USA, and an UPP pump station, all of which will be used for the production of fence wall elements. ■



## NEW INTELLIGENT RECESS SOLUTIONS



Especially in fully or partially automated production, recesses often represent, in practice, a challenge in designing production processes, when they are handled manually.

The Ratec development team wanted to find a solution for this which would allow largely automated formwork manipulation and reduce the required manual handling to a minimum. Based on the side elements of the SAS Standard Automatic System by Ratec, shorter supports were developed in suitable lengths for window and door recesses, which are used in combination with a new magnet holder edge.

The side shutterings are positioned automatically like the transversal and longitudinal shuttering. In all, only the four magnet holder edges, which are also equipped with a switchable magnet

system, are positioned by hand. To demould the formwork, the magnet holder edges are first removed. The magnet is first deactivated by using the special release tool. Due to the draft on both joining edges to the side elements, it can then be very easily lifted out.

An optimal solution is thus found for the desired objective of reducing setup time and minimising manual work. A further advantage for the customer: the magnet holder edge can also be used flexibly with other formwork systems. For example, for elements with special sizes for windows or doors, the PSV system can be used, and is then supplemented by the magnet holder edge.

The RATEC development team develops the optimal solution jointly with the customer. ■

## FILIGREE FORMWORK EXTENDED



A newly developed adapter for the RT U60 Pro shuttering system offers new flexibility to RATEC's customers. The adapter is used as an extension for filigree formwork to add another shuttering skin, which then can be used to produce solid elements. An intelligent "keyhole" technology is used to fix the adapter simply and safely on the RTU shuttering and remove it again.

**NO QUESTION OF "EITHER/OR"  
– ENJOY THE NEW FREEDOM**

For all standard variants of the RT U60 Pro shuttering system, RATEC has a suitable adapter to fix a shuttering skin in variable heights for solid elements. The adapter is available in different configurations: with clamping or tensioning mechanism and with or without suppressing function (i.e. for fibre concrete upstand).

The adapter with clamping mechanism is fixed by sidewise movement on the RTU 60 Pro, while the tensioning mechanism works with a lever, that also allows a fast removal.

The adapter is also available in a version for the fixation of plywood, that also incorporates a hold-down clamp to fix plywood and fibre concrete upstands.

To implement the adapter, only the standardized keyholes are required in the RT U60 Pro shuttering and sufficient adhesive power of the integrated magnet components to match the requirements for the production of solid elements. ■

## LEADING INDONESIAN PRECAST CONCRETE PRODUCER USES UPCRETE® TECHNOLOGY FROM RATEC



Indonesia is presently experiencing a building boom. Apart from residential building and infrastructure projects, up to 800 new hotels with a total of 100,000 rooms are to be opened in the next ten years. One of those projects in central Java was awarded to Dusaspun

Manufacturing using a conventional method or in one of the customer's existing production plants was impossible due to the short construction time, the limited space at the production location near the building site and the high requirements for the surface quality of the elements. For Dusaspun a suitable and user-friendly production solution – vertical

if possible – was necessary. This solution was found in upcrete® technology by RATEC.

### WITH UPCRETE® NO FINISHING WORK IS NECESSARY

The technology offers a variety of benefits compared to other precast production methods. A major advantage is the possibility to produce 6-sided formwork-smooth elements that are virtually free of bug holes and need only a coat of paint on the building site. Rework that is otherwise often required, such as plastering of wall elements, is thus entirely unnecessary, which was also a benefit for the tight time schedule of the project.

Only the pressurised filling from the bottom up in vertical production makes it possible to manufacture an additional 4-sided profiling on the element – required for the installation on site – , since the formwork can also be closed from above, and an opening is only required to allow air to escape.

The result of this German-Indonesia cooperation is a space-saving, fast and material-friendly production as well as top-quality elements that give Dusaspun a clear competitive advantage in the booming Indonesian market. ■

## MODULAR HOUSING ON THE PHILIPPINES



The Philippines are one of those countries in which solutions for safe and inexpensive living space are in particular demand.

With the help of upcrete® technology the Philippine precast concrete manufacturer DATEM has now positioned itself locally with its own promising module house project and is taking the next step to become the leading provider in the country's building sector. Following the realization of numerous construction projects with an upcrete® battery system, now in 2016 the first module house factory goes into production at DATEM. RATEC produces two room module molds for this project and a UPP 100 pump station

for the pressure filling of the molds. Room modules of the size 5.6 x 2.5m m will be manufactured, which when combined will in each case produce a house of 28 m². 600 of these houses are planned to be built per year.

Each house consists of two room modules. Initially the modules are simply to be placed horizontally next to each other. However, in future it is possible to also produce stackable modules with the already existing technology and therefore build multi-storey houses. ■

## SHORT NEWS:



### RATEC EXPANDS PRODUCTION AREA IN HOCKENHEIM

With the expansion of the production facilities in Hockenheim the overall production area increases to over 4.000 square meters. The additional space will be mainly used for the production of upcrete® components – i.e. battery molds, room module molds and pump stations.

Another production site is at the American headquarters, where the products for the North American market are produced. Besides that, all RATEC products and components are produced solely in Hockenheim and from there are distributed worldwide.



### NEW LASER TECHNOLOGY FOR EVEN MORE PRECISION

Precision in formwork and shuttering systems requires special and precise production tools. To further increase production speed and efficiency, RATEC has made pioneering investments in its production machinery. As a result, one of the first 8 KW solid-state lasers of the newest TRUMPF-generation is in operation in RATEC production since September 2015. Its core advantage is the even faster processing of metal sheets and an absolutely precise cut.



### MTK MAGNET-FABRIK MAGNET PRODUCTION FOR THE CONCRETE INDUSTRY

The partnership between RATEC and MTK exists since 2002 and today it is an integral part of the company group. The company manufactures more magnets for the precast concrete industry than anyone else. With a great commitment to research and development, the company further develops their products continuously in terms of quality, durability and flexibility. This progress is directly incorporated in the magnetic formwork solutions of RATEC. This creates new and interesting solutions that help to reduce production costs in precast concrete production. Customers benefit from the close cooperation especially when it comes to individual solutions, which can quickly and easily be realized.

# RATEC WORLDWIDE

## ■ HEADQUARTERS GERMANY

RATEC GmbH · Karlsruher Strasse 32  
D-68766 Hockenheim  
Phone: +49 6205 9407 29  
Fax: +49 6205 9407 30  
E-Mail: info@ratec.org

## ■ HEADQUARTERS AMERICA

RATEC LLC · 6003 126th Ave North  
Clearwater, FL 33760  
Phone: +1 727 363 7732  
Fax: +1 727 363 7463  
Toll Free +1 877 337 2832  
E-Mail: infoUS@ratec.org

## ■ RUSSIA

OOO "RATEC"  
196650, St. Petersburg  
Phone: +7 812 603 21 55  
Fax: +7 921 914 7723  
Mobile: +7 921 914 77 23  
E-Mail: ratec.rus@mail.ru  
Deutschland: Fon: +49 6205 9407 15  
Fax: +49 6205 9407 20  
E-Mail: nmaurer@ratec.org

## ■ SPAIN / LATIN AMERICA

RATEC S.L.U.  
Jürgen Deppe  
C/ Caspe, 12, 1° G  
E-08010 Barcelona (BCN)  
Phone: +34 93 4683036  
Fax: +34 93 3917947  
Mobile: +34 610 702436  
E-Mail: jdeppe@ratec.org

## ■ AUSTRIA

RT-Bauwaren GmbH  
Paulapromenade 24 · A-9500 Villach  
Phone: +43 6644 1091 53  
Fax: +43 4242 8901 915  
E-Mail: info@rt-bauwaren.at  
www.rt-bauwaren.at

## ■ BELARUS

OOO "Beltechlgra" OOO  
220004 Minsk, ul. Rakovskaya, 34 – 403  
Direktor Kalinovskaya Olga  
Phone: +375 29 6665992  
E-Mail: Ratec.org@gmail.com

## ■ DENMARK, NORWAY, SWEDEN

CPT A / S  
Energivej 7 · DK-5600 Faaborg  
Phone: +45 6265 2070  
Fax: +45 6265 2080  
E-Mail: info@cpt-as.dk

## ■ FRANCE

RSP REMY SCHNELL PRODUCTION  
7 rue Gutenberg, Z.I. Nord · F-82000 Montauban  
Phone: +33 5 63 66 52 80  
Fax: +33 5 67 05 90 99  
E-Mail: contact.commercial@3r-rpp.com  
www.rsp-rpp.com/fr

## ■ GREAT BRITAIN

SIMPLY PRECAST ACCESSORIES LTD  
Aidan Monaghan  
Wenning House, Forge Lane, Halton, Lancs,  
UK-LA2 6RH  
Phone: +44 800 678 5178  
Fax: +44 800 678 5179  
Mobile: +44 7971 253 367  
E-Mail: sales@simply-precast.co.uk

## ■ INDIA

Webau India · Aditya Khanna  
G-1, Zainab Manzil, #21 Club Road, Chetpet,  
IND-600031 · Chennai, Tamil Nadu  
Mobile: +91 98 98 24 14 14  
E-Mail: aditya.khanna@webau.in  
www.webau.in

## ■ INDONESIA

Pt. Detede  
Gedung Multika Lantai 2 · Ruang 203  
Jl. Mampang Prapatan Raya 71 – 73  
Jakarta Selatan ID-12790  
Phone: +62 21 797 5101/05  
Fax: +62 21 797 5141  
E-Mail: info@ptdetede.com

## ■ ITALY

Scotti S.A.S. Filippo Scotti & c.  
Via Pasubio 64 / 5 I-10098 Rivoli (To)  
Phone: +39 011 9585864  
Fax: +39 011 9585864  
E-Mail: fscotti@teletu.it

## ■ JAPAN

Haneda Zenith Techno Co., Ltd.  
7 – 2, Kojimachi 5- chome, Chiyoda-ku  
JP-102-0083 Tokyo  
Phone: +81 3 3556 2808  
Fax: +81 3 3556 2721  
E-Mail: hydro-a@hanex-grp.co.jp

## ■ MALAYSIA

CARTA BAKTI SDN BHD  
No. 28 & 30 · Jalan Anggerik Mokara 31/60 · Kota  
Kemuning Seksyen 31 · MAL – 40460 Shah Alam  
Phone: +6 03 - 5122 7381  
Fax: +6 03 - 5122 7372  
E-Mail: cbakti@streamyx.com

## ■ MIDDLE EAST

Webau Middle East FZCO, Warehouse No. AP07  
Jebel Ali Free Zone  
P.O. Box 17872 UAE-Dubai  
Phone: +971 4 8860 662  
Fax: +971 4 8860 663  
Mobile: + 971 50 545 6748  
E-Mail: webau@emirates.net.ae  
www.webau.me

## ■ NETHERLANDS & BELGIUM

Handelsonderneming Van der Blij BV  
Vechtstraat 9 · NL-5347 KH Oss  
Phone: +31 412 646 168  
Fax: +31 412 626 543  
E-Mail: info@vanderblij.nl  
www.vanderblij.nl

## ■ POLAND

Bartkam  
Jaroslaw Sitek  
Polna 3 · 32-660 Chelmek, POLAND  
Phone: +48 33 846 1916  
E-Mail: sitek.jarek@op.pl

## ■ PORTUGAL

Monteiro Viana Lda.  
Rua da Destapada No.300, Milagres  
P-2415-020 Leiria  
Phone: +351 244 836 484  
Fax +351 244 852 449  
E-Mail: geral@sypro.com.pt  
www.sypro.com.pt

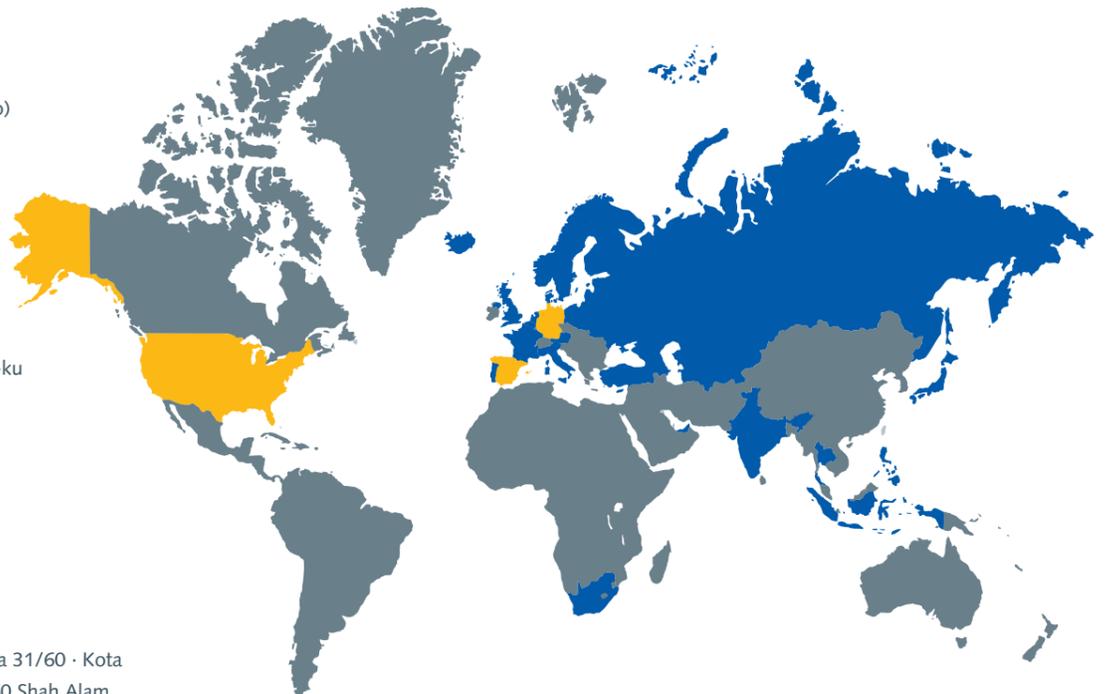
## ■ THAILAND

TRIO TECHNOLOGY CO., LTD.  
Chaivat Chaiworachotipong  
539 Bangwaek Rd., Bangpai, Bangkok  
T-10160 Bangkok  
Phone: +66 2 865 3675 7  
Fax: + 66 2 865 3678  
E-Mail: chaivat@trio.co.th

## ■ TURKEY

EM-PA Mühendislik Ltd. Sti.  
Cedit MH. Atatürk Bulvarı No.11  
TR-41100 Saraybahçe · Izmit / Kocaeli/ Türkiye  
Phone: +90 262 324 92 78  
Fax: +90 262 322 09 03  
www.empamuhendislik.com

E-Mail: info@empamuhendislik.com  
Germany: Köksal Kervan (Sales Manager)  
Phone: +49 6205 9407 31  
Fax: +49 6205 9407 30  
Mobile: +49 162 263 28 94  
E-Mail: kkervan@ratec.org



■ HEADQUARTERS ■ DISTRIBUTION PARTNERS



## MEET US AT THE UPCOMING EXHIBITIONS:

PROJECT IRAN  
24.04. – 27.04.2016  
Teheran, Iran

TURKEYBUILD ISTANBUL  
10.05. – 12.05.2016  
Istanbul, Turkey

CONCRETE SHOW INDIA  
19.05. – 21.05.2016  
Mumbai, India

CONCRETE SHOW SOUTH EAST ASIA  
14.09. – 16.09.2016  
Jakarta, Indonesia