

# CENTRO *text*

| Magazine for employees and business friends of the CENTROTEC Group |

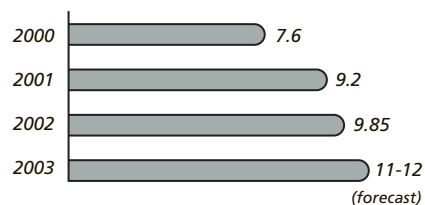


## CENTROTEC BUYS NED AIR: Building on market lead in energy-saving climate control

CENTROTEC took over NED AIR B.V., Kampen, the Netherlands, at the start of June. CENTROTEC has further strengthened its leading position in Europe in the rapidly expanding market for energy-saving climate control through this strategic acquisition.

**COMPLEMENTARY TO CORE BUSINESS**  
NED AIR, which generated a profitable revenue of EUR 9.85 million last year, is a long-standing business partner of the CENTROTEC subsidiary BRINK Climate Systems B.V., Staphorst, NL. Whereas BRINK is the European market leader for heat recovery systems for private low-energy houses, NED AIR's strengths lie in heat recovery systems for larger residential

NED AIR REVENUE, EUR MILLION



buildings and small public buildings (offices, hospitals, schools, etc.). Both market segments are enjoying considerable growth as a result of tougher energy-saving legislation. NED AIR moreover broadens the CENTROTEC Group's product portfolio with its new cooling concepts. In integrating NED AIR, CENTROTEC gains complementary technologies and market shares, and is thus able to build on its lead in this growth market. Read more on page 6.

### The CEO writes

Countries throughout Europe are finding it very difficult to meet the agreed energy-saving targets laid down in the Kyoto Protocol. Yet unnoticed by the public at large, a veritable energy-saving revolution is taking place in the residential sector. Actual figures from the Netherlands demonstrate that the energy consumption of the average new house has been cut by 2/3 over the past 20 years. All the while, stan-



dards of interior comfort have been raised! This process is still continuing: both technically and economically speaking, consumption is set to be cut by half again over the next ten years. CENTROTEC products are contributing towards this development. The effect is a long-term one, as only around 1% of housing stock is renewed each year. Political efforts therefore need to focus more strongly on existing houses. The Kyoto targets will then become possible.

*Gert-Jan Huisman, CEO*



# ENGINEERING PLASTICS

Centroplast | Industriplast | Centrotec Composites | Bond Laminates

## Ringing in the changes at CENTROPLAST

INTERVIEW WITH THE NEW MANAGING DIRECTOR ULRICH TERBRÜGGEN

*Ulrich Terbrüggen has been the new Managing Director of CENTROPLAST Kunststoffherzeugnisse GmbH in Marsberg since April 1, 2003. The 49-year-old, who has two grown-up sons, previously worked as Sales Manager and Managing Director at two different plastics processing companies. He replaces Hans Lothar Hagen, who left the company in February.*

**CENTROtext:** Herr Terbrüggen, you've been at CENTROPLAST for 3 months now. What's your first impression?

**U. Terbrüggen:** There's plenty to be done... CENTROPLAST is a good company, though its earnings situation could undoubtedly be healthier. But the team is motivated and capable, so on the basis of my first few weeks here, I view the future very positively.

**CENTROtext:** You mention the earnings situation. The semi-finished products sector is currently suffering from a weak state of the economy. Is there any point in remaining in such a line of business?

**U. Terbrüggen:** Without a shadow of a doubt! Although CENTROPLAST is only a small manufacturer of semi-finished products, it is very flexible and focuses on specialities. That's a good market position to have, and I believe its potential has been somewhat underestimated in the past.



Ulrich Terbrüggen at his desk at CENTROPLAST in Marsberg

**CENTROtext:** What are you planning to do differently?

**U. Terbrüggen:** We have already started to raise the quality of our semi-finished products even more methodically. In the medium term, as well as having an outstanding basic range I would like our company to be able to channel its wealth of expertise into innovations to a greater extent. However, it also remains our strategy to continue expanding through an outstanding range of prefabricated parts. Here again, we have expertise that others do not.

**CENTROtext:** You visited plenty of customers in your first few weeks here. How did they react?

**U. Terbrüggen:** 3/4 of customers already knew me before I moved here. Their response to my new position was positive. I even managed to interest new customers in collaborating with CENTROPLAST.

**CENTROtext:** So far we've only talked about the market. What internal changes will you be making?

**U. Terbrüggen:** Above all I would like to promote individual responsibility and independent initiative among staff. The people at CENTROPLAST are very competent and motivated – and many of them are more capable than they believe.



## Composites technology park in Brilon

### NUCLEUS FOR INDUSTRIAL-SCALE PRODUCTION OF SUPER-LIGHTWEIGHT, HIGH-STRENGTH COMPOSITES CREATED

BOND LAMINATES, of Brilon, started up a unique production plant, designed using its own expertise, in May 2003. This facility, which is able to turn out super-lightweight, high-strength composites materials on an industrial scale, is intended as the nucleus of an array of new processing companies. The State of North Rhine-Westphalia is lending financial support to this miniature "technology park", channelled through Sparkasse Hochsauerland.

Panels of composite plastic reinforced with woven fibres made from such materials as carbon, aramide, glass and aluminium are produced on the double-belt press. The key advantage is that the ultra-lightweight materials can be shaped into finished parts in a matter of seconds.

## CENTROTEC COMPOSITES receives follow-up order from Puma

The first order for the Puma "Shudo" football boot, which appeared on the market to coincide with the 2002 World Cup, has now led to a follow-up order for the new Puma "CELLERATOR-ZERO4" model.

The volume of the order is even larger than that of the first project. As well as the carbon fibre sole made from Tepex®, CENTROTEC COMPOSITES is also supplying a cushioning element for the heel area, a shank component to strengthen the section below the sole of the midfoot,

The high-tech material is currently still only being used in relatively small quantities in sports equipment, aircraft and racing cars. Companies in Germany, Norway, Italy, Japan and the USA are already processing the BOND product Tepex®. The advent of industrial-scale production now paves the way for larger



Tepex™ applications in aircraft construction

areas of application. CENTROTEC and BOND are inviting other companies to establish forming plants on the basis of BOND's expertise.

and the insock sole as the upper cover of the carbon fibre sole inside the shoe. These soles are again being manufactured in Asia by CENTROTEC JI Asia Pte Ltd, the Singapore-based joint venture that was launched in 2002. The actual production operations have been transferred temporarily from Guangzhou in China to Bintan in Indonesia due to the SARS epidemic. The "CELLERATOR-ZERO4" is likewise scheduled to sell around 100,000 pairs worldwide. In view of Puma's increasingly prominent brand presence in sport and leisure at present, the follow-up order has served to cement CENTROTEC COMPOSITES' healthy business relationship with Puma.

## Anniversaries

We take this opportunity to pay tribute to those employees who have been with us for many years, and to thank them for their dedication. We wish them much health and happiness for the future.

### ANNIVERSARIES AT BRINK CLIMATE SYSTEMS, STAPHORST

#### 12.5 YEARS

January 16, 2003	Henk Boomsma
February 6, 2003	Klaas Hetebrij
February 13, 2003	Henk Dozeman
June 17, 2003	André Veenman
July 7, 2003	Anton Baar
August 14, 2003	Ed van der Burg
October 2, 2003	Ina Rink
November 14, 2003	Sjerp de Vries

#### 25 YEARS

September 18, 2003	Theo Meiberg
November 6, 2003	Rob Slemmer

### ANNIVERSARIES AT GOLU B.V. SOEST

#### 12.5 YEARS

August 15, 2003	Ferry Vendrig
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#### 25 YEARS

December 1, 2003	Pieter de Vries
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### ANNIVERSARIES AT UBBINK DOESBURG

#### 12.5 YEARS

October 1, 2003	Inge Sanders
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#### 25 YEARS

January 1, 2003	A.C. (Adrie) Schunck
February 13, 2003	V.L.A. (Very) Theunissen

### ANNIVERSARIES AT NED AIR B.V. KAMPEN

#### 12.5 YEARS

October 1, 2003	Henk Kalter
October 1, 2003	Alco Westera
December 27, 2003	Piet Tromp

### ANNIVERSARIES AT CENTROPLAST MARSBERG

#### 10 YEARS

January 4, 2003	Gerald Metzner
August 1, 2003	Rainer Josten
August 1, 2003	Andreas Vössing
September 7, 2003	Karin Wigge

#### 20 YEARS

June 6, 2003	Antonius Monkos
August 1, 2003	Dirk Moller

*Illustration, top: CENTROTEC COMPOSITES exhibited at a trade fair in Las Vegas.*



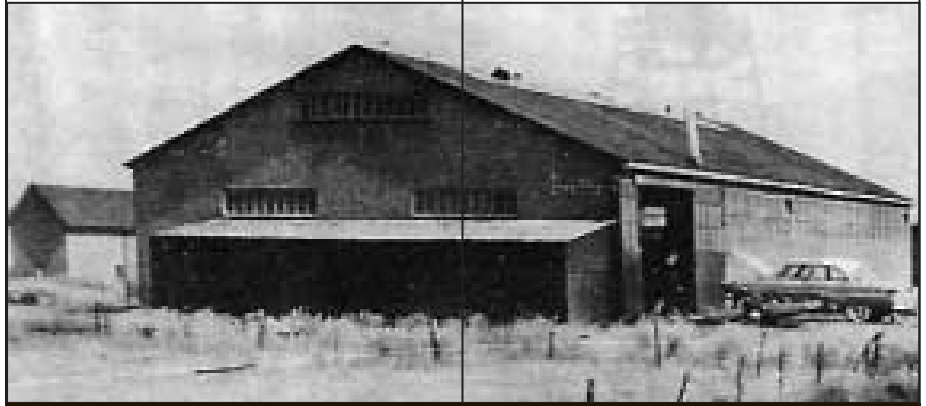
# HAPPY BIRTHDAY BRINK | ISH 2003

Brink | Centrotherm | Ned Air

## 100 years of BRINK

### MILESTONES

- 1903 | A smithy is founded in Assen by Reint Brink, great grandfather of the CENTROTEC Supervisory Board member Wim Brink, and specialises in the manufacturing of agricultural pumps
- 1930 | His son Roelof Brink expands the range of activities to include trailers and vehicle construction
- 1946 | A second company base is established in Meppel
- 1958 | All activities are brought together in Staphorst
- 1960 | Specialisation in the production of trailer hitches
- 1964 | Sales of air heaters manufactured in the USA
- 1967 | Development of own concepts for warm-air heating
- 1972 | Marketing of own air heating systems, establishment of 14 own installation outlets
- 1989 | Start of production of office furniture
- 1996 | Development of a heat exchanger made from high performance plastics with a unique recovery rate of 95 %
- 2002 | CENTROTEC acquires BRINK division producing climate systems
- 2003 | BRINK celebrates centenary!



BRINK 1958 ...



... BRINK today

## ISH 2003

CENTROTHERM and BRINK were represented at the ISH exhibition at two different stands in separate halls according to their differing product range.

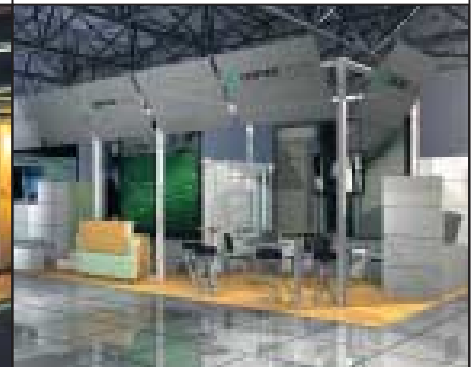
The items on show at the CENTROTHERM stand included in particular a new inspection elbow and a hitherto unique plastic concept for connecting several condensing boilers to a single gas flue. NED AIR was also exhibiting its products on the stand.

The BRINK stand placed the emphasis on heat recovery systems for the air inside a building. A welcome side-effect of the amassed

presence of BRINK, NED AIR and CENTROTHERM was that the "Neds", "Brinks" and "Therms" were able to get to know each other better!



The BRINK stand at the ISH in Frankfurt



The CENTROTHERM exhibition stand



## CENTROTEC on the move: four companies under one roof

After conversion work lasting six months, the new office facilities in the CENTROTHERM building in Brilon could finally be occupied. Spread over four floors, with a total area of some 500 m<sup>2</sup>, colleagues from BOND LAMINATES, CENTROTEC COMPOSITES and CENTROTEC AG are now all working under one roof. This move also mirrored the resolution passed at the Shareholders' Meeting in May to transfer the registered office of the parent company from Mars-



Brilon: four companies under one roof

berg to Brilon. A further 2000 m<sup>2</sup> of production have in addition been created. This includes a hall for BOND LAMINATES, housing a prototypes centre, a laboratory and the double-belt press, among other

things. CENTROTEC COMPOSITES, too, now has a hall of its own. Loudspeaker cones, shoe soles and interior components for the automotive industry are manufactured there.

## The new plastic concept – for multiple connections

This new polypropylene (PP) device, for which a patent has been applied, represents a complete system including ND80 flue gas shutoff device, fire protection and length equalisation element. It allows several condensing boiler appliances on different floors to be connected to a shared plastic gas flue shaft.



Plastic device for multiple connections

## CENTROTHERM takes over chair of European standardisation group

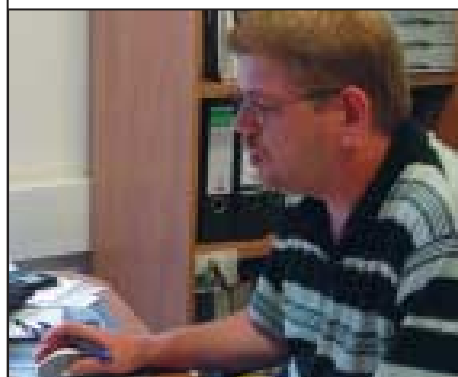
**THOMAS HOHMANN – CONVENOR OF WG4 FOR CEN TC166**

With our Head of Development for gas flue systems, Thomas Hohmann, once again one of our employees took up an office on an official standardisation body. In his new capacity as Convenor of a mirror committee of the European Standardisation Group for "System chimneys with plastic flue liners and their components", Hohmann will be able to influence standardisation in the field of plastic gas flue systems. He consequently has a say in the checking of guidelines, the avoidance of interfering factors and the implementation of testing procedures.

### THE EUROPEAN COMMITTEE FOR STANDARDISATION (CEN)

The CEN is a European Community organisation which is responsible for the standardisation of various kind of technical products. This committee consists of

various Technical Committees (TCs), which in turn organise smaller Work Groups (WGs). In these Work Groups, specialists draw up draft standards, guidelines and technical specifications, which are then presented to the TC. One of these Work



Thomas Hohmann

Groups, known as WG4 of TC166, is responsible for "System chimneys with plastic flue liners and their components". The according german mirror committee is now represented by Thomas Hohmann as elected chairman (Convenor).



# CLIMATE SYSTEMS

Brink | Ubbink | Ned Air

## Piping system for climate heat recovery now made of plastic

This was a real "home tie" for CENTROTEC: in a joint campaign, the two CENTROTEC companies UBBINK and BRINK developed an insulated piping system made from fireproof EPE plastic (pictured below) for heat recovery from the air inside buildings. As heat is retained in the house, the air inside the connecting pipes may be very cold, resulting in the formation of condensation. We have solved this problem through the insulating effect. What's more, the visually unobtrusive system is much easier to install than conventional systems. The components, up to 2.5 metres long, are flexible for easy installation but yet rigid to keep their form. The market response has been outstanding, among other things because the system makes cleaning an altogether easier business. And the soundproofing effect is significantly superior to that of metal systems.



Insulated piping system made from fireproof EPE plastic

## NED AIR – a tradition of innovation

NED AIR, the new CENTROTEC subsidiary in the Climate Systems segment, has a long tradition when it comes to innovations. NED AIR was established 13 years ago because its founders were dissatisfied with the sluggish pace of innovation at their former company. In the intervening years, none of this pioneering spirit has ebbed. One and a half years ago, NED AIR became the first company to develop standardised climate control systems with an air capacity of 400 up to 8000 m<sup>3</sup>/h. All devices incorporate a heat recovery feature with an efficiency rate of more than 90%. A record-breaking figure! The market segment is expanding rapidly, and NED AIR will continue to defend its status



The new, ultra-flat system

as market leader through its rapid pace of innovation.

The latest innovation is a very flat system with a capacity of 800 m<sup>3</sup>/h, just right for a class of 20 to 30 schoolchildren. It can easily be incorporated into the ceiling and maintains a healthy, energy-saving interior climate.

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