



## Succeeding with a smile

transfluid<sup>®</sup> goes Thailand

Technology

The mandrel bending machine –  
it's all about getting  
the right setup (part 2)

Field report

SORG Rollstuhltechnik –  
through everyday life with ease



# Just in time(s)

Editorial . Edition 02 . 10

Technology . Mandrel bending machine

Field report . SORG Rollstuhltechnik

## Contents

- 02 Contents | ticker | The team . Anniversaries
- 03 Editorial . Just in time(s)
- 04 Cover story . transfluid® goes Thailand
- 05 t notes . Happy Aua
- 06 Technology . Mandrel bending machine
- 07 Field report . SORG Rollstuhltechnik
- 08 time(s) check . Sauerland

## ticker

### Trade fair dates

- > BI-MU, Milan (05. - 09.10.2010), Hall 18/Booth C30
- > IZB, Wolfsburg (06. - 08.10.2010), Hall 7/Booth 7/401
- > Euro BLECH, Hanover (26. - 30.10.2010), Hall 11/Booth D01

### News

- > **At the start:** Since May 2010 Vladimir Abramenko of St. Petersburg has been responsible for the sales and marketing of transfluid® in Russia.
- > **Large-scale:** Starting on 01.10.10 the production area will be expanded by 1250 m² to a total of 3600 m².
- > **On board:** transfluid® has supplied all equipment, including the cleaning systems and measurement systems, for the new pipe production of the space station ISS in Russia. Commissioning is pending.
- > **In form:** The current collaboration with Dortmund University is taking shape in innovative forming processes: The construction of the incremental pipe forming is now complete. The acquisition of the individual components follows as the next step.

## The team

A special thank you to our co-workers for their loyalty, commitment and exceptional performance.

### 20 years of service

- > **Vinzenz Hochstein**, 28.8.2010  
Skilled agricultural machinery mechanic  
Responsible for the optimisation and adjustment of bending tools.



Vinzenz Hochstein, 20 years

### 10 years of service

- > **Frank Henneke**, 15.8.2010  
Skilled agricultural machinery mechanic  
Pipe Bending Division Manager
- > **Andre Beule**, 1.11.2010  
Skilled technician  
Responsible for the technical documentation, operating instructions and control of CE conformity of machinery



Frank Henneke, 10 years



Andre Beule, 10 years

### A breath of fresh air

- > **We cordially welcome our new trainees at transfluid® and are pleased about the „breath of fresh air“ added to our team.**  
In the photo (from left to right):  
Managing Director Burkhard Tigges,  
**Nadine Cater** (Industrial Clerk),  
**Christopher Dicke** (Industrial Clerk),  
**Laszlo Bludau** (Industrial Clerk),  
**Lukas Evers** (Machine and System Operator),  
Training Officer Stefan Schmidt,  
**Felix Schütte** (Industrial Mechanic) and  
**Mario-Hubert Schauerte** (Mechatronic Engineer).  
We wish them every success!



### Dear readers,

Does it all still make sense?  
I am asking myself this question while waiting at the airport in Bangkok. At midnight I will fly to Korea, where the client awaits at 8:00 am immediately after the landing!  
It's not really a problem. After all, we are always online. Available everywhere, always informed about everything. There were times – „old“ people like me remember – when this was not always the case. Letters received a stamp, the recipient received it after a week and the answer came back after four weeks.  
The fax was the first revolution. Phone calls could only be made from one's desk. The restroom was still a quiet place.  
There were only a few people at the airport and the men and women at the counter helped unexperienced travellers. Those were good times!

Today, I even receive direct notification of who wants to get a hold of me when my phone is turned off. I was plagued by a guilty conscious, but there must be a „downtime“ at some point. Of course I am not so quick to do so anymore, my inner voice will not allow it.

Now I am writing online with a wireless connection. I was able to delay the appointment in Singapore using my mobile phone, so I had three more hours in Bangkok. Great, right?  
An email came from Korea, saying they looked forward to my visit. Great, right?  
Our IT specialists assured me in advance that I can always receive emails and no longer have to shut down my computer 20 times. Great, right?  
Yet today was another day in which I finally received my emails after about two hours of unsuccessful start-up attempts. Then I made the decision to compose my frustration in words.  
I hope that all my fellow sufferers have IT specialists as understanding as I have. Thank you for being there!

However, I am still reassured by the following: I still read the newspaper, I do not use an iPad and no one has openly expressed the suspicion thus far I am too old for these great new times.

Don't worry be happy!

Ihr Gerd Nöker  
Managing Director



# Succeeding with a smile

Cover story . transfluid® goes Thailand



# Happy Aua

t notes



## Welcome to Thailand - today we invite you along on an excursion to Bangkok and introduce our subsidiary located there!

A few years ago, we at transfluid® started a process for the strategic realignment in the mid-term future. It affected our portfolio as well as the international markets.

How could and should we optimally serve these markets, especially those outside of the immediate reach of transfluid® Schmallenberg? Sales, in particular, as well as the customer service after the installation of our machines were the core themes.

Three geographic regions in addition to Europe and North America are crucial for future success: Asia, Russia and South America.

Where should we start now? Which region would be optimal for establishing an effective sales department and customer-oriented service department?

We were looking for a country whose residents are greeted throughout Asia and Australia, having never engaged in international conflict with other Asian/Pacific countries.

Travellers from Germany should be able to reach the country as quickly as possible without major bureaucratic efforts (visa), and our personnel must be able to move about freely without any limitations on travel. In addition, we needed well-trained experts for sales as well as the technical area; and

last but not least: The location must be centrally situated. All these criteria were satisfied by the Thai countries.

As the next step three alternative locations were determined: Hong Kong, Singapore and Bangkok. Singapore was, in our opinion, too expensive and the legal restraints were somewhat extreme. Hong Kong had just become part of the People's Republic of China and therefore was not 100% predictable. So the choice was Bangkok.

The decision was easy. The concrete implementation, however, was a real challenge - even in the „Land of the Smile“!

We posted an announcement in an English-language newspaper: We were looking for an employee to represent us and the network expansion in different countries. 120 applicants and 20 interviews later, we had our new co-worker: Thannarong Vasunirachorn.

## Sawasdee - the Land of the Smile!

Sometimes it is the simple things that we Europeans do not understand: Just opening a bank account - here it is a simple matter. Not the case in Thailand: First you have to find the right bank, the right office with the right smiling



bank clerk - somewhat difficult if you do not speak the language and cannot read any signs. Then you finally arrive at the right place. Take a number - like at the doctor's office.

After an appropriate waiting time of one hour 20 minutes, it is your turn. Yet another smiling employee asks: „How high is your monthly turnover in the account?“ „Well... not much at the beginning...“ All interest immediately disappears. We are shown the way to the door with a pile of forms and an unmistakable look: Next, please!

After the initial disillusionment we attempt to embrace Thai as a whole and soon notice: what seems like a problem to us is not really one at all. Sometimes things take somewhat longer and you can never lose your composure, but: „Everything is going to be alright!“

In all of our years in Thailand we have never experienced the unfriendliness or ill humour that are a part of everyday life here. Impatience is a foreign word.

transfluid® Asia Pacific, as a subsidiary of transfluid® Maschinenbau GmbH Schmallenberg, has now become a permanent and indispensable factor. Thanks to Thannarong Vasunirachorn, we have since acquired several new customers of interest and a functioning network of dealers in the Asian-Pacific Area.

The pictures show: Here you live corporate identity. Even the building was painted red and white both inside and out. The office is centrally located in downtown Bangkok, easy to reach from the airport and offering an extremely pleasant atmosphere. Theerawoot Norkhorn is an outstanding, highly-motivated service employee who solves customer problems in the shortest time.

transfluid® Asia Pacific has been equipped with spare parts and equipment in order to be able to operate without delays. We are capable of offering our customers 24-month warranties. We have gained our customers' trust in our products and our competence.

Therefore: We would like to express our warmest gratitude to our co-workers and colleagues in Bangkok for the extraordinarily pleasant collaboration and the great commitment! Kop koon krub/kaal!

As we get on in years it may be that, in addition to glasses and a toupee, certain parts of the mouth are no longer original either. There are two small anecdotes in this regard:

I was driving towards Austria while eating an apple in the car - vitamins are always good! „Wow, is this apple hard!“ And then a crunch... - Crack. There's the front incisor decoratively protruding from the apple while the rest of the „third“ is back where it belongs. What now? I had an important upcoming meeting. The solution: Motorway petrol stations normally have a broad selection of various adhesives. Stop! Run in! Select an adhesive and back into the car. Well hidden from everyone else, I carefully removed the broken piece from the apple, observed the damage, carefully applied the liquid of the instant adhesive and - voila! The dentist couldn't have done it better.

Now just it was a matter of just being a bit more careful and sticking to a liquid diet until the next customer meeting. Everything goes smoothly during the visit - and then comes the invitation to the cafe. While enjoying coffee and cakes it falls out again! The subsequent trip home was made with a gap in the teeth.

Then things went rather smoothly for a while - that is, until carrots were on the menu as part of a diet. Back in the car again, munching rock-hard carrots which had been driven around the country for several days. One bite and the entire bridge was in two pieces. I would prefer not to repeat the choice of words expressing the anger I experienced. So I exited the motorway to look for a dentist. No problem at all, thanks to Google. I explained that I didn't really need a dentist, just a quick fix. I paid 10 euro, filled out the forms and sat down in the chair. I repeated the desire for a simple repair. Again, the clear instructions that only these two parts I helplessly held in my hand only had to be put together again. The dentist replied: „We can't do anything for you. You need a dental technician!“ So, I went around the corner, carefully put the broken halves back together so that it looked better and went to the dental technician. He knew what he was doing and after fixing the crown in just a few minutes instructed me to have it worked on more thoroughly after coming home for safety's sake. Thank you - all done!

# Know-how (part 2)

Technology . Mandrel bending machine in practice: The right setting



Mandrel with sponging between the segments

You know the wide-ranging capabilities of a mandrel bending machine from the first part of the digression. This time, you learn how to recognise and correct errors in practical application – for optimal results.

## Error analysis and remedy

### 1. Pipe breaks off

- > The material does not have the correct elastic limits and forming qualities. Non-annealed pipe quality.
- > Acquire a different material or possibly heat non-iron metal pipes in order to appropriately adapt the qualities.

### 2. Pipe slips in clamping section of the bending tool

- > Adjust the pressure on the clamping section.
- > The clamping section must be roughened, eroded or equipped with a sawtooth.
- > The clamping section must be longer.
- > On the initial bending a solid adapter can be pushed into the pipe end.
- > Too much pressure on the clamping section; the mandrel elements are clamped too hard. Air gap on the flanks too large; pressure too high.

- > Too much pressure on the pressure die; excessive counterforce to the wiper die is generated.
- > The mandrel is too far forward; readjust the mandrel behind the tangent.
- > Too few links on the mandrel; the pipe already catches in the clamping section at a low angular degree.

### 3. If only folds arise, it may be due to the following:

- > Mandrel and/or wiper die not in correct position.
- > Mandrel diameter too low in relation to the radius and the wall thickness.
- > If folds form, this can be caused by using the wrong mandrel section. This is especially the case when the folds form towards the inside of the bend area. Then a mandrel with smaller distances between the segments must be used (open pitch, closed pitch, ultra closed pitch). Use a mandrel with closely positioned segments.
- > Insufficient lubrication or incorrect



Wiper die with lubricating hole

- > lubricant or lubrication in the wrong place.
- > Mandrel too far to the rear, behind the tangent of the bending roll.
- > Wiper die not in the correct position.
- > Wiper die worn out.
- > Outside pipe diameter and tool are not precisely matched.
- > The flanks of the pressure die touch the flanks of the roller when closed.
- > Insufficient pressure on the pressure die.
- > Excessive lubrication.

The third and final part of our technology report for mandrel bending machines can be read in the upcoming edition of t time(s).



Normal clamping section



Eroded clamping section



Clamping piece with grooved structure



Clamping piece with sawtooth



Clamping piece with square toothing



Toothed clamping surface

# Through everyday life with ease

Field report . Mobility made to measure: SORG Rollstuhltechnik

Every person is unique. Therefore, a modern wheelchair must precisely match each individual's requirements. After all, it is the everyday foundation for those who have difficulty in walking.

This motivation drives the employees of SORG Rollstuhltechnik. They develop tailored solutions which provide people as much mobility and the highest quality of life possible in order to lead a self-determined life. From day to day their goal is to provide assistance for the smallest children, for teenagers and for adults, adapted to their individual needs.

## SORG develops special solutions for special people.

Long-time experience and the comprehensive know-how of the specialists at SORG enable these custom designs. Since its founding in 1987 the company

has continuously improved and developed its wheelchairs. Customers trust the outstanding equipment and the company steadily grows. With the expansion of its production capacity, SORG assures the accustomed high quality and best service provision.

Around 30 employees form the team of specialists in Oberhausen-Rheinhausen, Baden Württemberg.

In the process, SORG relies on modern production methods like CNC machining. With their own production of the required individual components, the various requirements can be optimally fulfilled, including the quality guarantee.

SORG produces the base frame of the wheelchairs on a transfluid® CNC pipe bending machine with pipe diameters up to 30 mm. Especially light materi-

als, such as aluminium, are processed with this machine. This has been a permanent fixture in the production for years and supports SORG in providing customised solutions.

SORG Rollstuhltechnik GmbH + Co. KG  
Benzstraße 3-5  
68794 Oberhausen-Rheinhausen  
info@sorgrollstuhltechnik.de  
www.sorgrollstuhltechnik.de



# Thanks right next door!

time(s) check . Sometimes quality is close-by

Right in Germany and practically next door, our long-time partner INRO is there for our customers. The full name of the company from Sauerland already indicates the high demands: INRO GmbH Vertrieb Innovativer Rohrbearbeitungsmaschinen.



Dieter Wagner, Managing Director

From their location in Iserlohn, Dieter Wagner and his wife Cornelia Wagner have been an effective sales partner for our company for nearly 15 years. These experts have long-time experience with an extraordinary level of technical competence.

Dieter Wagner serves customers in technical execution before the sale. His concentrated procedure ensures consistent realisation of the individual demands and requests. The after-sales service of INRO GmbH is also impressive. Always available, Dieter Wagner stands by his customer with word and deed.

A reliable partner of transfluid® Maschinenbau GmbH, the company in Iserlohn forms an important link between the manufacturer and users of tube-forming machinery. INRO specialises particularly in the sales and distribution of tube-bending machinery and tube-end forming machines using diverse processing methods all the way up to fully-automatic production cells.

We are proud to have this strong partner and look forward to many more successful years with INRO.

## INRO GmbH

Founded: 19.6.1996  
Employees: 2

Representative for:  
> transfluid®

Sundernallee 75b  
58636 Iserlohn

Tel: +49 23 71 / 2 99 48  
Fax: +49 23 71 / 2 67 68

info@inro-gmbh.de  
www.inro-gmbh.de

**INRO** GMBH  
Maschinen und Systeme für  
innovative Rohrbearbeitung

t time(s)  
Edition 02 . 10

**publisher and editorial team:**  
transfluid® Maschinenbau GmbH

Hünegräben 20-22  
D-57392 Schmallenberg

Phone: +49 29 72 / 97 15 - 0  
Fax: +49 29 72 / 97 15 - 11

info@transfluid.de  
www.transfluid.de

**design & typesetting:**  
PSV MARKETING GMBH

**t**  
**transfluid**®  
tube processing machines