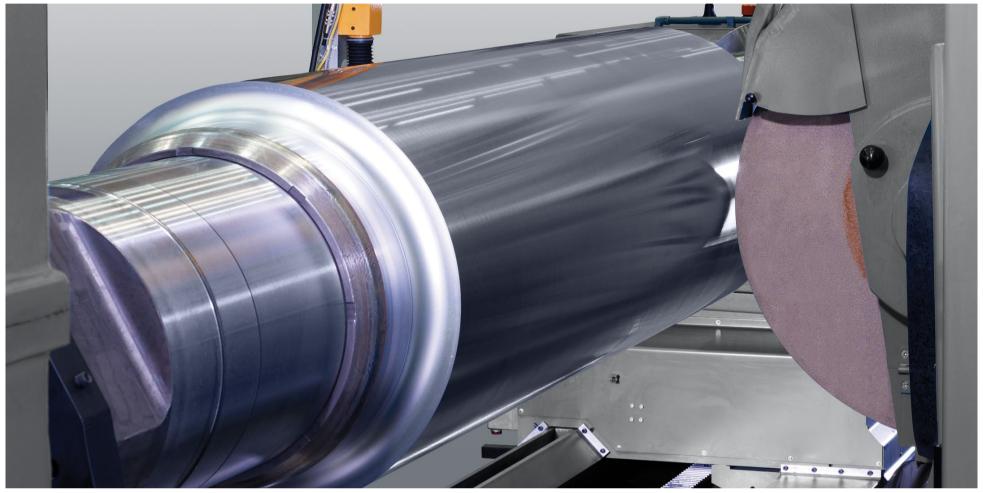


#### COMMUNICATIONS

Spring 2015

### **Trusting cooperation**



Roll machining with WaldrichSiegen machines: Highly precise machining at maximal grinding performance

Investing in a large machine tool from WaldrichSiegen is an investment for the future, which continues paying off for many decades. Due to the high quality of each single component and minimal wear characteristics, the machines guarantee the utmost machining qualities and reliability for decades to come. Additionally, the maintainability of the machines as well as fast and reliable service are the basis for a long-lasting, stellar cooperation.

Dr. Stephan Witt, President at WaldrichSiegen, emphasizes: "Customers, who once made a decision for WaldrichSiegen, will come back again. We maintain many long-lasting partner-

ships because we guarantee reliable quality and low life cycle costs for the customer."

Eight years ago, WaldrichSiegen delivered a texturing machine to the Japanese Toyo Kohan Ltd., manufacturer of steel sheet products. As a joint venture with the Turkish Tosyali Holding, "Tosyali Toyo Steel", the Japanese company is currently building a new cold rolling mill in Osmaniye, Turkey. The cooperation with WaldrichSiegen convinced the customer – Tosyali Toyo Steel placed a new major order with WaldrichSiegen: a complete roll shop.

One reason why WaldrichSiegen was awarded the order was the

comprehensive know-how of WaldrichSiegen in the field of texturing. Again, the customer opted for a double row texturing machine ProfiTex 60. The ProfiTex machine does not only achieve exactly repeatable surface roughness but also extended roll running times up to 300 % in the mill stand.

In addition to that, WaldrichSiegen will deliver four ProfiGrind roll grinders for the new cold rolling mill: one ProfiGrind 2500 for machining backup and work rolls, two ProfiGrind 600 K for work rolls and one ProfiGrind 300 K for rubber rolls. The machines are designed for the high demands of the cold rolling mill: The manufactured products are used e.g. for

food packaging, the automobile industry, household appliances or computers. They require the utmost surface qualities at the roll. The new WaldrichSiegen roll shop will contribute to achieving such high standards. The efficiency of the roll shop is assured by the Roll Shop Management System (RSMS) – also part of the scope of supply.

The RSMS collects and evaluates all information coming from the roll shop, which is completely planned by WaldrichSiegen. The advantages are very few downtimes and bottlenecks. With additional WaldrichSiegen roll shop and roll handling devices, like chock tilter and dechockers, the customer is optimally equipped.

However, the total Waldrich-Siegen package comprises even more. Jörg Naumann, President Sales, explains: "WaldrichSiegen does not only deliver state of the art equipment but provides its customers also with its service package: Processing, delivering on time, commissioning, aftersales-service – Tosyali Toyo Steel knows that they can rely on us in all aspects."

#### Topics:

- Tailor-made concept for the paper industry
- Grinding and texturing from one source
- Company-owned ProfiMill: investment for the future
- Successful milling machine event
- A clear sign for environmental protection
- Theater treat for apprentices

#### **Editorial**

The current situation in the heavyduty machine tool industry is characterized by a lack of orders and an insufficient willingness on the customers' side to invest. Like our competitors, we are struggling with an unsatisfying utilization of our capacities.

Yet, we do not waste our time by lamenting about external conditions we cannot change. We rather use the spare capacities for a continuous consolidation and further development. We see this time as a chance to develop new strategies, embrace technological improvement and optimize processes.

With Heinrich Haumer, we were able to recruit an experienced new Sales President, who will advance our sales and be responsible for this challenging task. Heinrich Haumer has excellent references for his position. At Siemens Austria, he was in charge of the division renewable energies and afterwards he was Managing Director at SBA mechatronics. Heinrich Haumer has been in charge of the sales of WaldrichSiegen lathes and portal milling machines since September 2014. He is also President Sales at UnionChemnitz, our sister company.

Combining these two jobs in one position, strengthens the joint market appearance of WaldrichSiegen and UnionChemnitz. This is the logical consequence of the contiguous product portfolio. With the PR 200 and PR 260, UnionChemnitz offers large boring mills, which complement ideally with the portal milling machines of Waldrich-Siegen. Thus, the two companies jointly offer a comprehensive scope of application solutions in the area of precise machining of large work pieces.

In combination with the roll machining sales devision with Jörg Naumann as President Sales, WaldrichSiegen is well-positioned for the future.

Superb services, innovative solutions, high quality to the very detail – these characteristics made WaldrichSiegen successful in the past and will distinguish us in the future as well.

Dr. Stephan Witt

### Tailor-made concept for the paper industry

The Indonesian company Indah Kiat Pulp & Paper, a subsidiary of Asia Pulp & Paper (APP), ordered a new machine from WaldrichSiegen for their plant in Perawang. The ProfiGrind 15000 P was assembled at WaldrichSiegen in Burbach in autumn 2014.

The machine is designed spaciously and adapted to the high demands of the paper industry. With a maximum length of 17,000 mm, a maximum work piece diameter of 2,200 mm and a load up to 150 t, the machine is perfectly adjusted to the machining of long paper rolls. A comprehensive package of accessories completes the tailor-made equipment: A belt grinding attachment, dust extraction, Venta-Nip milling attachment, rotating device and superfinisher make this machine unique.

The machine concept also includes a step less cross traverse of the head stock in the X-axis and a universal S-roll drive for "floating" mounted rolls, as well as an intuitively operable PGC 10 machine control. The proven CP-

roll measuring system is additionally equipped with a third measuring probe for measuring the roll sag.

A comprehensive service package also includes lifting the foundation block, inserting the spring elements and a turn-key installation. APP has been a trusting Waldrich-Siegen customer for many years. All-in-all, 13 WaldrichSiegen roll grinders are efficiently on duty at APP in Indonesia and China. The new ProfiGrind 15000 P will mainly grind rolls of the new PPM 6, which produces high quality shifted wood-free repro-

graphic paper with a width of 9.6 m and 1,500 m/min tape speed.

Mike Nitschke



Tailor-made machine for the paper industry: The ProfiGrind 15000 P for APP at WaldrichSiegen

# Grinding and texturing from one source

A grinding and texturing machine from one source – the Korean company POSCO Engineering & Construction approached WaldrichSiegen with this requirement. The company plans a continuous galvanization line (CGL) for its subsidiary POSCO Thailand Coating Steel. After extensive consultation with WaldrichSiegen, POSCO chose a ProfiGrind 2000 and a ProfiTex 60 S.

Several WaldrichSiegen machines are already used at POSCO Maharashtra Steel in India and POSCO VIETNAM in Vung Tau, Vietnam.

"Grinding and texturing from one source" – this concept is of particular benefit for the customer: By using the same drive and control components the number of spare parts and training for operating and maintenance personnel can be reduced. Furthermore, the customer has one single contact person for both machines – from the order placement to the warranty management.

The new POSCO plant in Thailand will mainly produce high quality plates for the booming Thai car industry. It's annual capacity totals 400,000 t. The WaldrichSiegen universal grind-

ing machine ProfiGrind 2000 will machine work and back-up rolls in the new plant.

The ProfiGrind roll grinder achieves excellent geometrical accuracies and surface qualities.

It is optimally designed for the high demands of the car industry.

During the subsequent machining process, the texturing machine ProfiTex 60 S will be used. Here, a flexible electrode design was

important to allow for an increase in production volumes in the future

Mike Nitschke



Compact texturing machine: ProfiTex 60 S

# **Company-owned ProfiMill: Investment for the future**

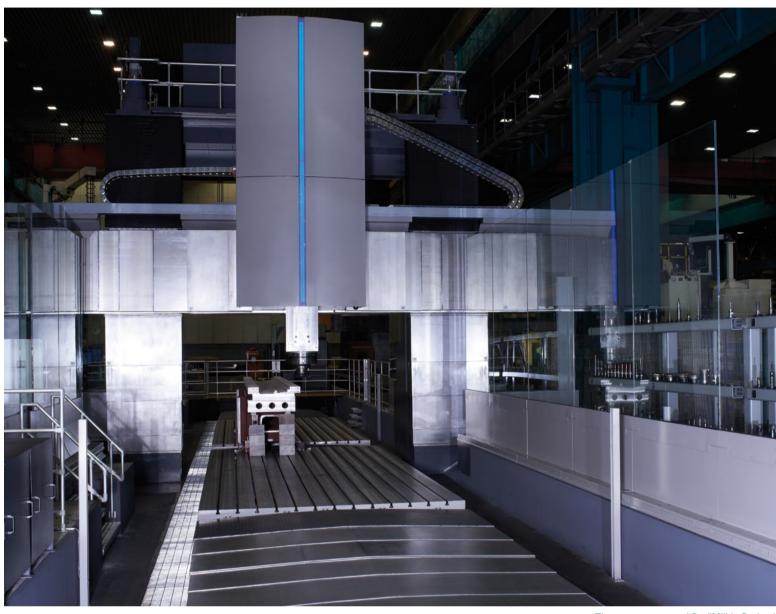
WaldrichSiegen is known for its high production-depth: All core components of the company's grinding, texturing, turning and milling machines are produced within the company group. This wide vertical range of manufacture allows for WaldrichSiegen to deliver machines which meet its own high standards on the one hand and to offer its customers the tailor-made solutions they need on the other. This is why the company has recently invested in a ProfiMill for its own production at the headquarters in Burbach, Germany. Heavy-duty machine tool components such as machine beds, columns or horizontal bars are machined with the highest precision on this new milling line.

The design of the new machine is very flexible: To be able to machine a vast array of work pieces, the portal milling machine is equipped with 7 milling heads for diverse milling and boring tasks. The milling aggregates are operated via an automatic tool and aggregate changer. With a passage width of 4,500 mm, a passage height of 4,000 mm and a clamping length of up to 17,250 mm, the machining of very large work pieces is possible. Designed as a double table machine, the Profi-Mill can use the tables either individually or coupled - an additional advantage in terms of variability and efficiency, because it enables

the machining of very long work pieces. All axes have hydrostatic guideways, the X-axis has a hydrostatic worm drive – together with the portal mill's robust design they guarantee almost unlimited durability, zero backlash and dynamic stiffness.

The new portal milling machine was put into operation in summer 2014. With this new investment, WaldrichSiegen is optimally pre-

pared for upcoming and future machining tasks – the high quality of all machine tools is guaranteed.



The company-owned ProfiMill in Burbach

### Milling machine event – successful kick-off of the anniversary

Approx. 40 visitors clustered around the ProfiMill in the production hall at WaldrichSiegen. With great interest, they watched the machining of a workpiece on the portal milling machine and the demonstration of the fully automatic tool and aggregate changer.

In personal dialogues with the customers, WaldrichSiegen experts explained the benefits of the ProfiMill. That shows – the WaldrichSiegen milling machine event in Burbach on March 3 - 4, 2015 was a complete success.

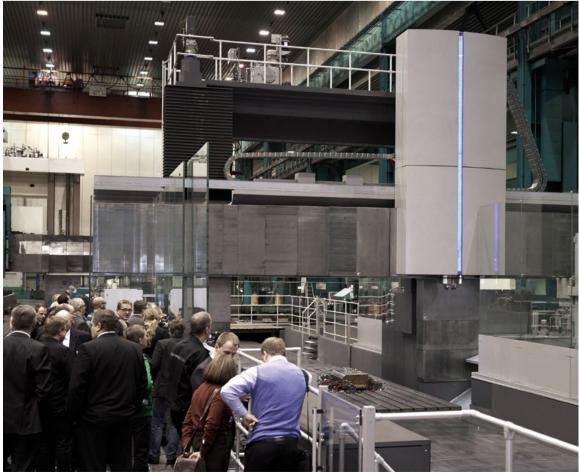
WaldrichSiegen is celebrating its 175<sup>th</sup> anniversary in 2015. The milling machine event was a practice-oriented kick-off of the anniversary year. Approx. 80 customers and interested persons accepted the invitation for the two days in Burbach in order to be informed about the recent innovations in the field of milling technology.

Whereas the first part of each day focused on technical presentations, highlighting the product

portfolios of WaldrichSiegen and the sister company UnionChemnitz, the second half of the days were dedicated to practical application. During live demonstrations on a ProfiMill the guests could witness the wide scope of precise and efficient machining options. They learned how to optimally apply the ProfiMill technology in their companies.

The company CCE (Catia) offered fascinating insights in the inner workings of the portal milling machine via 3D simulation, which allowed a "virtual walk" through the ProfiMill. The company Ingersoll Werkzeuge gave a technical presentation and introduced their vast scope of tools for heavy-duty cutting.

The milling machine event at WaldrichSiegen was only one opportunity to experience the Profi-Mill technology live – the WaldrichSiegen experts will gladly show you the performance of the machine during your next visit in Burbach.



An interested crowd at the WaldrichSiegen milling machine event

### A clear sign for environmental protection



Consequent application of energy efficient components like hydrostatic faceplate guideways of the ProfiTurn V

Responsibility for society and environment is an important part of the corporate philosophy, WaldrichSiegen promotes and implements. Energy efficiency and the preservation of natural resources are an important consideration in the design of WaldrichSiegen machines.

Recently, the company has joined the initiative "Blue Competence" of the VDMA (German Engineering Federation). The goal of the project is to actively promote sustainable technologies and solutions and to establish reliable standards.

WaldrichSiegen fulfills all criteria set up for the initiative: Apart from company-specific objects regarding environmental protection, this also implies reduced energy consumption of its machine tools.

Here, WaldrichSiegen excels with the application of energy efficient components and aggregates in all machines, e.g. frequency controlled drives of the chip conveyor. For the hydrostatic guideways, frequency controlled pumps are used efficiently and optimized regarding pocket geometry and oil gap. Thus, less cooling is required. Shortened start-up and warm-up phases of the machines as well as energy saving standby-concepts are known advantages of the machine tools along with controlling all leaks at the media and operating resources.

With "Blue Competence", WaldrichSiegen do not only demonstrate their commitment of environmental protection - innovative and sustainable technologies also support the company's sustainability.



Partner of the Engineering Industry Sustainability Initiative

# Theater treat for WaldrichSiegen apprentices

For WaldrichSiegen, training and education are of high importance. Every year, approx. 10 young talents start their apprenticeship as industrial mechanics, cutting machine operators or mechatronics at WaldrichSiegen.

In addition to education, art and culture are also part of the company's philosophy. Waldrich-Siegen regularly invites their apprentices to visit the Apollo Theater in Siegen/Germany. The visits combine cultural education and leisure.

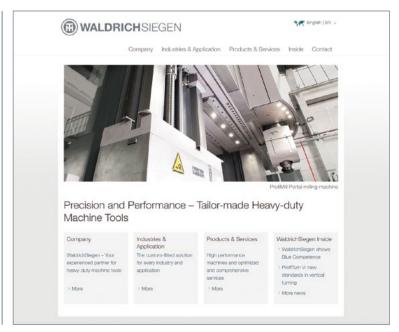
"Romeo and Juliet" by Shakespeare was on the program in 2014. The "Staatstheater Mainz" performed this classic play, directed by Thorleifur Örn Arnarsson. The problems dealt with in the play are still explosive and of great topicality - as they have been for centuries. Generation conflicts, love, constraints and taboos within society - young people have to deal with these issues today just as they had to in Shakespearean times. The production was highly modern provocative and full of dissonances. Classical theatrical and dramaturgical elements were mixed with modern approaches. They were partly a challenge for ears, eyes and nose and were emotionally touching. The apprentices, who were accompanied by their Head of Training, enjoyed the evening very much and left greatly impressed with the top-class production and actor's performance.



WaldrichSiegen apprentices in the Apollo Theater with Marita Thoma and Head of Training, Torsten Tockhorn

#### A facelift for the website

The WaldrichSiegen website has been completely revised: From now on, waldrichsiegen.de provides visitors with clear and comprehensive information about the company and product portfolio. Visitors will be able to download the WaldrichSiegen newsletter "WaldrichSiegen Communications" as well as information concerning upcoming events. The responsive design of the website's display adapts to all mobile devices.



International visitors receive the information under the following addresses:

> waldrichsiegen.com (English) waldrichsiegen.com.cn (Chinese) waldrichsiegen.jp (Japanese) waldrichsiegen.ru (Russian)

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