

Winter 2013/2014

Technology highlights at the Open House in the USA

Topics:

Lenape Heights Golf Resort Comfort and breathtaking views

39 x Precision and Reliability TISCO opts for Herkules machines

Roll Shop for KUMZ
The complete solution from one source

In-house manufacturing
Monolith™ beds at Herkules Meuselwitz



Editorial



Competence center roll grinding and texturing

Dear business partners, dear readers,

Our customers demand complete solutions, no longer just single machines. Therefore Herkules and WaldrichSiegen unite their strengths in the fields of roll grinding and texturing at one location. The employees of both engineering departments will design and further develop the machines of both brands at an engineering competence center at Herkules in Siegen. The different machine designs and the particular machine characteristics will continue to be maintained and expanded.

This internal concentration of competencies does not affect the independence of the two brands in the market. Both companies continue to be represented by different sales teams and the machines will be produced according to brands, technologies and capabilities in the companies of the HerkulesGroup.

We use the expertise of our design engineers, sales engineers and service technicians to bundle the competencies for roll grinding and texturing and to make our own roll shop in Siegen available for all customers.

With the founding of the competence center, the companies of the HerkulesGroup continue with their customer- and solution-oriented strategy and take advantage of the synergies between the companies.

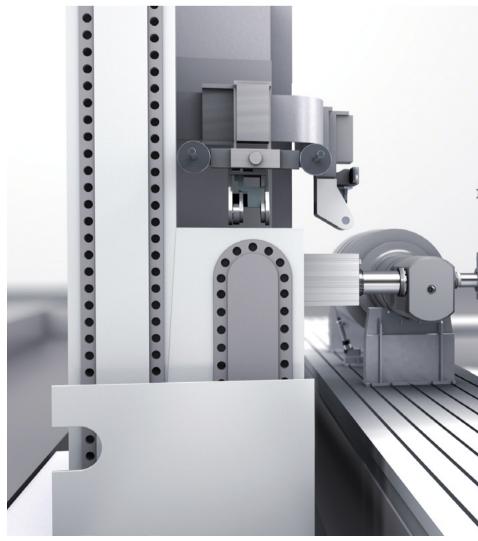
Confidently yours,

Christoph Thoma

Chairman and CEO of the companies in the HerkulesGroup



Herkules MACHtechnology - MACH ROTEC grinding wheels and Herkules machine technology guarantee reproducible grinding results with CBN coatings.



Parallel milling of roll necks with UnionChemnitz boring mills.

CBN grinding and roll neck machining: Technology highlights at the Open House



(I) UNIONCHEMNITZ

Innovative technology and product highlights combined with a top-class golfing tournament – ever since the Open House took place for the first time at Herkules USA in 1999, it has been an excellent opportunity for American customers to get better acquainted with the products and services that Herkules and the whole HerkulesGroup have to offer. The 15th Annual Herkules Open House in August proved to be no exception.

Next to a tour through the plant, where Herkules employees showed off modernized machines and new machines, the technical papers of the Herkules experts stood out as the highlights of the Open House. The focus of the presentations was on the newly developed **Herkules** MACH technology and on roll neck machining with Union-Chemnitz horizontal boring mills.

Reproducible grinding results with CBN

Herkules and the grinding wheel manufacturer MACH ROTEC developed the **Herkules** MACH technology. Whereas till recently one could use CBN grinding only for rough grinding, and at very high costs, the innovative technology now allows, for the first time ever, finish grinds of any type and with economical use of CBN coatings – superior grinding! Herkules and MACH ROTEC are the first on the market to enable users to grind cast and forged HSS rolls in high quality. The recipe for success: vibration damping grinding wheels and vibration damping machine technology with ultra-fast HCC/KPM control and measuring technology.

Efficient roll neck machining

A further technical focus was on roll neck machining. After taking over the horizontal boring mill manufacturer UnionChemnitz in 2011, the HerkulesGroup offers boring mills for the efficient milling of roll necks: PR 160. The boring mills can machine all types of roll necks – from flat necks to wobbler necks and to roll necks with longitudinal grooves. Depending on roll type, weight and size, the desired degree of automation and the space available, our experts develop the perfect custom machine for you. The dynamic hydrostatic systems of the PR series, the double hydrostatic guide ways completely enclosing the ram, and the heavily ribbed column guarantee high rigidity and superior damping characteristics of the machine.

Shop talk on the greens

A golf tournament, held in the Lenape Heights Golf Resort on the second day of the Open House, provided the perfect occasion to get to know our customers better, to learn about their needs and expectations and to discuss our solutions far away from the meeting rooms. First of all the 60 guests set out to determine the winner of the tournament. That task accomplished, they savored a delicious dinner in the restaurant overlooking the golf course. "Topping the day off with another delectable meal ended a beautiful weekend. Our memorable experience and time together will not be forgotten", wrote a guest after the event. Innovative technology, coupled with a gettogether in a convivial atmosphere, made the Open House a complete success.

Lenape Heights Golf Resort

Exclusive comfort with breathtaking views

Spending the last warm days of the year on the golf course during Indian summer. Enjoying a delicious dinner, after the game, on the terrace with a spectacular view of the fairway. Spending a relaxing night in one of the spacious rooms...

The new hotel in the Lenape Heights Golf Resort in Ford City, Pennsylvania, USA offers all this and much more. The hotel, which just opened and belongs to the HerkulesGroup, is the ideal destination for golfers and other discerning guests — not only during Indian summer.

Special offers for exclusive tastes

20 modern, stylish rooms, among them four suites, await the guests of the boutique hotel. Inspired by the colors of the Indian summer the rooms were decorated in orange, red, yellow or green shades and furnished with top quality furniture. The unique beauty of the location (only 45 minutes from Pittsburgh) and the golf course offer excellent opportunities for a little break. A sports bar invites the guests to linger. Chef Michal Lipinski prepares culinary delights from local fresh foods — the menu also features some typically German dishes. A private bar (cigar lounge), a gym and a small wellness lounge with steam room and sauna, currently being made ready, also help to leave everyday life behind. For conferences and weddings, the Lenape Heights Golf resort has a banquet facility that can accommodate up to 300 guests.

Service with a capital S

The friendly, personal service of the hotel staff sets new standards — an aspect that general manager Alexander Stiller particularly cares about. After his apprenticeship in Frankfurt, Germany he worked in first class hotels all over the world, for example in London, in Abu Dhabi and in Zurich. "I have been working in small hotels for many years because we can create service at a very personal level", says Stiller. "Topquality service is the standard we set for ourselves here at Lenape Heights Golf Resort".

Contemporary art

Once you enter the hotel you will notice the works of the American artist Joseph Stabilito on the walls of the hotel foyer and the corridors. Joseph Stabilito is one of the most important artists of the American "New Illusionists" movements. With expressive, vigorously applied colors, combined with precisely drawn geometric figures and illusory shades, Stabilito evokes a sense of depth that makes his works unique.

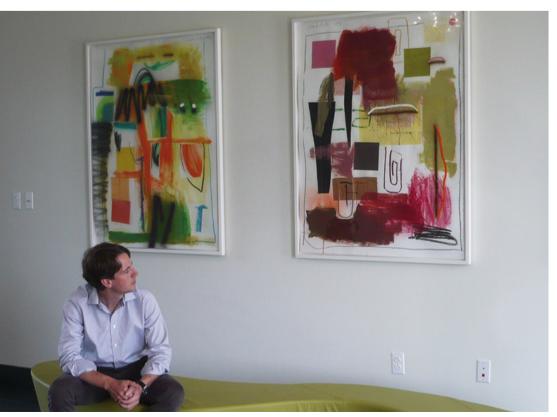
For further information on the hotel and the Lenape Heights Golf Resort, please visit: lenapeheights.com



Luxurious Boutique Hotel in the Lenape Heights Golf Resort.



Chef Michal Lipinski and General Manager Alexander Stiller on the terrace of the restaurant.



Pictures of the New York artist Joseph Stabilito in the hotel foyer.

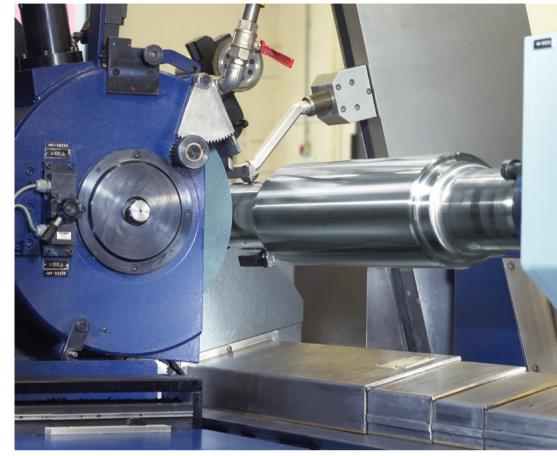
TISCO: Precision and reliability times 39

32 Herkules machines operate in the plants of the Chinese steel manufacturer TISCO (Shanxi Taigang Stainless Steel Co. Ltd). With high accuracy, they efficiently grind rolls for the production of stainless steel and silicone sheets. Based on the positive experiences of the long-standing co-operation, TISCO ordered seven new machines, bringing the total number of Herkules machines at TISCO to 39.

Six of the new roll grinders will be used in the cold-rolled stainless steel division that TISCO has expanded. The grinders, of the type WS 250, will machine work rolls and intermediate rolls for the SMS Siemag Z-HI mill stand.

Besides expanding the stainless steel sector with further mill stands, Shanxi Taigang Stainless Steel Co. Ltd. is also stepping up the production of silicone sheets. For this demanding application TISCO ordered another grinding machine for work, intermediate and back-up rolls. It will be used in a new mill manufactured by the Japanese company Mitsubishi. With the expansion of the silicone sheet division, Shanxi Taigang Stainless Steel responds to the ongoing high demand for electricity and the corresponding demand for transformers.

Dietmar Josche



Precise grinding results meet the most exacting demands

Herkules

Roll shop: complete solution from one source

The perfect coordination of all components, planning, design and implementation hand in hand — when you order a roll shop from Herkules you receive a complete solution from a single source. This was one of the reasons why the Russian company Kamensk Uralsky Metallurgical Works (KUMZ) decided to charge Herkules with the supply of a complete roll shop for their hot and cold rolling mill. As technology leader, Herkules fulfilled all demands KUMZ had for their new roll shop.

It is the long-term goal of KUMZ to become one of the most important suppliers of wrought aluminium alloy for the leading companies worldwide and the number one supplier for the aviation industry. The new roll shop will provide a valuable contribution to fulfilling this ambitious goal. It will significantly improve the quality of the aluminium sheets produced.

Two roll grinders, two de-chocking devices, a chock tilter and further roll shop equipment are all in the scope of supply. An HS 3 CNC knife grinding machine for grinding circular knives (photo on the front page) is also part of the roll shop order.

In the cold mill roll shop KUMZ will be able to grind rolls with a maximum diameter of 1,600 mm and a weight of 50 t; in the hot mill roll shop rolls with diameters to 2,000 mm, weighing up to 150 t.



Tailor-made roll shop ideally adjusted to the needs of the customer

MonolithTM beds produced in-house

It is the philosophy of the HerkulesGroup to produce all core components of our machines within the group of companies. That guarantees the high quality of the components and we are able to react flexibly to our customer's wishes.

The Monolith[™] beds of the Herkules machines are such core components. Until recently they were produced by an external supplier. Now the machine beds are manufactured at Herkules Meuselwitz. The employees in Meuselwitz produce the vibration damping beds in a new production hall.

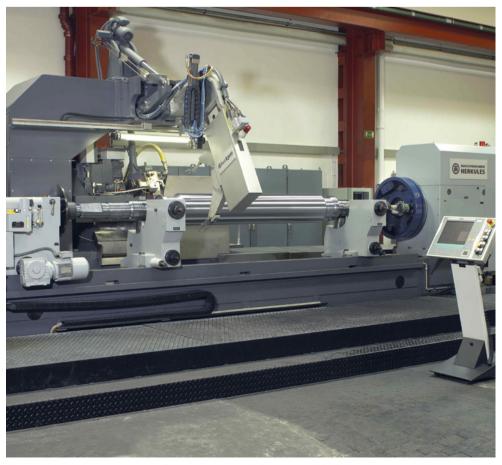
The Herkules Monolith™ beds have heavily ribbed guide ways and a heavy, steel bottom plate. Due to the sandwich design with special concrete there is no connection between the cast guide ways and the steel plate. The inherently rigid, thermostable design, which does not require a foundation, does not only dampen vibrations from outside the machine but also the vibrations inevitably occurring during the grinding process.



Welding the steel structure of a Monolith™ bed

Herkules

Monolith[™] technology prevails in Korea



High precision and reproducible grinding results with the WS 450 with HCC/KPM measuring technology.

Customers who opt for a Herkules machine do not only receive high-quality technology but also excellent service from the Herkules employees who support them with their extensive knowledge. Daeshin Metallizing, a company in the Dae Chun group, was so impressed with this service that management wrote a thank you letter to Herkules. They expressed their gratitude for the time the Herkules specialists took during the commissioning of the WS 450 L Monolith™ and for the fact that they shared their know-how with them.

The WS 450 L gives Daeshin the technology and the knowledge to grind thermally coated special rolls efficiently and to hold their ground in this demanding market. The high accuracy and the reliability of the WS 450 L were crucial factors for the decision in favor of Herkules. Another was the reproducibility of the grinding results through the HCC/KPM measuring technology and the unique C frame measuring caliper. A third reason to opt for Herkules was the cost of installing the machine. Due to its Monolith™ design the machine could be fit perfectly into the existing building structure.

The sale of the WS 450 L shows: Monolith™ technology also prevails in Korea.

Herkules receives climate protection award

When the city of Siegen (Germany) presented the winners of their annual climate protection award, Herkules also received an award. Herkules was awarded the second prize for their newly built cogeneration plant, the installation of flue gas heat exchangers, the replacement of heat pumps with high-efficiency pumps and the optimization of the heating system. The city of Siegen established the climate protection award to promote exemplary activities to save energy and to use energy efficiently. The other companies in the HerkulesGroup also attach great importance to protecting the climate. They maintain the highest standards when purchasing new cogeneration plants.

Herkules Gulf Region

Herkules chronicle for the crown prince of Bahrain

In 2011, the chronicle "Herkules – a family enterprise turns 100" was published. Eventually, the book made its way around the world – and found its way to the crown prince of Bahrain, his royal highness prince Salman bin Hamad Al Khalifa.

Malte Sietasch, head of the Herkules Gulf Region office, and his wife were invited to the prince's Great New Year's 2013 Reception Majilis. At the reception, Malte Sietasch presented the chronicle to the prince, who seemed to be very pleased with the gift.

HerkulesGroup

Corporate Communications for Corporate Identity





As early as the beginning of the 1990s, the consumer goods industry used modern digital media for their advertising and sales strategies. Meanwhile, the middle-sized companies in the machine building industry, including Herkules, were still far away from conveying their corporate values according to the principles of an efficient media that would communicate and strengthen its identity. At Herkules, the personal contact secured the loyal and trustful relationship between management and employees/customers.

After the quick expansion of the markets across all continents and after integrating other companies in the HerkulesGroup, the rising number of employees and customers made it essential to establish a means of modern, professional, internal and external communications. The creation of our branding in 1993 started out somewhat bumpy and met with opposition. Today – 20 years later – all companies in the HerkulesGroup are represented in the market with a consistent and uniform corporate design that promotes identity and recognition. The number of design materials the corporate communications department fulfills, needs a strong team of experts. Led by Marita Thoma, they are responsible for the design and the realization of all media appearances of the companies in the HerkulesGroup – ranging from trade fairs and events over print and digital media to advertising material and buildings.

The 20th anniversary of the corporate communications department was celebrated during a joint event with Marita Thoma's 60th birthday at the Herkules lake.

Above: Canteen in Meuselwitz. Below: Entrance to the company premises.



Maschinenfabrik Herkules Hans Thoma GmbH

Eisenhüttenstraße 21 57074 Siegen / Germany

Phone: +49 271 6906 - 0 Telefax: +49 271 6906 - 222 E-mail: info@herkules-group.com

Maschinenfabrik Herkules Meuselwitz GmbH

Industriepark Nord 04610 Meuselwitz / Germany E-mail: mhm@herkules-group.com

Herkules USA Corp.

101 River Street Ford City, Pennsylvania 16226 / USA E-mail: husa@herkules-group.com

Herkules USA Corp. d/b/a/ KPM

101 River Street Ford City, Pennsylvania 16226 / USA E-mail: kpm@herkules-group.com

HCC/KPM LLC.

101 River Street
Ford City, Pennsylvania 16226 / USA
E-mail: hcckpm@herkules-group.com

Deutsche Maschinen India Pvt. Ltd.

Palan Industrial Estate, Maheshtala 24 Parganas (South) - 700 141, West Bengal / India E-mail: dmi@herkules-group.com

German Machine International Trading Co. Ltd.

No.108 Furun Nan Road Jiaxing City, Zhejiang Province - 314000 / China E-mail: gmt@herkules-group.com

Jiaxing GMT German Machine Tools Co. Ltd.

No.108 Furun Nan Road Jiaxing City, Zhejiang Province - 314000 / China E-mail: gmm@gmt-machines.com

Representative Offices:

Maschinenfabrik Herkules Latin America

E-mail: hla@herkules-group.com

Herkules North America Corp.

E-mail: hna@herkules-group.com

Maschinenfabrik Herkules Asia Pacific Rep. Office

E-mail: hap@herkules-group.com

Maschinenfabrik Herkules Shanghai Rep. Office

E-mail: hrc@herkules-group.com

Maschinenfabrik Herkules East Rep. Office

E-mail: hme@herkules-group.com

Maschinenfabrik Herkules India Rep. Office

E-mail: hri@herkules-group.com

Maschinenfabrik Herkules Gulf Region

E-mail: hgr@herkules-group.com

Imprint

HerkulesNews

Publisher: Maschinenfabrik Herkules Hans Thoma GmbH \cdot Eisenhüttenstraße 21 \cdot 57074 Siegen / Germany Telephone +49 (0) 271 6906 - 0 \cdot Fax +49 (0) 271 6906 - 222 Responsible: HerkulesGroup Corporate Communications