



Press Release

HERRENKNECHT

Engineer and entrepreneur Martin Herrenknecht receives the Werner von Siemens Ring

December 14, 2016

Schwanau / Berlin, Germany

Dr.-Ing. E.h. Martin Herrenknecht accepted the Werner von Siemens Ring – one of the most prestigious technical engineering awards – on December 13, 2016 in the Berlin-Brandenburg Academy of Sciences and Humanities. The Werner von Siemens Ring Foundation highlighted Martin Herrenknecht’s inexhaustible innovative strength in the development of tunnel boring machines and honored his technical pioneering spirit in the realization of groundbreaking engineering projects in mechanized tunnelling. For the past 100 years, the Werner von Siemens Ring has been awarded to inventors and entrepreneurs for outstanding achievements who, like Werner von Siemens, have realized epoch-making technical innovations and guided them to success.

_____The entrepreneur and engineer Dr.-Ing. E.h. Martin Herrenknecht can look back on a remarkable range of personal honors and awards. Tuesday saw him receive a special token in the presence of a high-profile audience in the form of a festive award of the Werner von Siemens Ring in the Berlin-Brandenburg Academy of Sciences and Humanities. Prof. Dr. Joachim Ullrich, the Chairman of the Foundation Council and President of the Physikalisch-Technische Bundesanstalt, presented him with his Werner von Siemens Ring. It is a unique item designed and produced by Michael Berger, a kinetic jewelry designer and renowned master goldsmith, who was commissioned by the Foundation.

Around 250 guests representing the areas of science, business and politics took part in the festive event at the historic Gendarmenmarkt, eager to witness the presentation of the prestigious prize. The official speech was given by Nobel prizewinner and chemist Prof. Dr. Stefan Hell. In the greeting of Sigmar Gabriel, Germany’s Vice-Chancellor and Federal Minister for Economic Affairs and Energy, Martin Herrenknecht’s achievements were also praised. “To ensure that we can also

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continue to set standards with innovative products in the future, we need strong research facilities, strong companies and lively exchange. As the manufacturer of the world's largest tunnel boring machines, Dr. Martin Herrenknecht is an exemplary figure in these areas: he is an inventor and founder, a technical pioneer and an entrepreneur, and with the success displayed by his company, he is one of the representatives of this country's economic strength."

In a laudatory speech about the ring bearer Martin Herrenknecht, Prof. Dr.-Ing. E.h. Manfred Nußbaumer M. Sc., member of the Foundation Council at the Werner von Siemens Ring Foundation and former chairman of the Board at Ed. Züblin AG, confirmed the particular technical courage and entrepreneurial pioneer spirit displayed by the entrepreneur and engineer from Baden-Württemberg. "You have repeatedly broken new ground. Every time we met, I was amazed at the energy with which you pursued your goals and the wide range of possible solutions at your disposal for excavating tunnels", said Nußbaumer, as he reminisced about shared project experiences and encounters. With a variety of groundbreaking innovations and optimizations of existing technology and methods, the Herrenknecht company has swiftly assumed the role of international market leader. "By receiving the Werner von Siemens Ring, I would imagine that this is the icing on all of his awards to date", stated Nußbaumer in his laudation.

Dr.-Ing. E.h. Martin Herrenknecht received the award with particular pleasure: "I was surprised to receive this honor. Especially when I consider the impressive range of ring bearers to date. Without the substantial support given by my mother when establishing the company, without the untiring understanding of my family given to me as an entrepreneur, and without the fantastic commitment by my engineers and employees all over the world, I would most likely never have been considered for the Werner von Siemens Ring", claimed Martin Herrenknecht, as he spoke to the around 250 guests in the Academy's Leibniz Room. "Scientists, inventors and entrepreneurs have a special privilege and a genuine responsibility as we are capable of bringing beneficial progress to many key challenges. Although new tunnel infrastructures and tunnelling technology are only a small excerpt thereof, this award means that they will also be attributed special acknowledgement by science", added the entrepreneur from Baden.

Current technical engineering milestones in mechanized tunnelling

In almost 40 years of its corporate history, Herrenknecht has mastered more than 3,100 tunnel projects in over 80 countries in close collaboration with its customers. These include the largest, longest, smallest and deepest projects – with progress regularly marked by new records and milestones.

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Opened a year ahead of schedule and within budget, the Gotthard Base Tunnel in Switzerland is regarded as a truly epoch-making construction. Over a period of 8 years, four Herrenknecht Gripper TBMs bored and secured more than 85 km of new tubes for the railway tunnel which went into regular operation in December 2016. In Istanbul, pioneer work was achieved by man and machines until August 2015 in an effort to build a tunnel link between Europe and Asia. The Eurasia road tunnel under the Bosphorus to be opened this year links two continents and is regarded as a milestone in engineering and construction. Never before had a tunnel borer worked under such extreme conditions: 106 meters under the strait, the Mixshield with a diameter of 13.66 meters steadfastly withstood pressures of up to 11 bar despite the most difficult geological conditions. In Doha, the capital of Qatar, a championship team of international tunnelling experts offered a superlative performance featuring 21 EPB Shields supplied by Herrenknecht. In a mere 26 months, the construction crews completed a total of 76 breakthroughs along the 111-kilometer tunnel alignments – a pioneer achievement which outshines any other metro tunnel project in the world up to now. A supersized Herrenknecht TBM started its mission in Hong Kong in 2015. Weighing in at 4,850 tons and with a diameter of 17.6 meters, the giant Mixshield is the largest TBM ever built to date and completed 646 meters of mega-tunnel tube for a new road tunnel under the Pearl River Delta in less than 8 months. Another technical feature: After the breakthrough into an intermediate shaft, it was possible to convert the record-breaking colossus to a boring diameter of 14 meters thanks to its intelligent design. The core components of the large TBM were integrated into the smaller machine for the remaining tunnel route.

More information on the milestones in mechanized tunnelling:

Gotthard Base Tunnel:

<https://www.herrenknecht.com/en/references/case-studies/gotthard-base-tunnel.html>

Eurasia Tunnel, Istanbul:

<https://www.herrenknecht.com/en/allaround-digital/issue-4.html>

Doha Metro:

<https://www.herrenknecht.com/en/references/case-studies/doha-metro.html>

Tuen Mun - Chek Lap Kok Link, Hong Kong:

<https://www.herrenknecht.com/en/allaround-digital/issue-5.html#supersize>

Werner von Siemens Ring Foundation and ring bearers

For 100 years, the Werner von Siemens Ring Foundation has been awarding the Werner von Siemens Ring for outstanding life achievements in technology. The list of prizewinners is a reflection of historical technical developments and a testament to Germany's significance as a technology location. Recipients include, for example, the aircraft engineer Hugo Junkers, the inventor of the first functional computer

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Konrad Zuse and the rocket designer and founder of manned spaceflight Wernher von Braun. The German President is the patron of the Foundation.

Link to the Werner von Siemens Ring Foundation website: <http://siemens-ring.de/>

Awards received by Dr.-Ing. E.h. Martin Herrenknecht

Martin Herrenknecht has already received a wide range of awards and prizes, including the Cross of Merit, 1st Class of the Order of Merit of the Federal Republic of Germany as well as the German Entrepreneur's Prize (Deutscher Gründerpreis) 2013 in the category "Life's Work". Renowned technical universities have awarded him an honorary doctorate or appointed him honorary senator.

2016	Werner von Siemens Ring by the Werner von Siemens Ring Foundation, ascribed in December 2015 / awarded December 13, 2016
2016	ITA Lifetime Achievement Award of the International Tunnelling and Underground Space Association (ITA)
2016	Diesel Medal by the Deutsches Institut für Erfindungswesen e.V. in the category "Most successful innovative achievement"
2015	Badge of Honour of the VDI (Association of German Engineers) for 50-year membership
2013	Deutscher Gründerpreis , category "Life's Work"
2012	Prix Bartholdi Honorary award
2012	Honorary Citizenship of Offenburg University, Germany
2011	Honorary Senator at the Karlsruhe Institute of Technology, Germany
2009	The Moles Award 2009 of the US Heavy Construction Industry and honorary membership / New York City, NY, USA
2009	Member of the Handelsblatt Hall of Fame for the German Entrepreneurship
2008	Medal of Honour of the VDI (Association of German Engineers)
2007	Cross of Merit, 1st Class of the Order of Merit of the Federal Republic of Germany
2005	Award of the Research Association for Underground Transportation Facilities Inc. (STUVA) / Cologne, Germany
2002	Guest professorship at the Colorado School of Mines / Golden, CO, USA
2002	Honorary Citizenship of the Schwanau municipality
2002	Recipient of the Verdienstmedaille des Landes Baden-Württemberg (Medal of Merit of the Federal state of Baden-Württemberg)
2002	1st Karlsruhe Innovation Award for Construction Endeavours, awarded by the Society of Friends of the Institute for Technology and Management

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- in Construction, Karlsruhe University (Technical Institute)
- 1998** Recipient of the **Honorary Doctorate** (Dr.-Ing. E. h.), awarded by the Civil Engineering and Surveying Faculty of the Technical University Carolo-Wilhelmina / Braunschweig, Germany
- 1993** **Bundesverdienstkreuz am Bande** (Order of Merit on ribbon of the Federal Republic of Germany)
- 1987** **Baden-Württemberg Business Award**

Photos

Engineer and entrepreneur Dr.-Ing. E.h. Martin Herrenknecht receives the Werner von Siemens Ring



Prof. Dr. Joachim Ullrich, Chairman of the Foundation Council at the Werner von Siemens Ring Foundation, presented the traditional ring award to tunnel pioneer Dr.-Ing. E.h. Martin Herrenknecht. The engineer and entrepreneur received the award for his outstanding life achievements in the technical development of gigantic tunnel boring machines.



Around 250 guests were present at the Werner von Siemens Ring award ceremony on December 13, 2016 in the Berlin-Brandenburg Academy of Sciences and Humanities. They included the German Federal Minister for Economic Affairs and Energy Sigmar Gabriel, Chairman of the Foundation Council Prof. Dr. Joachim Ullrich, ring prizewinner Dr.-Ing. E.h. Martin Herrenknecht and laudatory speaker Prof. Dr.-Ing. E.h. Manfred Nußbaumer M. Sc. (from left).

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Each Werner von Siemens ring is specially crafted for the respective wearer and presented in an artistically-designed box. The ring for Dr.-Ing. E.h. Martin Herrenknecht was designed by Michael Berger, a kinetic jewelry designer and renowned master goldsmith, and aptly fitted with a miniature TBM which bores into and out of the gem when the ring is in motion.

For further information: Please contact us.

Herrenknecht AG

Herrenknecht is the only company worldwide to deliver tunnel boring machines for all geologies and in all diameters – ranging from 0.10 to 19 meters. The product range comprises tailor-made machines for traffic, supply and disposal tunnels, technologies for pipeline installation as well as additional equipment and service packages. Herrenknecht also manufactures drilling equipment for vertical and inclined shafts as well as deep drilling rigs.

In 2015 the Herrenknecht Group achieved total output of 1.343 billion euros. The Herrenknecht Group employs around 5,000 people worldwide, including around 180 trainees. With 76 domestic and overseas subsidiaries and associated companies working in related fields, Herrenknecht provides comprehensive services close to each project and customer.

› <http://www.herrenknecht.com/en/references>

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