

# Conference & Exhibition 2007

## Advance Programme

www.stainless-steel-world.net

Maastricht, The Netherlands, 6-8 November 2007



## Maastricht - *the place to be*

The Stainless Steel World 2007 Conference & Expo will be held in the MECC (Maastricht Expo and Congress Centre) in Maastricht, in the South of the Netherlands, close to where the borders of the Netherlands, Belgium and Germany meet. Maastricht is a city with a charming yet international character and with a definite Burgundian atmosphere. The city owes all this to its rich history and its position on the crossroads of different European cultures, languages and

trade routes. All these factors make Maastricht an ideal meeting point for the "Euregion" and beyond. If you would like to explore the city, Maastricht has an excellent bus service. City buses run about every five minutes between Maastricht city centre, Maastricht Central Station, the conference hotels and the MECC. During all conference days, delegates and exhibitors have free access to Maastricht city buses upon showing their delegate or exhibitor badges.

The MECC is a modern conference centre hosting seminars, conferences, exhibitions and other events of all shapes and sizes. All conference rooms are located in the MECC Euro Centre, accessible directly, and for delegates only, from the Expo Hall. The name Euro Centre is a reference to the Maastricht Treaty, signed in 1992, in which the decision was made to introduce a single European currency, the Euro.

For more information: [www.mecc.nl](http://www.mecc.nl)

## Register now

Save money and register in advance. Attendees who register as delegates and pay before 15 July can benefit from the early bird fee of Euro 975 instead of the onsite fee of Euro 1775. The fee includes access to all sessions and workshops, access to the online version of the conference proceedings, access to the exhibition, three lunches and all social functions, including the Stainless Steel World dinner and free transportation on Maastricht city busses during conference days.

If you wish to register with multiple employees of your company, please contact Mrs. Kiyu Vlam for the special "4 delegates for the price of 3" offer. Email: [k.vlam@kci-world.com](mailto:k.vlam@kci-world.com)

**Cut out the form on page 7, fill it in and fax it back to us here at Stainless Steel World on FAX: +31 575 511 099, or scan it and e-mail it to [ssw2007@kci-world.com](mailto:ssw2007@kci-world.com)**

## Join Stainless Steel World 2007

On behalf of the Steering Committee, I am very pleased to offer our invitation to the Stainless Steel World 2007 Conference in Maastricht. I began preparation for the conference with the intent creating a conference for everyone with an interest in Materials. I feel that the range of papers we have selected has achieved this objective admirably.

I know the Committee has worked hard to review papers to ensure the content is interesting, informative and varied. We now need an audience to make the Conference a successful event. I am sure there is genuinely "something for everyone" from Students to "Seasoned Professionals". Formal papers, poster sessions, workshops and learning zones; provide many opportunities to contribute and learn from this event. I stated at the start of planning that this invitation "goes beyond the Materials Community" to recognise the extensive use of stainless steel. I would like



everyone with an interest in application or performance of stainless steels (in fact, a wide range of metals) to take part in the event to improve the knowledge we all have.

Apart from the technical content, the Conference offers an excellent opportunity to meet with suppliers from all stages of production and users from a whole range of industries. I know how important meeting others and networking is to all. Stainless Steel World 2007 is both a very social event and creates opportunities to expand our understanding of application and performance of these materials.

The steering committee have done their work and I will be delighted to meet with you in November. I have always enjoyed my work in Materials Engineering because of the people I meet. I am sure you will find this Conference a rewarding experience. A blend of technical and social activity, in the beautiful historic city of Maastricht.

*What more could we want?*

Neil Henry, ABB Engineering Services  
Chairman Stainless Steel World 2007 Conference



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## The Organizers:

**Publishing House**  
KCI Publishing B.V.  
Telephone: +31 575 585 270  
Fax: +31 575 511 099

**Mailing address**  
P.O. Box 396  
NL-7200 AJ Zutphen  
The Netherlands

**Exhibition Manager**  
Robert a Campo  
ssw2007@kci-world.com

**Conference Director**  
Sjef Roymans  
ssw2007@kci-world.com

## The Steering Committee:

### Chairman

Neil Henry, *ABB Engineering Services, UK*

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## The Conference

# Seminar Metallurgy for Non-Metallurgists

The feed-back we had from the previous presentation of "Metallurgy for Non-Metallurgists" was very positive and the number of participants much more than we expected. We take this as an evidence that there is still a need for a popularized course in Metallurgy aimed at a group of people who want to gain a general understanding of stainless steels and their behaviour.

My colleague Professor Thomas Ladwein and I have rewritten the course from the version used at the SSW conference in Maastricht 2005 so as to suit this need. It is our aim to convey to the participants an understanding of the relations between the constituents of the steel (microstructural features such as grain boundaries, dislocations, precipitates, non-metallic inclusions etc) and the properties (corrosion properties, mechanical properties, machinability, weldability etc). Furthermore, it is our aim to describe the way in which steels are produced and fabricated. Video sequences will be used to demonstrate this. During the course of the seminar rather qualitative arguments will be used to explain the features implying that no advanced knowledge in mathematics is required.

We would like to wish you welcome to this course in "Metallurgy for Non-Metallurgists" and look forward to participation of many delegates at the conference.

*Thomas Ladwein, FH Aalen and Jan-Olof Nilsson, Sandvik Materials Technology (in the picture)*



## The Student Forum



Due to its popularity in 2005, the organisers and the scientific steering committee have chosen to repeat the Student Forum at this year's conference. Students can contribute a presentation about their research and development projects and delegates will have the opportunity to exchange ideas and experiences. In particular, it should provide a forum where young student researchers can present their work, including work in progress, and where they can make contact with representatives from the various industries interested in stainless steel, who might be potential employers. The committee has selected several students who will present their work in an informal poster session on Wednesday 7th November in the Expo area. Do not miss this unique opportunity to meet the upcoming material specialists of the future.

### As always, Stainless Steel World has compiled a social programme

#### Monday 5 November: Welcome Reception

Meet and greet the delegates, the exhibitors, the steering committee, the authors and the Stainless Steel World staff at the Stainless Steel World Welcome Reception in the NH Maastricht Hotel.

#### Tuesday 6 November: Heartbeat Café at Expo Hall



Join the Heartbeat Café for a free drink and music at 16:00 hr at the lunch area in Expo Hall

#### Wednesday 7 November

Antonius Vesselheads BV kindly invite all participants to attend a cocktail-hour which will be held at 16:00 hr at the lunch area in Expo Hall

#### Stainless Steel World Dinner



Held at the Auberge La Butte aux Bois just across the border in Lanaken, Belgium. This is the traditional highlight of every Stainless Steel World event.

All delegates with a passe-partout ticket have free access to all social functions. Extra tickets for the Stainless Steel World dinner can be ordered via the enclosed registration form.



## Credit where credit is due

Stainless Steel World would like to thank the members of the Steering Committee, who have selected the paper presentations and compiled the conference programme for this year's Stainless Steel World Conference.

Thanks to their dedication and commitment to the advancement of materials science technology and corrosion resistant alloys in particular, the Conference will offer a wide variety of interesting and topical paper presentations. In addition, thanks to their guidance and advice five workshops have been selected, targeted at creating an open atmosphere where delegates can discuss materials issues with their peers. It has been a pleasure to work with such a dedicated group of materials professionals.



## Meet the Session Chair

### Kjell Arild Bakken, Aker Kvaerner

MSc from the Technical University of Norway (Trondheim), Institute of Metallurgy and Metals Working in 1981. He has been within the Aker Kvaerner Group of Companies since 1983.

He has been Department Manager for Materials Technology in Aker Kvaerner Engineering & Technology since 1997 and has 22 years of experience within Materials Engineering offshore and onshore, including material selection for structures, process and utility systems, welding metallurgy, NDT, corrosion, engineering/ manufacturing of materials and supervision of manufacturer's performance.

Member of NORSOK Expert Group for material standards (EGM)



### Leif Karlsson, ESAB

Dr Karlsson received a Ph.D. in materials science from Chalmers University of Technology in Gothenburg, Sweden in 1986. After graduating he joined ESAB and has since been involved in R&D on weld metals. He currently holds a position as Manager of Research Projects focussing mainly on projects dealing with corrosion resistant alloys and high strength steels. Dr Karlsson has authored several technical papers in the field of welding metallurgy. He is a member of Commissions II and IX of the International Institute of Welding and since 2005 the chairman of Sub Commission IX-H "Welding of Stainless Steels and Nickel alloys".

### Othmar Hornasek, OMV AG Refinery

Othmar P. Hornasek, is currently a senior refinery expert within the OMV Refining & Marketing Division's Project Management for OMV's CEE Refineries in Austria, Germany and Romania.

Othmar is a 30-year OMV veteran and most recently served as Manager of the Inspection, Reliability & Material Technology Dept. for the Schwechat Refinery in Austria.

He has been working, among others, in the worldwide refinery arena with firms and organisations such as: UOP Des Plaines, Getty Oil Kansas, Hess Oil US Virgin Islands, Ceylon Petroleum Corporation, Pertamina, Esso Australia Ltd., the United Nations Industrial Development Organization [UNIDO] and in due diligence teams for the acquisition of industrial plants.

His strengths are in the field of specialized materials for hot hydrogen service in refinery and petrochemical plants, their metallurgical performance, life-cycle orientation and non-destructive testing of those materials. He holds several memberships in Europe and overseas, such as ASMET, NACE, ASNT etc.

Recognized with a Technical Counsel award by the Federal President of Austria, Othmar works as a General Court Appointed and Certified Expert for the Austrian legislation. He holds a B.S./M.S. in mechanical engineering, from the Technical College/University of Vienna.



### Raymond Cordewener, on behalf of Brück Welding

Raymond Cordewener, Director of R. Cordewener Management and Consultancy BV which is Focusing on the Industrial Market. He is a Mechanical Engineer. He has over 20 years of experience in the International (Stainless) Steel market. In all aspects of Forming, Welding, Annealing etc. Specialism is Materials, Engineering and Designing of Constructions. He is interested in Innovations.

## Amongst others the following experts will present

**Iris Rommerskirchen, H. BUTTING GmbH & Co. KG - Thursday 8 November, at 8:50 in Euro Room**



In 1992 Iris obtained a diploma in chemistry and worked as scientific assistant to Professor Grabke at the Max-Planck-Institut für Eisenforschung, in a research programme dealing with high temperature corrosion. In 1995 she obtained her PhD degree at the University of Dortmund and her thesis dealt with the oxidation behaviour of  $\beta$ -NiAl and  $\beta$ -FeAl as well as iron-aluminium alloys. She started her career as project manager of an R + D programme at ThyssenKrupp VDM GmbH. She became Manager of the application technology department and left her post in 2001 in order to join BUTTING as assistant to the Managing Director. In 2002 she was appointed Managing Director. She is now responsible for sales, procurement and quality.

**Paul Woollin, TWI Ltd - Tuesday 6 November, at 12:20 in Florin Room**



Paul Woollin is Manager of the Metallurgy, Corrosion & Surfacing Technology Group at TWI. He obtained an MA in Metallurgy and Materials Science, at Cambridge University in 1984. Following this, he studied fatigue in nickel superalloys for his PhD. His work at TWI has included failure investigations covering the spectrum of failure modes associated with stainless steels, consultancy and research and development programmes. Areas of particular study have included: - the use of duplex stainless steels under cathodic protection. - weldability and properties of low carbon weldable supermartensitic stainless steel pipe materials, especially environmental cracking resistance. - the corrosion fatigue behavior of carbon manganese and stainless steels.

**John Dunn, ATI Allegheny Ludlum – Thursday 8 November, at 11:10 in Florin Room**



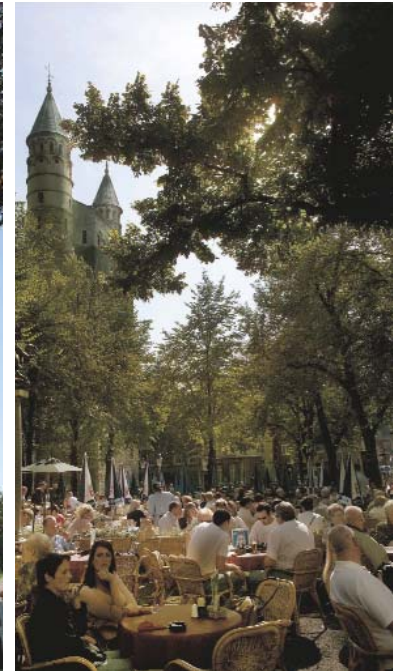
John Dunn holds a BS in Material Science from Carnegie Mellon University and a MS in Metallurgical Engineering from the University of Pittsburgh. He has been employed at Allegheny Ludlum for 25 years, and currently serves as Director of Market & Product Development.

**Masanao Yamashita, Sumitomo Metal Ind., Ltd. - Tuesday 6 November, at 11:40 in Euro Room**



Since 2005 Technical Manager Specification & Quality Control Section, Sumitomo Metal Ind., Ltd Steel Tube Works. Mr Yamashita holds a Bachelor Degree of Mechanical Engineering, 1986, from Kyoto University, Japan. After graduation, he joined the Staff of the Steel Making & Tube Making Plant of Sumitomo Metal Ind., Ltd Steel Tube Works, where he worked on Production Engineering.

## Maastricht hotel reservations



In co-operation with the MECC Maastricht, Stainless Steel World holds a block of rooms at a specially negotiated rate in a number of hotels in Maastricht. To take advantage of these rates, fill out the hotel reservation form on our website: <http://www.stainless-steel-world.net/conf2007/hotel.asp> and fax it to the MECC Hotel Service at +31-(0)43-3838300. For more information, please call +31-(0)43-3838383. The MECC Hotel Service will also operate a shuttle service between the airport and the conference hotels. If you would like to take advantage of this service, there is also a form to fill out using the same weblink as above.

### Information

More information can be obtained from the organiser Stainless Steel World, P.O. Box 396, NL-7200 AJ Zutphen, the Netherlands, or by email: [ssw2007@kci-world.com](mailto:ssw2007@kci-world.com)

## Plant tour to Ugine & ALZ Genk (Belgium) Site

Ugine & ALZ will host a plant tour for all conference delegates and expo visitors and exhibitors on Friday 9 November. Apart from visiting the meltshop and downstream cold-rolled mill the programme will include a general presentation of the Arcelor Mittal stainless steel segment and an informal lunch. The admission is free but pre-registration is required. Please indicate at the Registration Form on page 7 if you wish to participate.



## New Committee Members

From the Arctic Circle to the Sahara, both BP's and Eni's oil & gas fields are often located in extreme climates and severe conditions. Materials selection therefore plays a crucial role in the success of these projects. This is the responsibility of Andrew Leonard of BP and Paolo Cavassi of ENI, who have just been selected members of the steering committee for Stainless Steel World Conference and Expo 2007.



**Paolo Cavassi of ENI** received a doctorate in nuclear engineering at the Polytechnic of Milan in 1989, and became a specialist in materials. Since 1991 he has worked in the Corrosion & Materials group of Eni Exploration and Production Division (formerly Agip). Recently this group changed name and competences to "Maintenance and Materials Technologies". His main fields of activities are the material selection for down-hole and surface facilities of new fields, corrosion risk assessments of production facilities, failure analysis, research & development projects, and know-how transfer. He participated as observer to the ISO TC67-SC5-WG3 working group "Corrosion Resistant Alloy Casing and Tubing". He has published almost 20 papers, many of which deal with the economic impact of corrosion. "At the Stainless Steel World Conference I hope to update my knowledge of what is going on in materials, and discuss problems and compare notes with other end users. Contact with manufacturers is also valuable, as they know very well how their products perform."



**Andrew Leonard of BP** is involved in two main areas of work. The first one is BP's E&P R&D activity, which for him predominantly deals with the application of stainless steel in the upstream area. "This involves everything from downhole materials right through to topsides and export. The second part is to work on the selection and application of materials for our projects and assets.

We work with stainless steel materials based on our material selection philosophy. This philosophy says that we look for 'fit and forget' solutions where we can and where the corrosivity of the fluids is so high that for safety and economic reasons we need to look at the most appropriate and cost effective stainless steel for each specific application. As a new committee member I have been pleased with the papers that have so far been sent in. All of them deal with interesting topics and are truly new papers, so no rehash of old material. I have also seen a few papers that will, hopefully, evoke debate. Personally, the debate around operating limits of some materials that we have used for quite some time, like duplex and supermartensitics will be interesting. As an industry, we have seen a few failures with these materials and it will be interesting to see where that debate is going."

(A more extensive interview with both Andrew Leonard and Paolo Cavassi can be read in the May edition of Stainless Steel World magazine)

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# Advance Conference Programme

Please note that this advance conference programme is preliminary and that the organisers reserve the right to make alterations. The final programme will be distributed at the conference.

## Monday 5 November

20:30 Welcome Reception, NH Maastricht Hotel

## Tuesday 6 November

### Euro/Florin Room

**Plenary session: Production, Applications Procurement**

**Chair: Neil Henry, ABB Engineering Services, UK**

- 8:45 Opening by the Chairman Neil Henry (ABB Engineering Services, UK)
- 9:00 Raatgeep (Sandvik Material Technology) Corrosion resistant alloys- Development trends from a supplier perspective
- 9:30 Renner (Bayer, Germany) Trends in application in Chemical process industry
- 10:00 Damhof (Dow Chemical, The Netherlands) Procurement Trends
- 10:30 Coffee and Expo break, Expo Hall

### Euro Room

**Parallel session: Application and performances**

**Chair: Neil Henry, ABB Engineering, UK**

- 11:00 P7023 Olsson (Outokumpu, Sweden) Stainless Steels in Road Environment
- 11:20 P7058 Willauschus (Buhlmann Tube Solutions, Germany) New Piping Classes in Chemical Industry as a result of PED Technical Challenges for specialized distributors
- 11:40 P7045 Yamashita (Sumitomo Metal, Japan) Properties of Sumitomo 347AP Steel Tube for Use in Desulfurizing Plants in the Petroleum Refinery Industry
- 12:00 P7009 Pajonk (Institute of Materials Testing of Nordrhein-Westfalia, Germany) Chimneys and flue liners-are all problems solved using stainless steels?
- 12:20 P7033 Ward (Corrotherm International, UK) Materials Engineering and Supply Issues in relation to the usage of Nickel and other alloys in MENA



### Florin Room

**Parallel session: Welding**

**Chair: Leif Karlsson, ESAB, Sweden**

- 11:00 P7030 Mollan (Statoil ASA, Norway) Effect of weld cycles and short term heat treatment on the microstructural evolution and HISC susceptibility of a supermartensitic stainless steel
- 11:20 P7060 Kyffin (TWI, UK) Recent Developments in Friction Stir Welding of Stainless Steel
- 11:40 P7005 Longerich (ISF-RWTH Aachen University) Welding of Hollow Structures and Open-Porous Metal Foams for Application in Combined Cycle Power Plants
- 12:00 P7024 Lorenz (Federal Institute for Materials Research and Testing, Germany) Laser-MSG hybrid welding with high alloyed cored wire electrodes
- 12:20 P7043 Woollin (TWI, UK) Welding supermartensitic stainless steels for corrosive service

### Dollar/Yen Room

**Parallel session: Metalforming/Working**

**Chair: John Houben, ExxonMobil, The Netherlands**

- 11:00 P7022 Bruch (Brück Forgings, Germany) Investigations on microstructure, mechanical properties and corrosion resistance of large thickness duplex stainless steel forgings
- 11:20 P7036 Holtz (Spuncast, USA) Centrifugally Cast Duplex Stainless Steel, Discussion of Benefits
- 11:40 P7007 Voges-Schwieger (Institute of Metal Forming and Metal Forming Tools, Germany) Generation of Load Adapted Components during Sheet Metal Forming - Local Strain Hardening due to Martensite Evolution in Metastable Austenitic Steels
- 12:00 P7063 Bárta (Vítkovice Heavy Machinery, Czech Republic) Heavy forgings of feed pumps made of a supermartensitic stainless steel



12:40 Lunch and Expo break, Expo Hall

### Euro Room

**Workshop 1: Asset Integrity Management - aging of equipment**

**Moderator: Neil Henry, ABB Engineering Services, UK**

### Florin Room

**Workshop 2: Field experiences in duplex and martensitics including guidelines on how to avoid hydrogen induced stress cracking**

**Moderator: Sytze Huizinga, Shell Global Solutions, The Netherlands**

### Dollar/Yen Room

**Parallel session: Developments**

**Chair: Raymond Cordewener, on behalf of Brück Welding, R. Cordewener Management & Consultancy BV, The Netherlands**

- 14:00 P7054 Ladwein (Aalen University, Germany) Kinetics of the formation and dissolution of precipitates in Duplex Stainless Steels
- 14:20 P7031 Beckers (Outokumpu, Sweden) Outokumpu 4565, a high performance superaustenitic stainless steel
- 14:40 P7034 Schwind (Outokumpu, Sweden) Properties of various low-nickel stainless steels in comparison to AISI 304
- 15:00 P7056 Peissl (Materials Center Leoben Forschung, Austria) Development of a high chromium martensitic steel proposed for roller bearing applications
- 15:20 P7059 Fluch (BÖHLER Edelstahl, Germany) A new superaustenitic stainless steel developed for the oilfield industry exhibiting excellent corrosion properties
- 16:00 Coffee and Expo Break. Heartbeat Cafe at Expo Hall



## Wednesday 7 November

### Euro/Florin Room

**Plenary session: Markets and Trends**

**Chair: Neil Henry, ABB Engineering Services, UK**

- 8:30 Hartford (ATI, USA) Emerging Markets and trends
- 9:00 Charles (Ugine & ALZ Arcelor, France) Duplex
- 9:30 Moll (SMR Steel & Metals Market Research, Austria) Market Statistics
- 10:00 Coffee and Expo Break



### Euro Room

**Parallel session: Corrosion**

**Chair: Hubertus Schlerkmann, GfKORR, Germany**

- 10:30 P7012 Trasatti (University of Milano, Italy) Corrosion behaviour of duplex SAF2205 in aqueous organic acid solutions
- 10:50 P7018 Conder (Xodus Subsea, UK) Testing the Effects of Barium Sulphate Scale on Supermartensitic and Austenitic Stainless Steels Testing the Effects of Barium Sulphate Scale on Supermartensitic and Austenitic Stainless Steels
- 11:10 P7053 Ladwein (Aalen University, Germany) Characterization and Optimization of the Functional Properties of Stainless Steel Surfaces
- 11:30 P7039 Holzleitner (Materials Center Leoben Forschung, Austria) SCC and Electrochemical Behaviour of Austenitic

- CrNiMo Stainless Steel
- 11:50 P7052 Harrison (Bechtel, USA) Coatings as Effective Protection for Stainless Steels

### Florin Room

**Parallel session: Clad Materials**

**Chair: Othmar Hornasek, OMV AG, Austria**

- 10:30 P7062 Furukawa (The Japan Steel Works, Japan) Development of High Toughness X70 Grade Clad Steel Pipe for Natural Gas Transportation Pipeline
- 10:50 P7061 Heiberg (Det Norske Veritas, Norway) Lined an clad pipeline materials
- 11:10 P7008 Heigl (Voestalpine Grobblech, Austria) clad plates in power plants

### Dollar/Yen Room

**Parallel session: Duplex welding**

**Chair: François Dupouiron, Total, France**

- 10:30 P7013 Holloway (Metrode Products, UK) Welding Consumables for Lean Duplex Stainless Steels
- 10:50 P7055 Stenvall (Sandvik, Sweden) Welding of Sandvik SAF 2707 HD
- 11:10 P7026 Francis (Weir Pumps, UK) The Effect of Welding Gas Composition on the Corrosion of Superduplex Stainless Steel Welds
- 11:30 P7015 Chavdarov (Technical University of Sofia, Bulgaria) Electron Beam Welding of Superduplex Stainless Steel S32750
- 12:30 Lunch & Expo Break
- 14:00 Expo Visit to over 200 specialist stainless steel suppliers



14:00 Student Forum (for details see page 2) - Expo Hall

### Florin Room

**Seminar: Stainless Steel Market Trends & Statistics**

**Moderator: Markus Moll, SMR**

16:00 Coffee, Expo Break and Cocktail Antonius at Expo Hall

## Thursday 8 November

### Euro/Florin Room

**Plenary session: Projects**

**Chair: Neil Henry, ABB Engineering Services, UK**

- 9:00 Tunisi (Saudi Aramco, Saudi Arabia) Mega Projects within Saudi Aramco and the Gulf Region
- 9:30 Update on recent LNG project/Speaker to be announced
- 10:00 Coffee and Expo break, Expo Hall

### Euro Room

**Parallel session: LNG**

**Chair: Kjell- Arild Bakken, Aker Kvaerner, Norway**

- 10:30 P7006 Karlsson (ESAB, Sweden) Comparison of Ni-base Consumables for Submerged Arc Welding of 9% Nickel Steel
- 10:50 P7038 Rommerskirchen (H. BUTTING, Germany) Longitudinally welded pipes made from FeNi36 - promising candidates for safe and cost efficient LNG-transport
- 11:10 P7037 Harrison (Bechtel, USA) Use of Stainless Steels in Liquefied Natural Gas Plants
- 11:30 P7071 Knowles (Shell, the Netherlands) Innovative requirements for metallic materials in the LNG business - a user's perspective

# The Conference

## Florin Room

### Parallel session: Duplex

Chair: Arild Lundberg, Statoil, Norway

- 10:30 P7035 Heino (Sandvik, Sweden) Influence of U-bending on the corrosion properties of duplex, superduplex, and hyperduplex stainless steels
- 10:50 P7047 Hägg (Avesta Welding, Sweden) The welding consequences of replacing austenitic with duplex stainless steels
- 11:10 P7048 Dunn (ATI Allegheny Ludlum, USA) AL 2003™ (S32003) Lean Duplex Case Study: Flexible Flow Line for an Offshore Oil Field Development
- 11:30 P7040 Hirohata (Sumitomo Metal, Japan) The Corrosion resistance and properties of various duplex stainless steel

## Dollar/Yen Room

### Parallel session: Seawater Corrosion

Chair: Thierry Cassagne, Total, France

- 10:30 P7011 Gerard (Valtimet, France) Titanium and super stainless steel welded tubing solutions for seawater-cooled heat exchangers
- 10:50 P7010 Alves (ThyssenKrupp VDM, Germany)



Thierry Cassagne, Total EP SA

- 11:10 P7041 Kivisäkk (Sandvik, Sweden) Crevice Corrosion Testing of Sandvik SAF 2906 and Design Curves of Superduplex Stainless Steel in Seawater Representing Umbilicals
- 11:30 P7016 Schleich (KM Europa Metal, Germany) Electrochemical Behaviour of UNS C70600 in Chlorinated Seawater
- 12:00 Lunch and Expo break, Expo Hall

## Euro Room

- 14:00 **Workshop: Risk based approach- new construction, maintenance and equipment strategies.**  
Moderator: John Houben, ExxonMobil, The Netherlands

## Florin Room

- 14:00 **Workshop: Materials selection for pipelaying**  
Moderator: Mario Celant, Pipe Team, Italy

## Dollar/Yen Room

- 14:00 **Workshop: Fabrication & Welding**  
Moderator: Raymond Cordewener, on behalf of Brück Welding, R. Cordewener Management & Consultancy BV, The Netherlands

12:30 Lunch and Expo break, Expo Hall

## Euro/Florin Rooms

16:00 Closing Session, Neil Henry, ABB Engineering



## Thursday 8 November

### Kopenhagen/Berlin Room

Seminar: Metallurgy for Non Metallurgists

Moderator: Thomas Ladwein, FH Aalen

Jan-Olof Nilsson, Sandvik Materials Technology

- 8:30 Introduction
- 10:00 Coffee & Expo Break, Expo Hall
- 10:30 Discussion of cases
- 12:00 Lunch & Expo Break, Expo Hall
- 14:00 Further discussion of cases.
- 16:00 End of seminar

# The largest Stainless Steel World Expo Ever

All conference delegates will have free access to the Stainless Steel World 2007 Exhibition, which runs in parallel with the conference. The technical and commercial staff of over 200 specialised companies from all over the world will be pleased to give you an update on the availability of their products. All conference breaks will be in the Exhibition hall, enabling conference delegates to visit the Exhibition during their breaks. If you would like more information about the Exhibition, please contact Mr. Robert a Campo, Tel.: +31 575 585 275, E-mail: r.a.campo@kci-world.com

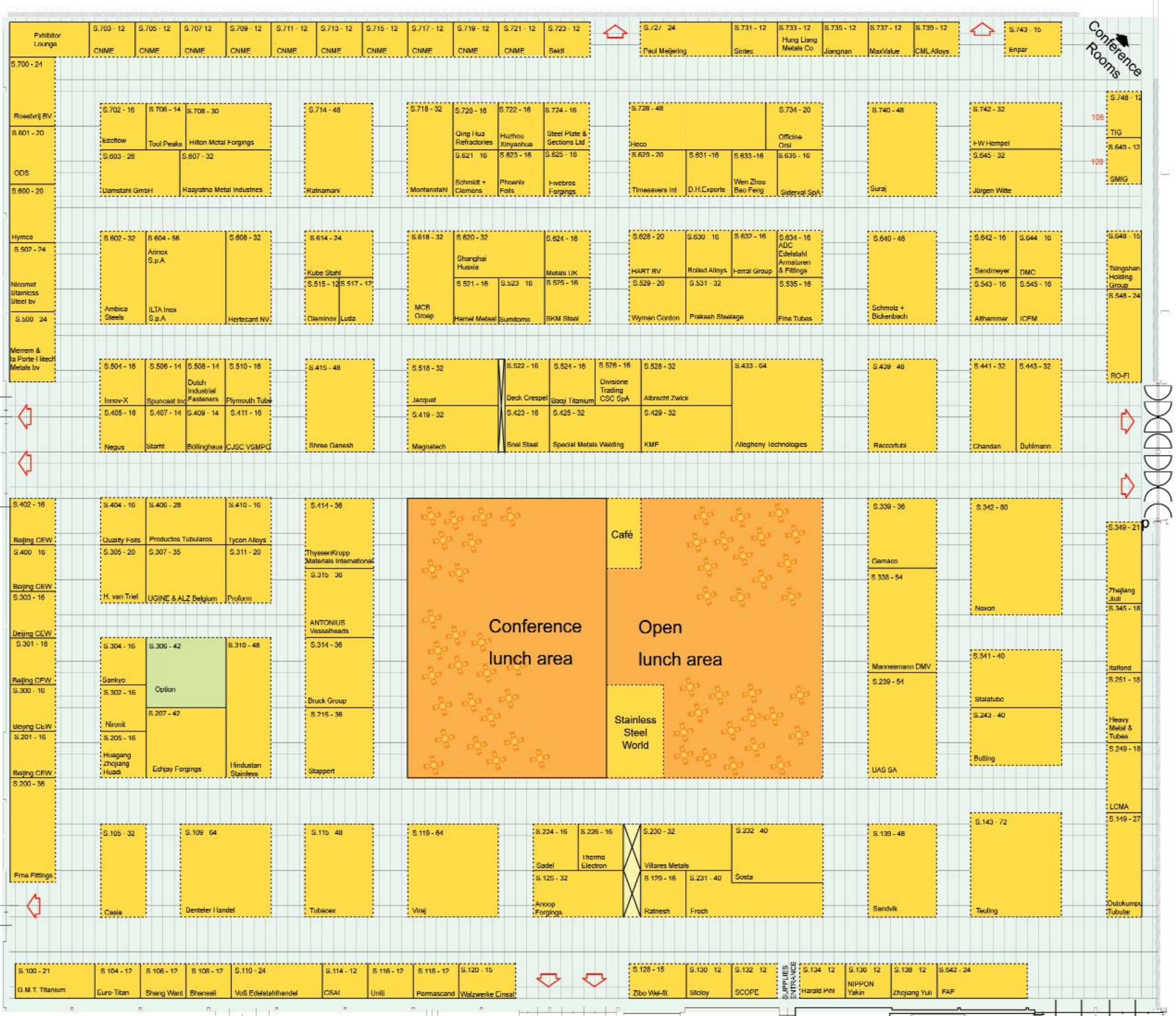


# The Exhibition

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## Please Note

Cancellation Policy - Cancellations in writing prior to October 1st 2007 will be subject to a Euro 50 processing fee. Refunds will not be granted after October 1st 2007. Refunds will not be given for no-shows after the conference start date.

**To benefit from our special group-booking offer: Four Registrations for the Price of Three please indicate clearly that you are part of a group. All four registration forms must be submitted together with "the chosen fourth person free" clearly indicated!**

## Transportation to Maastricht and the MECC

### Air

Maastricht-Aachen airport is located only 10 kilometres outside Maastricht. The following airports have direct flights to this airport:

- Netherlands - Amsterdam Schiphol - KLM
- Germany - Berlin - Easyjet

### Connecting flights

By making your reservation for the ticket of your main flight at your travel agency, you can ask for the ticket for the connecting flight between Amsterdam and Maastricht. If you reserve both tickets together, there is a special rate for the flight from Amsterdam to Maastricht. There are four daily flights from Amsterdam to Maastricht.

For more information, go to [www.maastrichtaachenairport.nl](http://www.maastrichtaachenairport.nl)

### Flights to Brussel Airport (Zaventem)

You can also fly directly to Brussels from many major international airports.

For detailed information go to [www.brusselsairport.be](http://www.brusselsairport.be)

There may be a special shuttle service between the airport and the conference hotels upon request.

### Train

The nearest train station, Maastricht-Randwyck, is located 250 metres from the MECC. There are frequent trains between this station and Maastricht Central Station, which is linked with the Dutch and international railway network. Major European cities with a direct connection with Maastricht are:

- Paris (Charles de Gaulle) • London (Waterloo)
- Amsterdam • Brussels (Midi) • Düsseldorf • Hamburg

### Train connections from Amsterdam to Maastricht

Trains to Maastricht leave every 30 minutes (at 07 and 37 minutes after the hour) from Schiphol Airport.

The journey takes about 3 hours.

For more information, go to [www.ns.nl](http://www.ns.nl) select International

### Train Connections from Brussels to Maastricht

Trains to Maastricht from Brussels Airport leave every hour, commencing at 6.30 am. This journey takes 2 hrs and 20 minutes.

For more information, go to [www.ns.nl](http://www.ns.nl) select International

### Car

If you are travelling south on the E25/A2 motorway (from Amsterdam-Eindhoven), take exit 55, "Randwyck-MECC". If you are travelling north on the E25/A2 (from Paris-Liège), take exit 56, "Gronsveld MECC".

### Airport Shuttle Service

MECC Maastricht has its own Transport Service that can arrange taxis from the different Airports to Maastricht and vice versa. The only thing you have to do is fill out the form which you can download from [www.stainless-steel-world.net](http://www.stainless-steel-world.net) and fax it to +31-43-3838309. For more information, you can call +31-43-3838383.

## Register Now and Save Money

Save money and register in advance. Attendees who register and pay before 15 July can benefit from the early-bird fee of euro 975 instead of the onsite registration fee of euro 1775. The fee includes access to all sessions and workshops, access to the online version of the conference proceedings, access to the exhibition, three lunches and all social functions, including the Stainless Steel World dinner, and free transportation on Maastricht city buses during conference days. Please use the registration form below and fax it back to Stainless Steel World at +31 575 511 099. You can also find the registration form on our website [www.stainless-steel-world.net](http://www.stainless-steel-world.net)

## Conference Proceedings

All conference papers will be made available online at the Stainless Steel World website before the conference for all pre-registered conference delegates (at no extra cost). Conference Proceeding CD-Rom is also available to purchase at an additional cost of Euro 225.



# Registration Form



Stainless Steel World Conference & Exhibition 2007  
6th - 8th November 2007, Maastricht, The Netherlands

Please complete this form and send to: P.O.Box 396, 7200 AJ Zutphen - The Netherlands  
Tel: +31 575 585 270 or fax to: +31 575 511 099

### Delegate information:

Name: ..... Position: ..... Company: .....

Address: .....

City : ..... Postal Code: ..... Country: .....

E-mail: ..... Phone: ..... Fax: .....

Delegate Registration (Prices are in euros including 19% VAT; VAT can be reclaimed via your local tax authorities.)

### Passepartout includes:

- 3 conference days & social programme
- 3 conference lunches
- 3 days expo visit
- ON - Line Conference Proceedings
- Official Stainless Steel World Dinner & Party (This invitation is complimentary and valid only in your name. Confirmation of attendance is required.)

	Early Bird Until July 15th 2007	From July 16th Until September 31st 2007	From October 1st 2007 and Onsite
Stainless Steel World Conference 2007 Proceedings CD Rom	225 Euro	225 Euro	225 Euro
Attend The 1 Day Seminar Thursday Nov. 8th Metallurgy for Non Metallurgists (As a Full Conference Delegate admission is free but pre registration is required)	Yes/No	Yes/No	Yes/No
Attend the Ugine & ALZ Plant Tour on Friday Nov. 9th (Admission is free but pre registration is required)	Yes/No	Yes/No	Yes/No
<b>Total Price</b>	<b>Euro</b>	<b>Euro</b>	<b>Euro</b>

**Payment Information:**  Payment Via Credit Card  Payment via Bank Transfer

All payments must be remitted in Euro's by credit card or

**For payment via bank transfer: details will be provided upon receipt of completed registration form**

American Express/MasterCard/Visa) for ..... Euros

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Cardholder's Name: ..... Cardholder's Signature: .....

In addition to the credit card number, a card verification code (CVC) is required. This is new, and has been introduced to provide more security for both the customer and the mail order company. We will not be able to process credit card transactions without a verification code.

For **Visa and Mastercard/Eurocard** you can find your CVC on the reverse side of your credit card, printed into the signature filed. It is a three-digit number. The full credit card number is reprinted in the signature box and at the end of the number is the verification code number:

For **American Express** the verification code number is a four-digit number on the front of the card above the credit card number on either the right or the left side of your American Express credit card.

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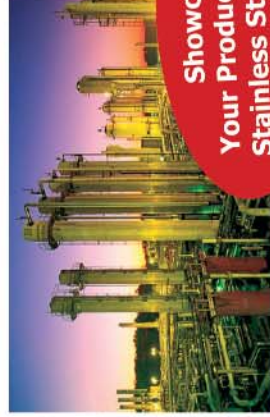
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#### FOR MORE INFO AND SUPPORT

##### Conference:

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##### Exhibition:

Mr Robert a Campo +31 575 585 275, r.a.campo@kci-world.com

##### General:

Mrs Elisa Hannan + 31 575 585 291, e.hannan@kci-world.com

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