

**PAUL WURTH**

SMS group

## Country Seminar - Japan

Testimonial of Paul Wurth in Japan

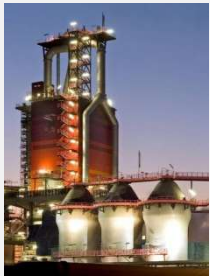
Bob GREIVELDINGER, 21-09-2017





# Paul Wurth Group – Our Products & Services

The Paul Wurth Group is one of the world leaders in the design and supply of the full-range of technological solutions for the **primary stage of integrated steelmaking**



**Blast  
Furnace  
Plants &  
Technology**



**Cokemaking  
Plants &  
Technology**



**Agglomeration  
Plants &  
Technology**



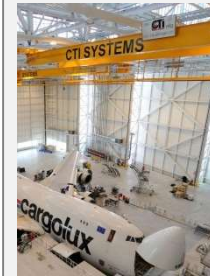
**Direct  
Reduction  
Plants**



**Environ-  
mental  
Protection &  
Recycling  
Technologies**



**Special  
Equipment  
for Oil & Gas  
downstream  
processes**



**Intralogistics  
Solutions for  
Heavy Loads**



**Civil  
Construction &  
Infrastructure  
Projects**

## *Our services*





# Paul Wurth History

Organic growth	1870	Eugène Muller builds a <b>boilermaking facility</b> in Luxembourg Hollerich, known as "Kesselfabrek".
	1890	Business is taken over by Paul Wurth. The firm specialises in <b>metal erection works</b> , especially the construction of metal bridges and blast furnace shells.
	1951	Paul Wurth acquires from a British firm the licenses needed to supply <b>complete blast furnaces</b> with all the accessories.
	1954	<b>Construction of a first blast furnace at Seraing in Belgium.</b>
	1969	<b>Invention of the Bell Less Top®</b> , a revolutionary system for blast furnace charging.
	1977	<b>First subsidiary (Brazil)</b> – development of sales & engineering network.
External growth (2000– 2014)	2003	Creation of <b>TMT Tapping – Measuring – Technology</b> .
	2004	Fabrication activities transferred to Arcelor Dommeldange. Paul Wurth becomes a <b>pure engineering company</b> .
	2004	Integration of <b>Didier - M&amp;P Energietechnik</b> specialised in hot blast stove technology and refractory & lining concepts ( <b>Paul Wurth Refractory &amp; Engineering GmbH</b> )
	2005	Take-over of the blast furnace, coke making and direct reduction activities as well as the staff from <b>SMS Demag S.p.A.</b> and creation of <b>Paul Wurth Italia S.p.A.</b>
	2009	A stake is taken in <b>CTI Systems</b> , specialised in intralogistics systems. In 2013, the company becomes a 100% daughter. In 2016, it is merged with SMS Logistiksysteme GmbH into the joint venture <b>AMOVA</b> .
	2012	<b>Creation of Paul Wurth IHI Co., Ltd in Japan.</b>
	2012	Paul Wurth becomes part of the <b>SMS group</b> .
	2014	Construction license for <b>Midrex®</b> direct reduction plants





# Paul Wurth, a Global Player

- About **1 500** qualified staff
- **27 Group members** in 15 countries, incl. 19 operational entities
- **Joint ventures:** TMT, Paul Wurth IHI, VCL, P&A Industrial Engineering, Paul Wurth Kovrov, Amova
- Other countries covered by Representations





# Key Indicators of Paul Wurth Group

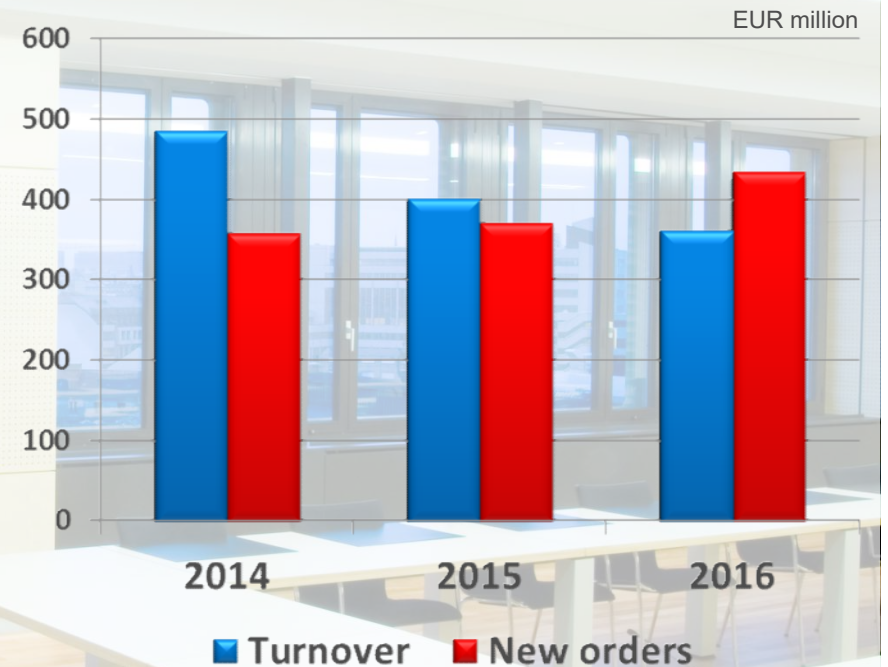
## Financial data

(in MEUR)	2014	2015	2016
Turnover	485.3	402.0	362.0
Result before tax	11.2	17.6	15.1
New orders	359.0	371.5	434.6
Order book	647.9	592.0	655.7

## Staff evolution

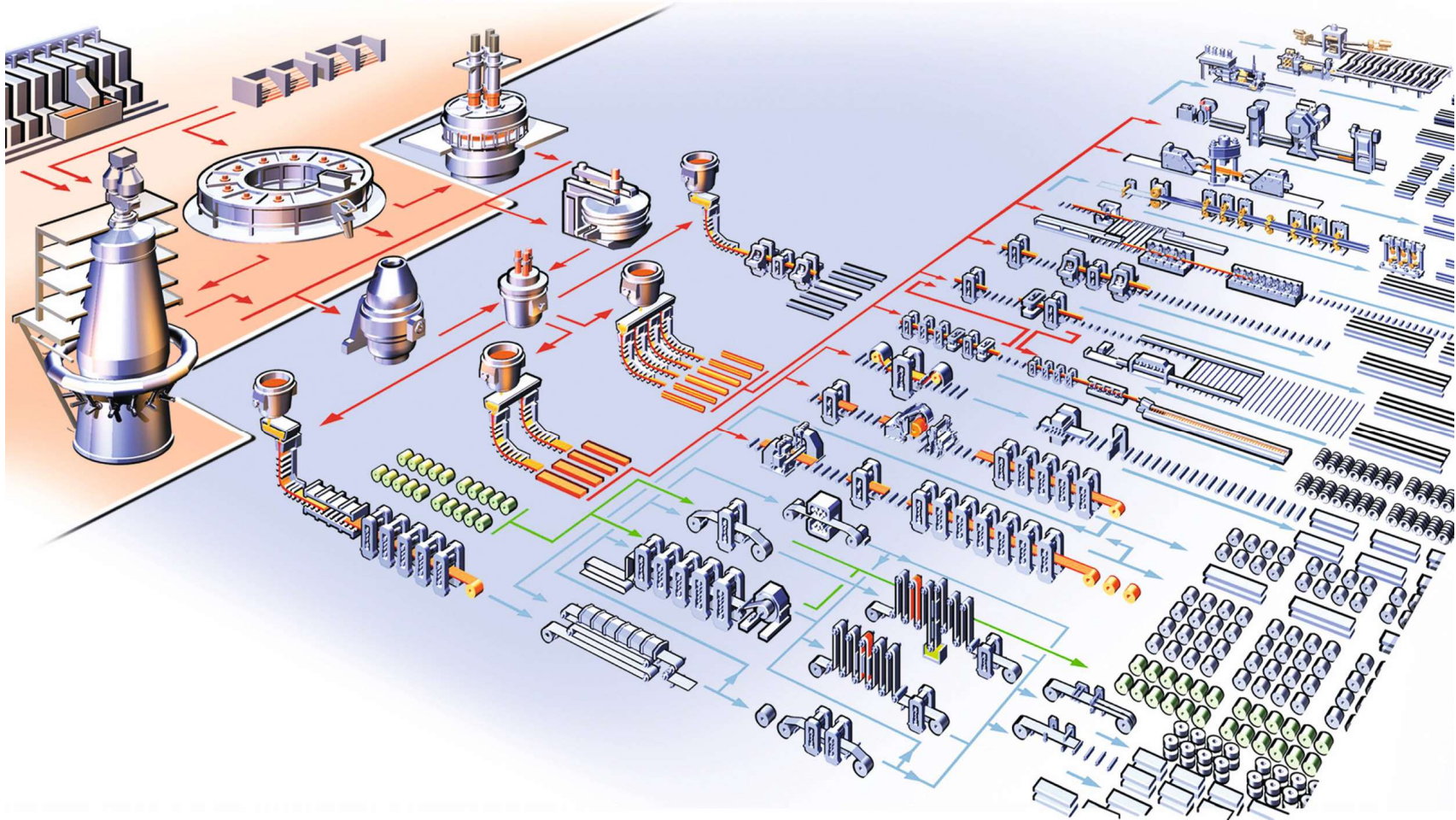
Workforce (FTE, yearly average)	2014	2015	2016
Companies of the Group	1 519	1 518	1 489

## Business Development





# Competence for the entire Metallurgical Chain





## Paul Wurth's History in Japan

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- Paul Wurth has been offering its ironmaking equipment to Japanese Iron- & Steelmakers since the early 1970's, either
  - through **technology licences** granted to major Japanese steelplant operators and builders, such as Nippon Steel and IHI Corporation
  - or
  - through **direct sales**, mostly out of our entity in Kaoshiung, Taiwan
- Since Nov 2012, Paul Wurth is operating a Joint Venture Company with IHI (Ishikawajima Harima Heavy Industries) in Tokyo, named Paul Wurth IHI Co. Ltd.





## Rationale for creating a Joint Venture with IHI

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- **Forecast of re-emerging market**
    - A specific market opportunity in the field of repairs/rebuilds of coke oven batteries (mostly >40 years old) has been identified by Paul Wurth
      - To be able to address this market, mainly consisting in execution of large projects, Paul Wurth needed a local set-up with a strong partner
  
  - **Why with IHI?**
    - Trustful relationship due to a successful past
      - Paul Wurth equipment has been integrated in numerous blast furnaces designed and constructed by IHI, in and outside of Japan
      - In particular, a license had been granted to IHI for Bell Less Top (BLT<sup>®</sup>) technology since 1974
    - Both companies have similar backgrounds & values
      - Similar fields of activities
      - Highly quality, technology & safety oriented
- In Nov 2012, Paul Wurth and IHI have joined hands for serving our Customers in Japan and in East & South-East Asia





## Paul Wurth IHI – Company Profile

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- **Company name**
  - Paul Wurth IHI Co., Ltd.
  
- **Head office**
  - Located in Tokyo, Koto-ku  
(in existing IHI building)
  
- **Staff**
  - Highly skilled people, transferred from IHI & PW
    - At start-up: 38 FTE
    - Today: 85 FTE
  
- **Ownership/management structure**
  - 50% shares held by each IHI and PW
  - Board seats: 3 for PW, 4 for IHI
  - Joint & equal daily management scheme



**PAUL WURTH IHI Co., Ltd.**





## Paul Wurth IHI – A strong Set-up

- With the full support of the worldwide network of Paul Wurth and IHI entities, Paul Wurth IHI can offer:
  - Consultancy & feasibility studies
  - Tailor-made engineering
    - for equipment
    - for process and plant design
    - for specific new developments
  - Project management
    - up to turn key projects
  - Equipment supply & installation
  - Plant construction & commissioning
  - After-sales servicing

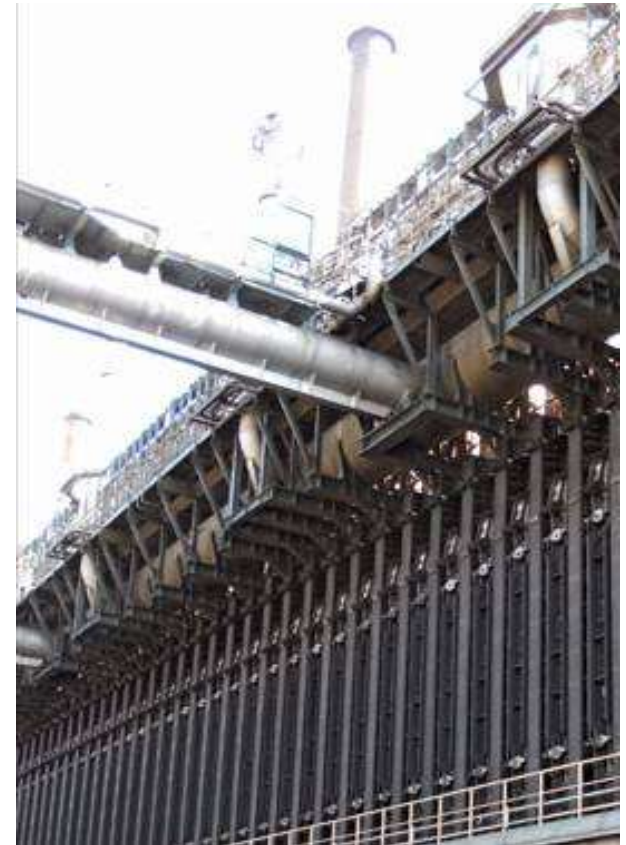
**...all out of one hand!**





## The Situation as of Today

- Major local markets penetrated as intended
- 11 small-, medium- & large-size projects executed, mostly to the full satisfaction of our Customers
- Project margins lower than expected, due to harsh local competition and many unforeseen extra requests from Customers during project execution
- The well-performing reference plants built are the best quality label for our technologies world-wide
- Strongly fluctuating order intake; now again promising forecasts for the two coming years
- The partners have the strong intention to maintain the set-up in its current size and function



### Key figures

Mio. €	2013	2014	2015	2016	2017 (FC)	2018 (FC)
Incoming Orders	13	23	139	10	60	100
Sales	6	7	27	90	40	40
Staff (FTE)	39	44	61	82	90	90



## **“Japan is different” - Some Experiences to Share (1/2)**

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### ■ **Respect the culture**

- Japanese people are BUSY - Be on time for meetings, or better too early
- Define detailed meetings agendas and follow them properly
- Be patient and LISTEN carefully
- Japanese people are interested in your culture, thus also show interest in theirs
- Gifts are appreciated, but they should be meaningful rather than expensive (beware: packaging/presentation counts a lot!)

### ■ **Start smart**

- Find your niche
  - The market is mature → Customer expectations are sky-high
  - Existing players defend their business → Disruptive innovation is hardly accepted
    - Take your time to understand in which field(s) you have the best chances
- Strive for excellence
  - Better be the best for a single product than just middleclass “everywhere”
  - Carefully evaluate your strongest product(s) and then put all efforts on convincing with those
    - Fine-tune your value proposition specifically for Japan



## **“Japan is different” - Some Experiences to Share (2/2)**

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- **Try to understand the local circumstances**
  - For importing products, cooperation with Japanese trading companies suits well
  - For larger projects in Japan, you probably need a stronger set-up (local partner), to get into the local business
  
- **In Japan, the decision making process works from bottom to top**
  - High level approaches are important, but wait for the right time: after technically convincing the on-field specialists
  
- **Others**
  - Anticipate language barriers - use translators skilled in your field
  - Don't seek for compromises or explain your failure - present a detailed solution
  - Consider the exchange rate in your forecasts - a weak JPY makes import expensive!
  - Play on branding:
    - Strong EU brands help in sales
    - Alternatively, you may create your own brand for Japan (involve locals!)
  - Japan is not a playground: keep out with “products in development” – better use other, less-demanding markets to validate such new products



## Some Specificities... about Negotiations

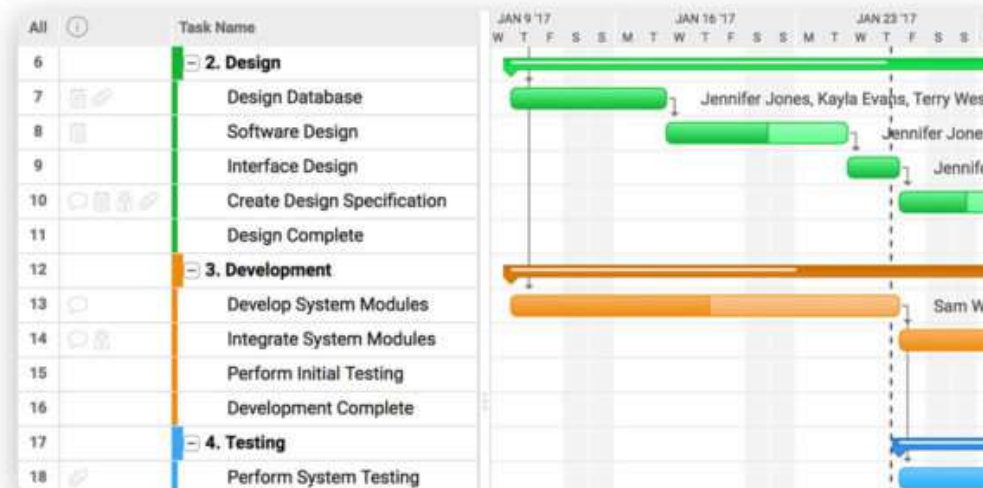
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- **The importance of the spoken word**
  - A verbal agreement between 2 Japanese people counts as much as a written contract
  - Contracts are mostly short & limited to the essential (all other issues are ruled by the Customer's general conditions which are anyway not negotiable)
- **The Japanese way of negotiating**
  - Negotiation := series of many short meetings (15 minutes), over many weeks/months
  - Principle: listen to the Customer's request, don't reply, return to office to internally discuss the request, ask to arrange the next meeting... a.s.o...
  - Japanese people would never bargain, discuss, or fight in a meeting
  - Significant discounts are expected, to "give face" to all different level people
    - Your first quotation should include the necessary margins!!
  - In Japan, there is no clear difference between a budget price and a firm price
  - Customers' internal procedures are slow: Let time play in your favour!



## Some Specificities... about Time/Timing

- **The importance of time,... or: the Japanese “Slow Motion Hurry”**
  - Although the progress of a project may at first appear slow to you, Japanese Customers usually emphasize that the project is “in a big hurry”
    - PW experience: “Hurry” := project will start in less than 1 year, not tomorrow
  - “Japanese Pareto law”: 80% = thinking, 20% = doing
    - But beware: Once everything is clarified, the project start / execution can go very fast!
  - “Tight schedule” is typically the biggest point of discussion
    - Shortest delivery time / project execution time can be one of your strongest sales points





## Some “Clichés” – mostly confirmed

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### “Japan is a closed and traditional country” – TRUE

- Japanese culture plays a strong role in the society & in daily life
  - Respect, Correctness → Seriousness, Competence, Care, ...
  - **Age is essential** (“juniors” shall learn from “seniors”)
    - Perfect know-how preservation, but limited room/incentive for new ideas!
- Japanese people often stay in their closed community
  - Limited English skills
- Keeping personal distance is an integrated part of the culture
  - Customers strongly dislike when a supplier is too “pushy”! (no reply = “NO”)

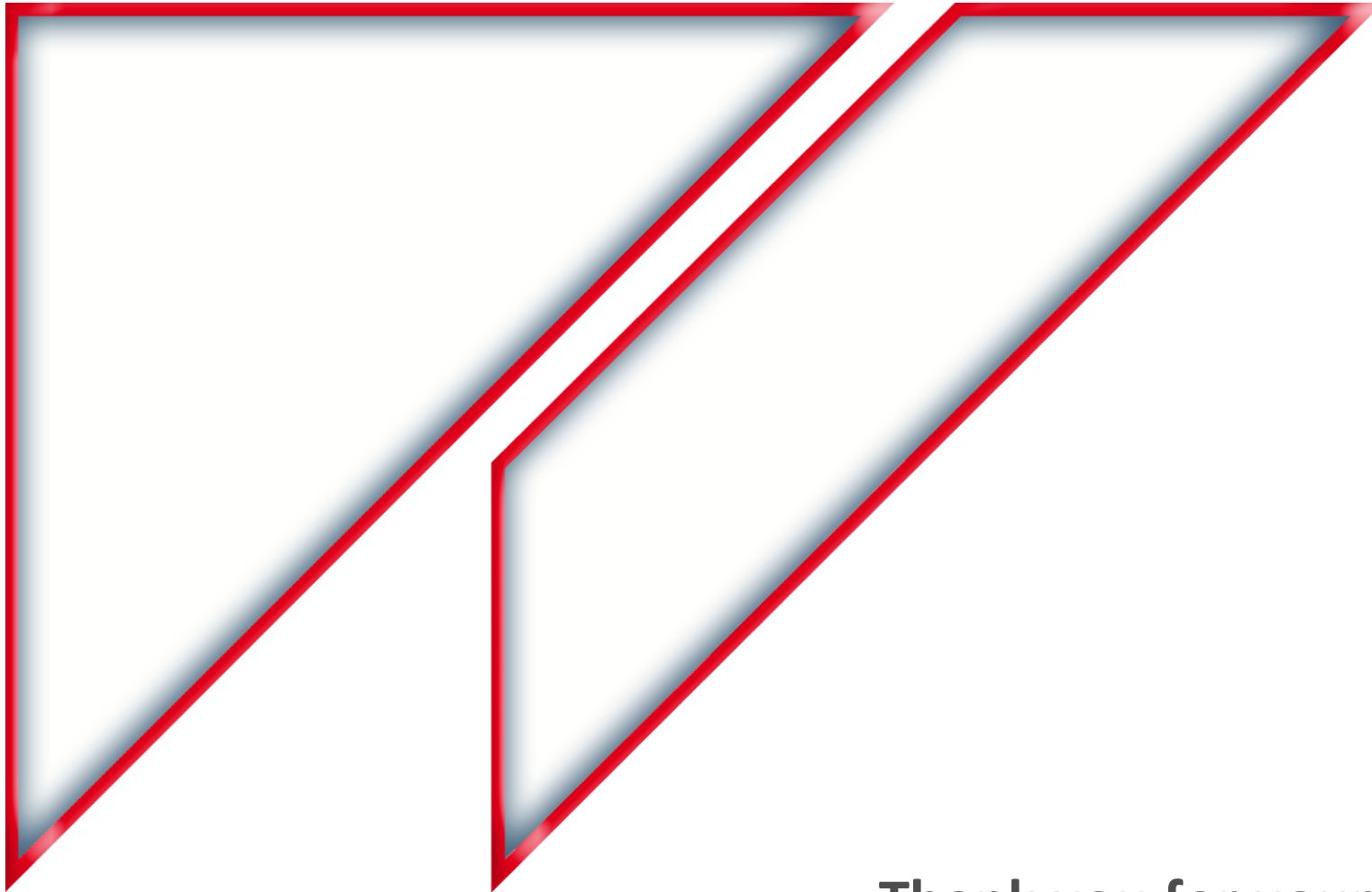
### “Business in Japan relies much on relationships” – TRUE, BUT

- Market entrance is difficult and time-consuming
- For large investments, high level contacts are definitely needed, but in addition to technical/commercial superiority

### “Japan is complicated” – TRUE

- Technical complexity is the pre-condition for potential success (all easy things do already exist...)





**Thank you for your attention**

**Questions ?**





# Appendixes

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# Paul Wurth Ownership Structure

## Shareholders of Paul Wurth S.A.

**SMS group** **59.1%**

**Luxembourg State** **40.8%**

Direct participation 11.0%

SNCI (Investment and development bank) 18.8%

BCEE (Savings bank) 11.0%

**Others** **0.1%**

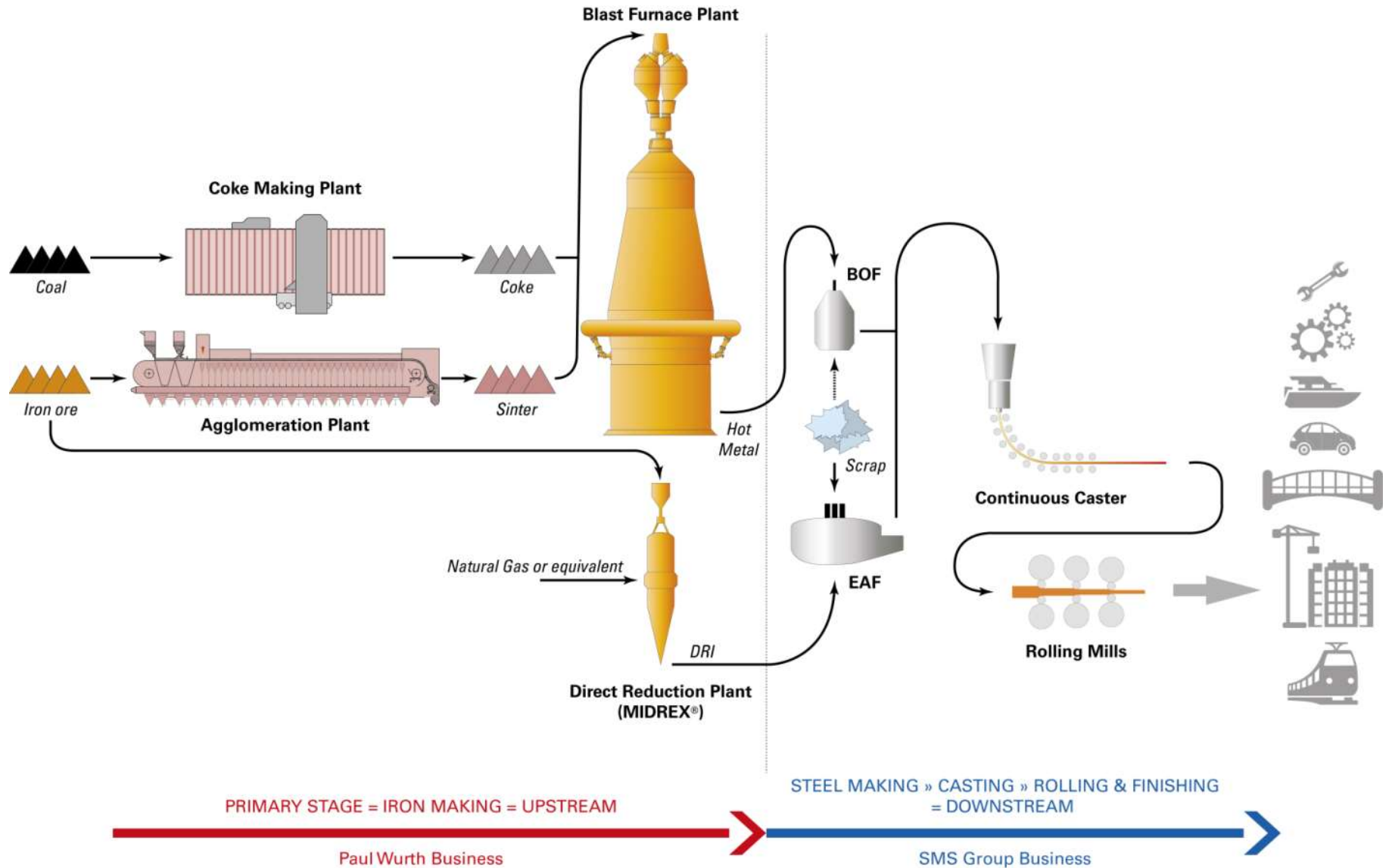
**Subscribed capital** **EUR 13 767 840.-**

**Consolidated equity\*** **EUR 105.8 million**

\* as at 31.12.2016 in accordance with IFRS



# Integrated Steelmaking





# Blast Furnace Technology

- Engineering and construction of complete blast furnace plants
- Blast furnace modernisations, rebuilds and relines
- Proprietary BF technology
- All auxiliary plants
- Servicing throughout entire campaign

**230**

**BLAST FURNACE  
CONSTRUCTIONS &  
MODERNISATIONS WORLDWIDE**





# Cokemaking Technology

- Engineering and construction of complete cokemaking plants
- Coke oven batteries (top & stamp charging)
- Features for environmental compliance
- Coke oven machines
- Coke quenching
- Coke oven gas treatment

**16**

**COKE OVEN BATTERIES  
SINCE 2002**

