



WELCOME

LEADING IN PRODUCTION EFFICIENCY

ANALYSTS' TRIP

# MEASURING AND PROCESS SYSTEMS

Schenck Shanghai Machinery Co., Ltd  
Peter Legner, CEO & President  
Shanghai, October 8, 2012

# MPS ACTIVITIES IN CHINA

4 Strong Brands „under one roof“

## Balancing and Assembly Products

**SCHENCK**

**DÜRR**

**DÜRR**  
AGRAMKOW

**Balancing and Diagnostic Systems**

**Assembly Products**

**Filling & Testing Equipment**



## Cleaning and Filtration Systems

**DÜRR**

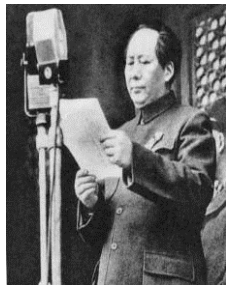
**ECOCLEAN**



# MPS: BUSINESS GROWTH IN CHINA

	2005	2012 (e)	CAGR in %
Incoming orders (in € m)	25	135	27
Order backlog (in € m)	21	106	26
Sales revenues (in € m)	16	130	35
Employees	136	540	22

# SCHENCK IN CHINA



Delivery of the  
1<sup>st</sup> machine

1953



Manufacturing  
in China

1991



1<sup>st</sup> Asian sales  
meeting

2002



1<sup>st</sup> fully automatic  
balancing machine

2005



1<sup>st</sup> cleaning system  
Jeto 84W

2007



10<sup>th</sup> anniversary  
of SSM

2009



Integration of  
Agramkow, 1<sup>st</sup> Order

2011

1986

Representative  
office opens in  
Beijing



1999

Foundation of  
SSM



2004

Visit of Federal  
President Rau



2006

Foundation of Dürr  
Ecoclean China



2008

1<sup>st</sup> wheel test  
stand "Xwheel"



2010

1<sup>st</sup> filling system  
"Compstart"



2012

Foundation New  
Plant Baoshan



# CUSTOMERS (besides Automotive OEMs)



... to name a few



# MPS LOCATIONS IN CHINA

Three locations in Shanghai



## Balancing

- » Floor area: approx. 7,900 m<sup>2</sup>
- » Workshop, showroom, warehouse: approx. 3,500 m<sup>2</sup>
- » Office, canteen etc.: approx. 1,800 m<sup>2</sup>



## Cleaning

- » Floor area: approx. 4,400 m<sup>2</sup>
- » Workshop, showroom, warehouse: approx. 3,650 m<sup>2</sup>
- » Office, canteen etc.: approx. 1,865 m<sup>2</sup>



## Assembly Products & Filling

- » Floor area: approx. 3,300 m<sup>2</sup>
- » Workshop & warehouse: approx. 3,200 m<sup>2</sup>
- » Office, canteen etc.: approx. 1,500 m<sup>2</sup>

## Total

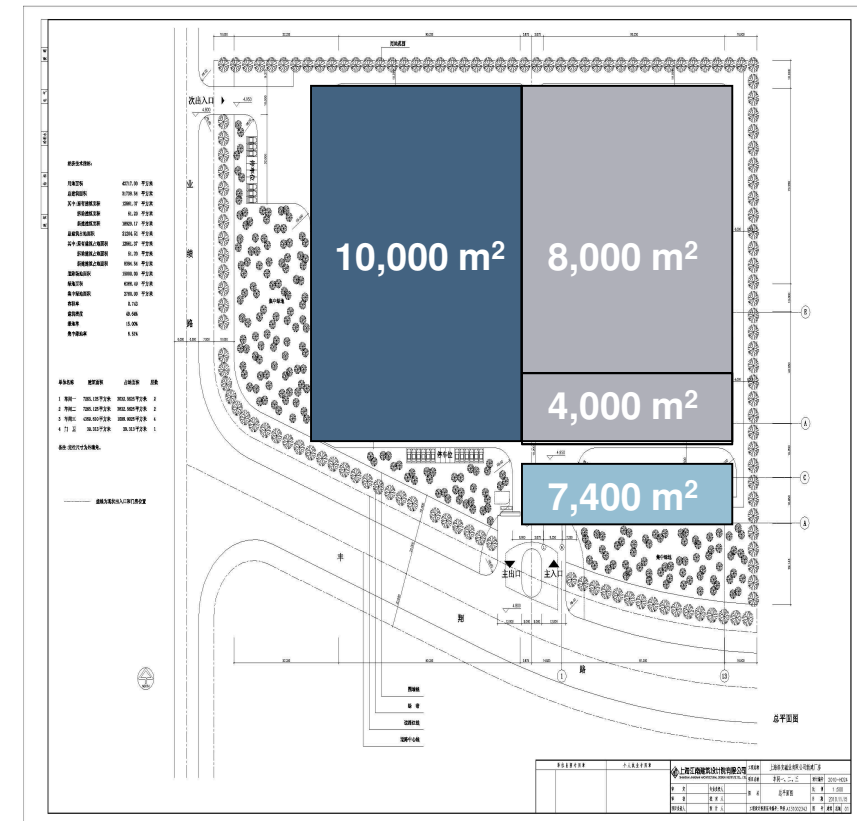
- » Floor area: approx. 15,200 m<sup>2</sup>
- » Workshop & warehouse: approx. 10,350 m<sup>2</sup>
- » Office, canteen etc.: approx. 5,165 m<sup>2</sup>

# NEW MECHANICAL ENGINEERING LOCATION IN BAOSHAN



## All mechanical engineering activities under one roof

- » Relocation scheduled for 6/2013, Shanghai Baoshan
- » 1 instead of 3 locations
- » Balancing, filling, assembly, cleaning technology
- » Integrated Dürr/Schenck growth strategy
- » Synergies, know-how transfer, flexibility
- » 43,000 m<sup>2</sup> total area
- » 22,000 m<sup>2</sup> production area
- » 7,400 m<sup>2</sup> office area (engineering, admin)
- » Rent approx. 1.1 RMB/m<sup>2</sup>/day



**SCHENCK**

**AGRAMKOW**



**ECOCLEAN**



**SOMAC**

- Production cleaning + balancing systems
- Production filling + assembly systems
- Production Electro Components
- Offices

# ADDITIONAL MPS SALES AND SERVICE LOCATIONS IN CHINA





# SCHENCK ROTECH IN CHINA

## Overview



Represented in China: since 1985

Manufacturing in China: since 1991

Installed base: > 6,000 machines and systems

Employees: ~ 210

Managing Director: Yueguang Song

Market share: > 60%

Planned order intake 2012: ~ € 45 million

# SCHENCK ROTEC IN CHINA

## Local activities

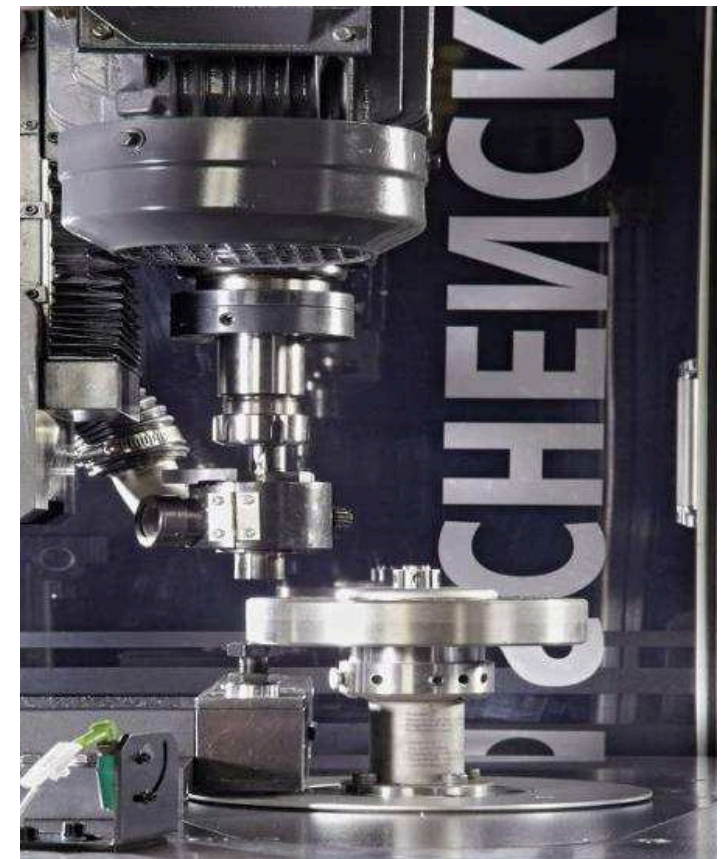


- » Sales of all Schenck RoTec products in China
- » Local manufacturing of a large number of balancing systems for different applications or rotors
- » Development of machines and systems specifically for China and emerging markets
- » Supplier for Schenck worldwide
- » Coordination of marketing and sales in Southeast Asia
- » Service balancing, field balancing and customer support
- » Installation, service and maintenance for all Schenck RoTec products

# SCHENCK ROTEC IN CHINA

Key project 2012: automatic balancing machine Distec

## Development and Manufacturing in Shanghai



# DÜRR ASSEMBLY PRODUCTS IN CHINA

## Overview



Represented in China: since 1986

Manufacturing in China: since 2007

Installed base:

- 120 end-of-line (EOL) lines (414 individual machines & systems)
- 5 complete assembly lines
- 5 rear-axle alignment stations

Employees: ~ 120

Managing Director: Peter Legner

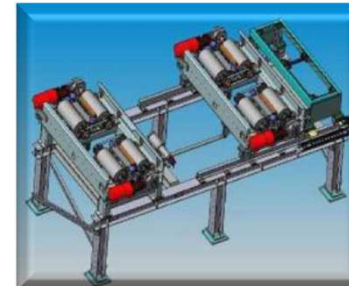
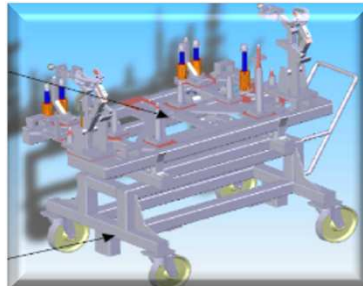
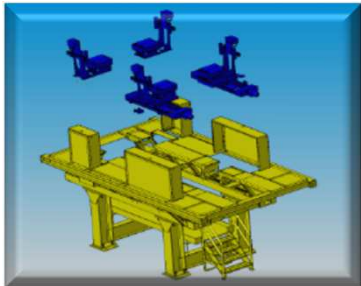
Market share EOL: ~ 50%

Planned order intake 2012: ~ € 30 million



# DÜRR ASSEMBLY PRODUCTS IN CHINA

## Local activities



- » Sales of all products of Dürr Assembly Products in China
- » Local manufacturing of brake test stands
- » Local manufacturing of components and subassemblies, assembling & testing of entire EOL systems and rear-axle adjustment stations
- » Installation and on-site assembly, service and maintenance of all products



# DÜRR ASSEMBLY PRODUCTS IN CHINA



Key projects 2012

## Further localization of mechanical components



# FILLING SYSTEMS IN CHINA

## Overview



Represented in China: since 1995

Manufacturing in China: since 2007



Installed base: > 400 filling systems

Employees: ~ 50

Managing Director: Frank Gijsen



Market share Automotive: > 30%

Planned order intake 2012: ~ € 15 million

# FILLING SYSTEMS IN CHINA

## Local activities



- » Sales of all Dürr Somac and Agramkow products in China
- » Local manufacturing of compact filling systems “Compstart”
- » Installation and on-site assembly, service and maintenance of all Dürr Somac and Agramkow products



# FILLING SYSTEMS IN CHINA

Key projects 2012: compact filling systems “CEMAC” (Appliances) & “Compact C” (Automotive)

**Design of “Chinese” machines, manufacturing in Shanghai**



# DÜRR ECOCLEAN IN CHINA



## Overview



Represented in China: since 2000

Manufacturing in China: since 2006

Installed base: 490 machines and systems

Employees: ~ 140

Managing Director: Markus Reissmann

Market share automotive: > 50%

Planned order intake 2012: ~ € 45 million



# DÜRR ECOCLEAN IN CHINA



## Local activities



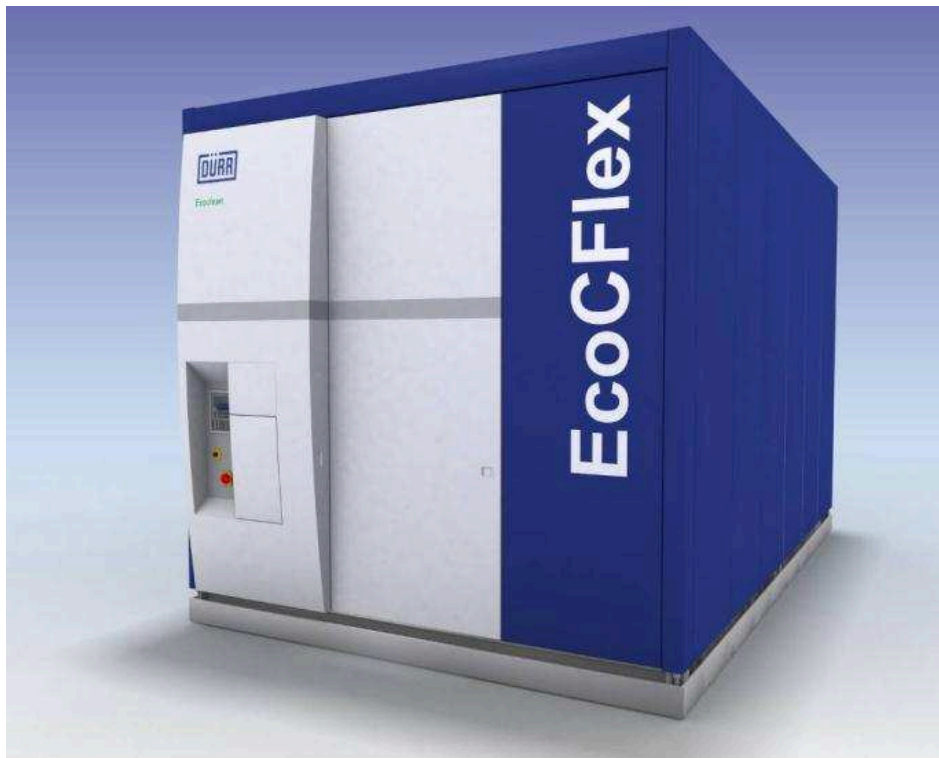
- » Sales of all Dürr Ecoclean products in China
- » Local manufacturing of a number of cleaning systems – both for the automotive industry and for the industrial segment – , filtration systems and automation/conveyor systems
- » Cleaning test procedures in Dürr's own testing laboratory, service cleaning and customer support for optimum cleaning processes
- » Installation, service and maintenance for all Dürr Ecoclean products

# DÜRR ECOCLEAN IN CHINA



Key project 2012: robot-controlled cleaning system EcoCFlex China

## Development of a “Chinese” version and manufacturing in Shanghai



# MPS SUCCESS CRITERIA IN CHINA

- » Local design tailored to customer requirements
- » Local manufacturing
- » Own engineering
- » Long-term local presence
- » Consistent management team

# LOCALIZATION VS. EXPORT: MECHANICAL ENGINEERING



## » Example: balancing systems (Schenck)

### Local design (~40%)

- » Selected machines (e.g. for electric armatures, brake disks)
- » Tailored to market requirements
  - » Performance/units
  - » Features
  - » Pricing etc.
- » Approval by Darmstadt headquarters

### German design (~60%)

- » High level of standardization of the basic design
- » User-specific customization by Schenck China
- » Close cooperation China/headquarters
  - » Feedback to design
  - » Pricing etc.
- » Purchasing + manufacturing: mainly China, complex components from Germany (e.g. measuring units)

**Important:  
product mix  
positioning**

# BIGGEST CHALLENGES OF MPS IN CHINA

- » Availability and attrition of human resources
- » Piracy
- » Competitive/pricing pressures
- » Differentiation from local competitors in order to justify price differences
- » Complexity (18 market segments, 45 different product lines, ~ 6,000 customers, output of ~ 1,200 machines p.a.)



## SUMMARY

- » In the area of mechanical engineering, China is a very important market for Dürr and offers good prospects
- » The success factors for Dürr are:
  - » early market penetration
  - » consistent expansion of its local presence
  - » high level of localization at all levels of vertical integration
  - » job sharing and knowledge exchange with mother companies
- » In future: increased export from China, new service products

# Appendix

# OVERVIEW: COMPETITORS IN CHINA

## Balancing and Diagnostic Systems

Kokusai (JP), DSK (JP), American Hofmann (US), CEMB (IT),  
> 50 local competitors

## Assembly Products

Burke E. Porter (US), Fori (US), Siemens (DE), A&E (DE)

## Filling & Testing Systems

Automotive: Cinetic (FR), SAT (DE), Cjierui (CN), Yiheng (CN)  
Appliances: Ulvac (JP), Galileo (IT), CACL (CN)

## Cleaning and Filtration Systems

Automotive: Elwema (DE), MTM (DE), Shimada (JP), Dalian MAM (CN),  
Industrial: > 100 local competitors



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