

# Evolution of Tenova in China

Guido Molteni  
Tenova Metals

April 2014

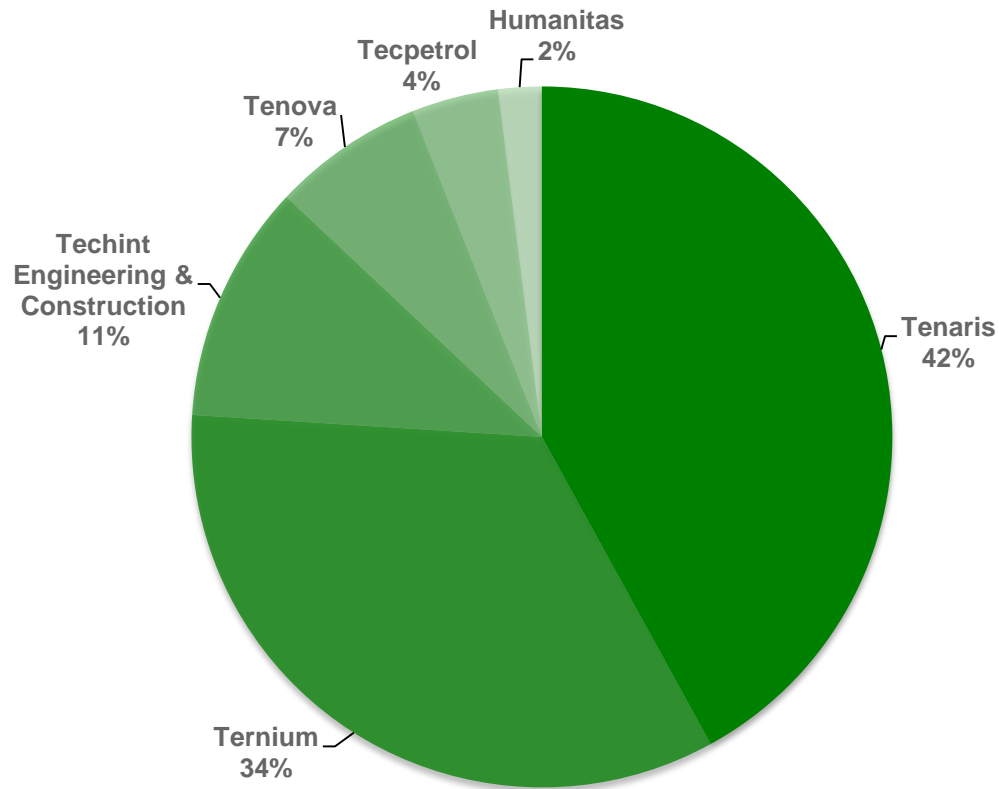


# Techint Group

2013

# Techint Group Revenues

Aggregate sales of the main six companies: over **USD 26 billion**



# Who we are



Ternova is a worldwide supplier of advanced technologies, products, and services for the **Metals** and **Mining & Minerals** industries providing innovative, integrated solutions for complete process areas.

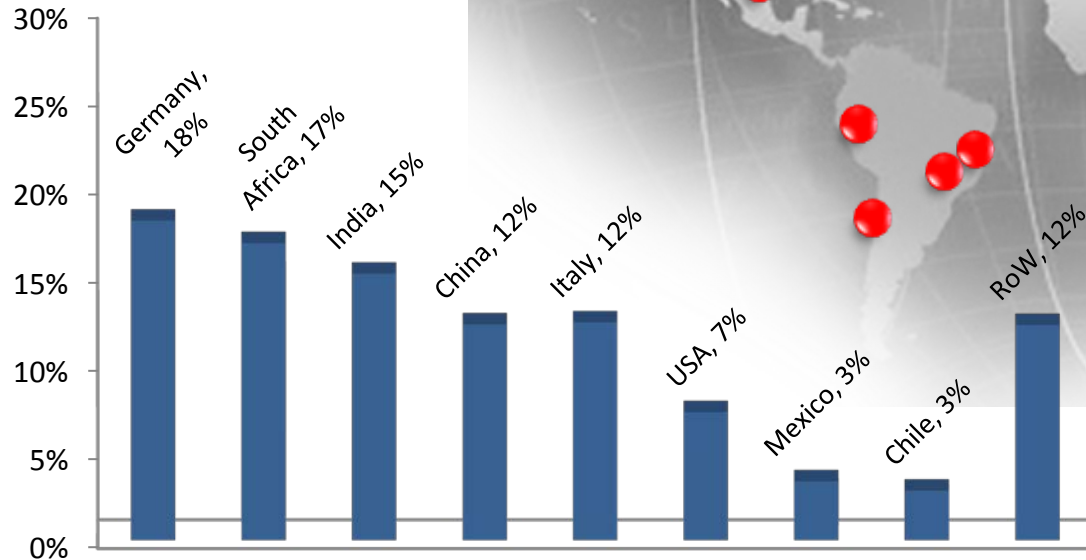


Ternova embraces the heritage of distinguished brands:

- CORE
- GOODFELLOW
- ENVITA
- HYL
- HYPER THERM
- I2S
- ITALIMPIANTI
- KEY TECHNOLOGIES
- LOI THERMOPROCESS
- MALHER, SCHMETZ, BMI, IVA, HUISEN
- MULTIFORM
- RE ENERGY
- POMINI
- TIMEC
- TECHNOMETAL
- BATEMAN
- DELKOR
- ITALIMPIANTI
- PYROMET
- TAKRAF
- TIMEC



**4.900 People**  
**26 Countries**  
**1.9 Billion \$ Revenues**





## Steelmaking

- DRI plant
- EAF
- Consteel®
- Secondary metallurgy



## Industrial Furnaces

- Reheating furnace
- Heat treatment furnace



## Rolling and Finishing

- Cold rolling mill
- Z-Hi mills
- Silicon line
- Tinning line
- Galvanizing line
- Pickling line and ARP



## Roll Shop

- Roll Grinding machine
- Roll Shops ancillaries





## Engineering, EPCM and Project Services

### Mining and Bulk Materials Handling

- Open pit mining
- Underground solutions
- Heavy material handling
- Overland conveyor
- Yard equipment
- Port equipment



### Mineral Processing

- Milling/Screening
- Flotation
- Filtration
- Thickening and clarification
- DMS plant



### Metallurgical Processing

- Solvent Extraction
- Electrorefining and electrowinning
- Acid Plant
- Smelting and refining



- Coal
- Iron Ore
- Copper
- Nickel
- Zinc
- Cobalt
- PGMs
- Aluminium
- Gold
- Ferroalloys
- Tar Sands



# The steps of Tenova in China

---

## The 1980s

- First **commercial exploration** for projects for the steel industry

## The 1990s

- **Beijing Representative office**, Tenova as exporter of equipment and technology to China

## The years 2000

- Establishment in 2003 **of the WFOE, Tenova Industrial Technologies (Beijing) Co. Ltd.**  
Manufacturing in China and exporting worldwide.
- The new factory in Tanggu, Tianjin: **TiMEC**, 2005. The combination of European technology with the Chinese industrial structure
- Acquisition of LOI Thermoprocess, **LOI Tianjin**, 2006 specialized in Thermal processing
- Set up in 2010 **of the WFOE, Takraf China**, specialized in Mining and Minerals



# The 1990s



- Advanced Technologies, completely unknown before, enters the Chinese market
- Important contracts are acquired against the most qualified western competitors

**Electric Arc  
Furnaces and  
Consteel®**



**Reheating  
furnaces**



**Pomini  
Roll grinders**



**Strip  
processing  
lines**





# The years 2000

---

Challenge: the portion of equipment that Chinese companies is willing to import reduces constantly

TENOVA evaluates the possibility to manufacture the equipment in China

and decides to

- establish a WFOE in Beijing
- make business in China as a Chinese Company
- begin with the “shopping around”



# The years 2000

- Supply of a melting unit to Wheeling Pittsburg, USA
- Supply of a melting unit to Tianjin Pipe Corporation, first contract in RMB



# The years 2000

---



## Challenge:

- problems for quality and delivery time
- corrections and modifications

## What to do:

- find the right Chinese partner
- select qualified workshops
- specialize each workshop to specific works
- training of each workshop
- continuous supervision during manufacturing



create a reliable workshops network with strong commitment in  
quality and delivery time



# The years 2000

## Challenge:

Increasing competition requires the increase of range of products and activities originated from China, improve of quality and production flow

- From the network of worksops to the vision of the factory
- 11,000 sqm, 4000 ton per year capacity, 10 milion euro investment





# The years 2000

Develop competence in Ternova China:

- Engineering
- Project management
- Procurement
- Technological Services and
- After sales
- Supporting product development for Chinese market

**Jangsu Feida Electric  
Arc Furnaces and  
Consteel®  
The biggest in China**

**Project execution by  
Ternova China**



# Today



- 5 companies
- 450 People
- 100 M€ Sales in china
- 150 M€ if consider whole sales for projects in china



# Future goals

---

New scenario: less green field new installations, more focus on modernization and technical services, customers more selective on technologies to be imported.

Our portfolio of Solutions has been tuned-up to face the new challenges since a while:

- Energy recovery and pollution reduction technologies
- Lower Energy consumption equipment
- Flexible production system
- Technological services to improve processes and final product quality
- New products to fit Chinese market

Chinese management and local resources to be empowered for faster feedback time, using the customer language.



**Thank you**

