HPC usage at REDE-AR

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Company overview

Leading global manufacturer and supplier of steel pipe products and related services for the world's energy industry and for other industrial applications

Worldwide integrated operation of a network of steel pipe manufacturing, research, finishing and service facilities with industrial operations in the Americas, Europe, Asia and Africa and a direct presence in most major oil and gas markets.

→ Net sales: 9.97 billion USD (2011)

→ Number of employees: 26,980 (As of December 31, 2011)

Global organization

An Integrated R&D Network

Four dedicated research centers specializing in:

Argentina Steel making processes
OCTG products

Italy Rolling processes
Mechanical and power generation products

Japan Products with high chrome steel level

Mexico Welding processes
Linepipe products

- Full-scale testing and finite element analysis of new products
- More than 200 scientists and engineers staffing the research facilities and nearly half hold Master or Doctoral degrees
- Collaboration with selected external R&D laboratories, product testing centers and universities

HPC usage at REDE-AR

Mainly related with finite element modeling.

Currently 23 researchers use the finite element method or another numerical simulation methods at R&D Argentina.

Usage of parallel computations supported by several commercial packages (Abaqus, Adina, MSC Marc, Fluent) and in-house developed software.