#### NAS: A REFERENCE IN THE STAINLESS STEEL INDUSTRY

# Cristobal Fuentes CEO of NAS

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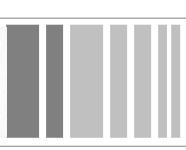












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#### Company Overview

- ➤ North American Stainless was founded in 1990. From its foundation to the present it has undergone several phases of expansion in order to become the largest fully integrated Stainless Steel Producer in the U.S.
- Our location in Carroll County, Kentucky enabled us to build a state of the art production facility in an area with good communications, close to major highway and with direct access to river traffic on the Ohio River. NAS production facility is only 8hrs away from a large part of the US market. Being a «Greenfield» project, using the expertise gained from Acerinox, we were able to plan the layout of the plant in order to maximize efficiencies so that we can offer a full range of stainless flat and long products with competitive delivery times



#### Production Capacity (metric tons)

Melt Shop	1.4
Hot Roll	1.2
Cold Roll	0.8
LP	0.2

#### Company Overview

North American Stainless (NAS) is part of the ACERINOX Group, considered the largest and most efficient stainless steel manufacturer in the world with a Melt Shop output of 3.5 million tons. Aside from NAS, the group has major factories located in Spain, South Africa and Malaysia (under construction)

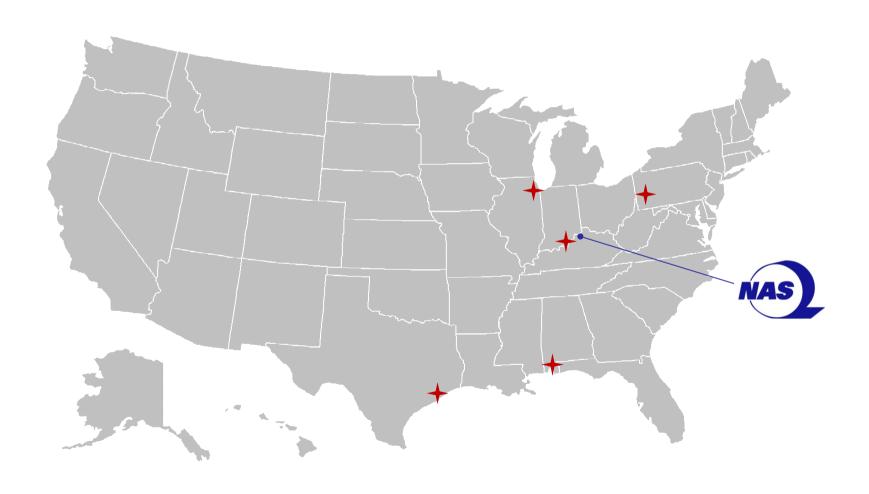




- Most of NAS Ni and Cr consumption is in the form of scrap
- NAS has ability to use a very high scrap percentage; therefore, utilizing discounted and domestically sourced Nickel and Chrome units in scrap vs. more expensive primary nickel and chrome units sourced from outside the US
- Proximity to the stainless steel scrap markets gives flexibility to adjust to the continuous stainless steel grade mix changes in the market and still maintain lower inventory levels



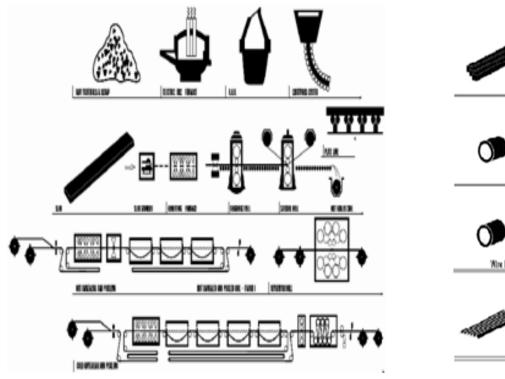
#### Proximity to Stainless Scrap Suppliers

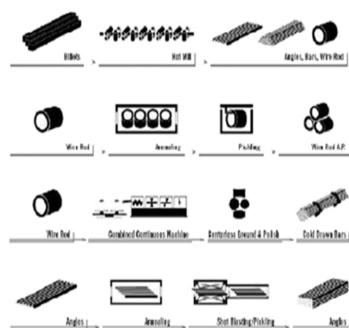


### Integrated Production

- All NAS production flat and long processes: melting, hot rolling, cold rolling and finishing are integrated in one location
- Having all processes in one location increases productivity allowing us flexibility to manufacture what customers need in a short time
- An integrated production eliminates freight costs and gives us flexibility to quickly react to market changes
- The addition of billet production in the Melt Shop reduces costs in slabs production
- NAS manufactures Stainless Steel products exclusively; not having other alloys to process avoids conflict with production, scheduling and quality
- Inventory levels are reduced to at least half compared to other non-integrated facilities which tends to reduce working capital

### Integrated Production







#### State of the Art Equipment

#### Melt Shop

- NAS heat size is one of the largest in the stainless business.
- Continuous casting speed and low casting temperatures are ideal conditions to improve product quality
- Tapered slabs in the continuous casting process allow us to achieve the most optimal width as per customer order and reducing metal loss for non-standard widths
- Improved refining and casting processes allow us to minimize the amount of slabs that require grinding before hot rolling









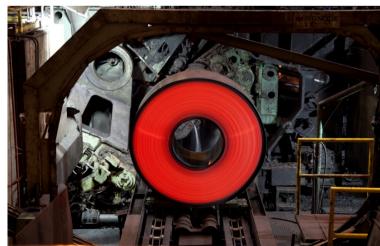


### State of the Art Equipment

Hot Mill

- The plant layout permits direct charging of slabs that don't require grinding
- The Steckel Mill is the most quality efficient hot rolling mill for stainless steel
- The hot rolling mill is suited to easily make process changes for multiple grades
- The hot mill can roll thinner gauges improving the cold rolling processes







#### Cold Mill

- NAS cold rolling equipment has the highest productivity in the industry
- NAS cold rolling equipment allows quick process set ups for different steel grades
- Mathematical models for annealing, pickling and rolling are used in all main cold rolling processes to improve productivity and reduce waste
- Temper rolling, tension leveling and trimming are incorporated into the annealing and pickling lines allowing us to finish and pack material at the AP lines. This eliminates the last steps of the process, finishing and packing





### State of the Art Equipment

#### **Long Products**

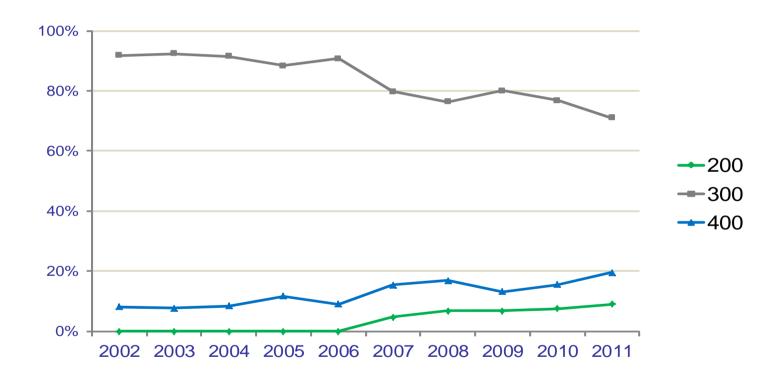
- The manufacturing and melting of billets in a large scale Melt Shop (1.4 million tons/year)
  assures that will have the best possible billet cost feeding Long Products
- LP Hot Rolling mill is well prepared for the multiple dimensional and temperature changes that are part of the daily operations
- LP Rolling mill was engineered to allow quick changes reducing non-production time and improving production efficiency
- LP Finishing is designed to process a wide variety of Long Products





### **Steel Grades and Products**

#### Production by Grades





#### NAS Steel Grades and Products

#### Flat Products

- NAS manufactures a wide range of products. These include rapidly growing grades such as 201(low Nickel and high Manganese grade), 301, non Nickel bearing grades, duplex grades, etc.
- Several types of ferritic grades and products used for automotive exhaust systems; from the hottest end of the system to the coldest end, for domestic as well as transplant automotive applications
- Several types of duplex grades used for high strength, higher corrosion applications
- Always open to asses market needs and develop new products
- Less Nickel steels provide better consistency in production levels









#### **Steel Grades and Products**

#### **Long Products**

- Wide variety of product types: wire rod, bars, angles and rebar
- Wide variety of available grades: austenitic, ferritic, duplex, martensitic and precipitation hardening grades
- Range of available conditions from annealed to precipitation hardened
- Range of dimensions from 3/16" to 5"







### **Was** Warehouses Network

- NAS owns four domestic warehouses and also one in Canada and one in Mexico
- Warehouses finishing capability and the proximity to our customers allows us to provide quality products to our customers just in time; this not only helps NAS keeping a low inventory, but also helps our customers to maintain low levels of inventory as well

#### NAS: A reference in the stainless steel industry

### Warehouses Network















### was Workforce

- Fair treatment and excellent communication at all employee levels is the key to keeping NAS the leader in efficiency and productivity in the stainless steel business
- Low number of employees needed due to the ability of moving employees into different areas to adapt to market changes; as a result, we achieve high productivity per employee
- No- layoff policy due to lean, efficient and high quality productive workforce
- Workforce stability due to conditions mentioned above
- Multi-trained workforce that performs at high productivity levels
- 401-K plans more cost efficient than pension plans. No legacy cost
- Efficient administrative systems resulting in a lower number of administrative personnel
- NAS salaries and benefits are highly competitive and regarded as one of the top in this part of the country

### **Sustainability**

- Member of Kentucky Excellence in Environmental Leadership
  - 1. Requires annual environmental audit
  - 2. Three projects promoting environmental stewardship
  - 3. Establishment and compliance with environmental management plan
- Member of Kentucky Recycling Interest Group (encouraging recycling in Commonwealth of KY)
- Recycle & Reuse
  - Use of slag byproduct as lime
  - Use of refractory brick as dolomitic lime
  - Use of laundering program for PPE, rags and oil absorbent pads and rugs
  - Use of rewind paper at polish and pickling lines
  - Extensive Recycling Program of:
    - Cardboard
    - Paper
    - Metal
    - Plastic
    - Used oil



#### NAS Closing

- The plant layout, the high efficiency and high productivity of the equipment and having it all integrated in one location allows NAS to manufacture product in 2 to 4 weeks. The normal production time for other companies is 6 to 8 weeks and use 2 to 3 different locations to melt, hot roll and cold roll
- NAS has the shortest manufacturing cycle time in the market and the shortest delivery time to customers. These provide a big advantage mainly over imports competition
- A combination of low number of employees and highly efficient equipment result in higher productivity per employee
- Most consumed raw materials is recycled scrap
- A high efficiency melt shop that can produce at a large scale (1.4 million tons/year)
  assures that the products will have the best possible cost
- Large slabs produced in large heat sequences reduces the cost in each step of the process, increases productivity and process stability, reduces operations, consumables per ton of steel and energy costs

#### was Closing

- Manufacturing cost factors: Electrical cost in Kentucky are very competitive vs other domestic and international producers. Natural gas has also a very competitive cost in the United States
- Production Lines are engineered to run at maximum production capacity for 90% of the product gauges
- In-Line cold rolling processes allows to finish and pack products at the AP line improving lead time
- NAS layout was designed with efficient material handling systems to improve costs, reduce inventory and process times
- Quick product mix adjustments help maintain low inventory levels resulting in less working capital
- NAS offers a wide variety of grades and quality products and is always open to asses market needs
- NAS warehouses network provides the ability of just in time delivery to our customers and the advantage of maintaining low inventory levels at NAS as well as at the customer sites
- NAS demonstrates its commitment to the environment through sustainability programs

## Thank you very much













