SIDERVAL
SPECIAL PROFILES IN STEEL

Energy & Power Gen

Special Steel Profiles for Industrial Boiler Applications

Profile:
Triangle Profile
Material grade:
Stainless Steel
Execution:
Hot Extruded
Destination:
Sweden

BACKGROUND

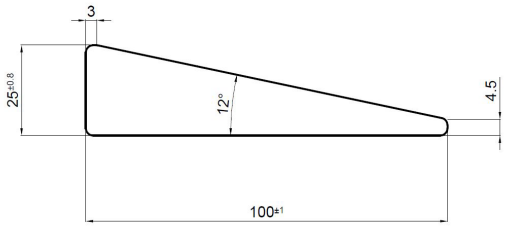
Siderval recently embarked on a challenging but promising project aimed at developing a highly specialized steel profile.

One of our customers was looking for a special steel solution that could effectively meet the operational needs encountered in industrial boiler systems.

The primary application of this **custom profile** was to facilitate the removal of combustion residues from the bottom of boilers, a critical task in maintaining the efficiency and operational integrity of power generation facilities.

The initial effort began with a detailed analysis of the customer's needs and operational challenges, highlighting the need for a steel profile that was not only robust, but also able to withstand **extreme conditions** without compromise.

CHALLENGE



Siderval faced several critical challenges in developing this steel profile:

- Required **steel** had to withstand high temperatures and be free from internal stresses
- Precise **customization** to ensure proper functionality without damaging the boiler
- Finding **small quantities** of a special steel grade to produce a sample
- Needed extensive **collaboration** to finalize material specifications

These hurdles required precise coordination and innovative solutions to meet the stringent demands of our customer.

SOLUTION

After numerous iterations and collaborations between the two parties, Siderval successfully identified and sourced an appropriate type of **stainless steel** known for its high temperature resistance and ability to maintain structural integrity under stress, meeting the customer's requirements for the manufacturing of this **unique profile**.

Using **hot extrusion** technology, Siderval produced this special triangle-shaped stainless steel profile with dimensions of 25x100 mm.

The profiles were subjected to rigorous **testing** performed by the customer and successfully passed all evaluations. Feedback confirmed customer satisfaction with the final product, paving the way for future orders.