SIDERVAL
SPECIAL PROFILES IN STEEL

Hot Extruded Tubes for Agricolture Machinery

Profile:
Finned tube
Material grade:
Carbon steel Fe510D
Execution:
Hot Extruded
Destination:
Italy

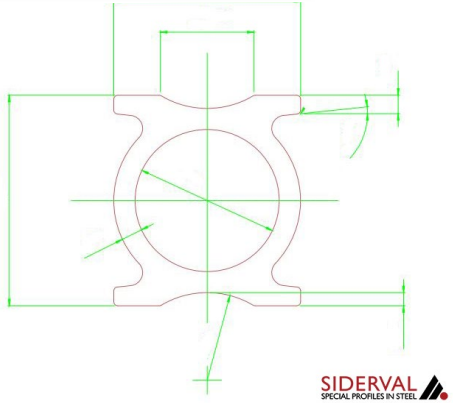
BACKGROUND

The carbon steel profiles used in **Agricola Italiana**'s machinery offer strength, flexibility, and durability. They are essential for ensuring that agricultural machines operate effectively under challenging conditions.

Carbon steel known for its wear resistance and strength, is the material of choice for heavy-duty agricultural equipment such as tractors, seeders, and plows. Its profiles can be tailored to specific needs and are treated to improve corrosion resistance and hardness, ensuring suitability for the demands of agricultural use.

The customer was looking for **new profiles** because traditional methods of attaching pipes with hooks were not secure enough and raised concerns about the stability of the attached equipment, especially under the stress of farming.

CHALLENGE



The standard profiles used in this application were not secure enough, as the welding did not provide the necessary reliability for the hooks. To overcome these challenges, we explored various solutions:

- Alternatives such as attaching carabiners to the tubes were considered but were ultimately deemed **unsafe** for the stringent requirements of agricultural machinery.
- The **aesthetic** appearance of the machine was compromised by weld lines visible after painting, which could affect the overall marketability and perceived quality of the equipment
- Need for **different lengths** up to 6 meters

SOLUTION

The manufactured profile allows for equipment to be **securely fastened directly** onto the tube's flange, significantly increasing the overall stability and safety of the machinery attachments.

By eliminating the need for welding in the attachment process, the tubes maintain a **sleek appearance** post-painting, with no visible lines or marks, enhancing the aesthetic appeal of the machines.

The new attachment method has been successfully adopted across various types of machinery, such as seeders, and is applicable for tubes measuring up to 6 meters in length, providing a standardized solution for a range of equipment.