

## What Stainless Steel is used in RBI housings? by Mike Mortensen - Director of Engineering RBI-USA

AISI 304 is a stainless steel that is used in our stainless housing series. It is characterized by its chromium (18-20%) and nickel (8-10.5%) content. The higher chromium content contributes towards its oxidation and corrosion resistance. AISI 304 stainless steel is resistant to food acids, sterilizing solutions, organic chemicals, many inorganic chemicals, and most oxidizing acids. These characteristics of 304 stainless steel have given it a niche market in the poultry and food processing industry where the housings are very likely to be exposed to water, food, and cleansing agents.

Cast iron housings are painted or plated in order to prevent corrosion. If the paint or plating is scratched or chipped, the housing is exposed and corrosion can easily occur. By using stainless steel, there is no need to paint or plate the surface of the housing and therefore, scratches do not affect the performance or appearance of the housing. The thermal and mechanical properties such as strength or heat resistance are not compromised by choosing to stainless steel over cast iron. The sacrifice is that stainless steel is a bit more expensive.

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