

MATERIALS OF CONSTRUCTION - THE ROLE OF STAINLESS STEELS

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Abstract

An understanding of how relevant materials may behave in a food-processing environment - whether they are metallic, elastomeric, plastic, composite or glass - is essential to their correct selection as materials of construction. Only by matching the choice of material to the working environment (and that includes not only the food being processed but also the cleaning processes applied to the equipment) can the safety, hygiene and life-time economics all be optimised. This paper will examine the sources of advice available to help the engineer make these critical decisions. Stainless steels are frequently seen as the materials of choice in such applications, and the properties of this versatile family of strong, corrosion-resistant, easily-fabricated and, ultimately, recyclable materials will be discussed.

Key words: *Materials, Selection, Construction, Operating environment, Stainless steels.*