

Ferritic Stainless Steels for Architectural Material*

Yutaka Oka** Noriyuki Kuriyama***

1 Introduction

SUS430 is a representative steel grade of ferritic stainless steel. But SUS430 is inferior in corrosion resistance, weldability and formability to austenitic stainless steels, such as SUS304 and SUS316, which are widely used in architecture. For this reason, ferritic stainless steels in general were not regarded as steels suitable for an architectural material. A series of highly corrosion-resistant ferritic stainless steels in which these disad-

sure test in a coastal industrial area (exposure lasted for 1.5 years at a place 5 m away from a revetment in the Oihama district of Chiba City) and the results of pitting potential measured in a 3.5% NaCl solution at 70°C. RSX-1 and R445MT are designed to obtain the corrosion resistance equivalent to SUS304 and SUS316, respectively, in pitting potential, and moreover, the exposure test reveal that RSX-1 and R445MT have better corrosion resistance than SUS304 and SUS316, respectively. R342 and R322 have better corrosion resis-

tages were eliminated were developed at Kawasaki Steel for use in an architectural material.

resistance to corrosion compared with SUS316. Among four steel grades developed, R302 and R311 are the



