

NSSC SERIES

FERRITIC



## Oxidation- and Electric-Resistant Ferritic Stainless Steel

NSSC HOM

15Cr4Al-LC,N

### Features and Applications

1. Distinguished performance of oxidation resistance owing to the forming of alumina oxide on its surface when in high-temperature atmosphere.
2. Smaller thermal expansion coefficient than austenitic stainless steel, thus offering small thermal deformation.
3. Large electric resistivity.

[ Applications ] Combustion tubes of oil-burning stoves, Grid resisters of cars or ships.

### Characteristics

#### [Mechanical properties]

	Yield strength 0.2% offset N/mm <sup>2</sup>	Tensile strength N/mm <sup>2</sup>	Elongation %	Hardness HV
Specification	≥350	≥520	≥15	≤230
Typical values	493	656	24	208

#### [Physical properties]

Specific gravity.	Electric resistivity	Average thermal expansion coefficient
7.20	125±6μΩ·cm (at 20°C)	11.5×10 <sup>-6</sup> (1/°C) 20–(500°C)

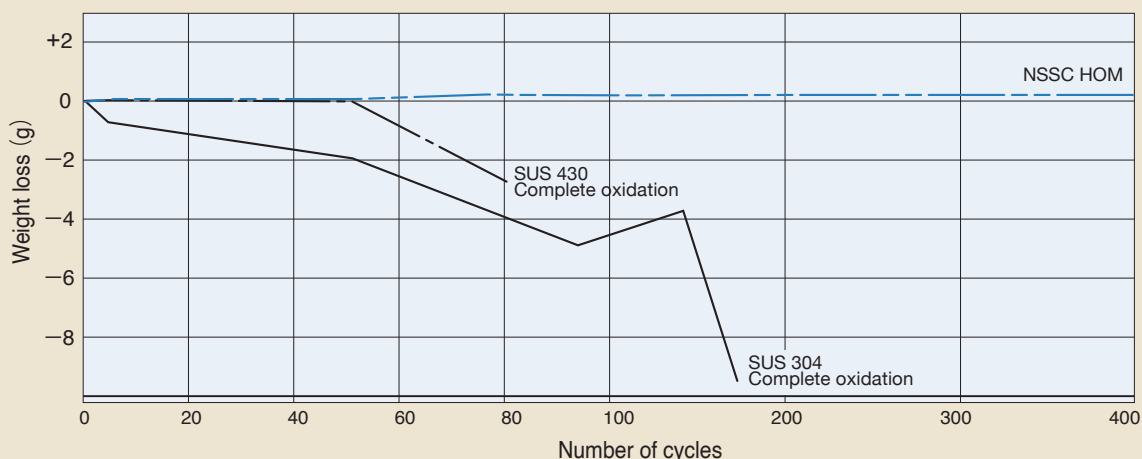
#### [Oxidation resistance]

intermittent oxidation test in the air

(Test condition)

Heating conditions : One cycle consists of '30 minutes at 1200°C and 30 minutes at room temperature'

Test specimens : thickness×20×50mm



**Notice:** "NSSC" is a trademark of NIPPON STEEL CORPORATION. While every effort has been made to ensure the accuracy of the information contained within this publication, the use of the information is at the reader's risk and no warranty is implied or expressed by NIPPON STEEL CORPORATION with respect to the use of the information contained herein. The information in this publication is subject to change or modification without notice. Please contact the NIPPON STEEL CORPORATION office for the latest information. Please refrain from unauthorized reproduction or copying of the contents of this publication. The names of our products and services shown in this publication are trademarks or registered trademarks of NIPPON STEEL CORPORATION, affiliated companies, or third parties granting rights to NIPPON STEEL CORPORATION or affiliated companies. Other product or service names shown may be trademarks or registered trademarks of their respective owners.

### NIPPON STEEL CORPORATION

2-6-1 Marunouchi, Chiyoda-ku, Tokyo 100-8071 Japan  
 Tel: +81-3-6867-4111 Fax: +81-3-6867-5607  
 www.nipponsteel.com

Oxidation- and Electric-Resistant Ferritic Stainless Steel

S007en\_01\_202503f

© 2025 NIPPON STEEL CORPORATION