

ABSTRACT

AUSTENITIC STAINLESS STEEL SHEET

An austenitic stainless steel sheet, comprising: a chemical composition comprising: C: not more than 0.03%, Si: not more than 1.0%, Mn: not more than 1.5%, Cr: 15.0 to 20.0%, Ni: 6.0 to 9.0%, and N: 0.03 to 0.15%, with the balance being Fe and inevitable impurities, wherein an Md30 value calculated by $497-462(C+N)-9.2(Si)-8.1(Mn)-13.7(Cr)-20(Ni+Cu)-18.7(Mo)$ is 30 to 50°C; and a metal micro-structure, wherein an average amount of deformation induced martensite is not more than 5.0% in volume ratio, an average austenite grain diameter is not more than 5.0 μm , and X-ray diffraction half-value widths of $\gamma(220)$ phase respectively at a sheet surface and sheet center are no less than 0.50°, and difference thereof is not more than 0.10°. This steel sheet is suitable for, for example, a laser metal mask.

Figure 2