

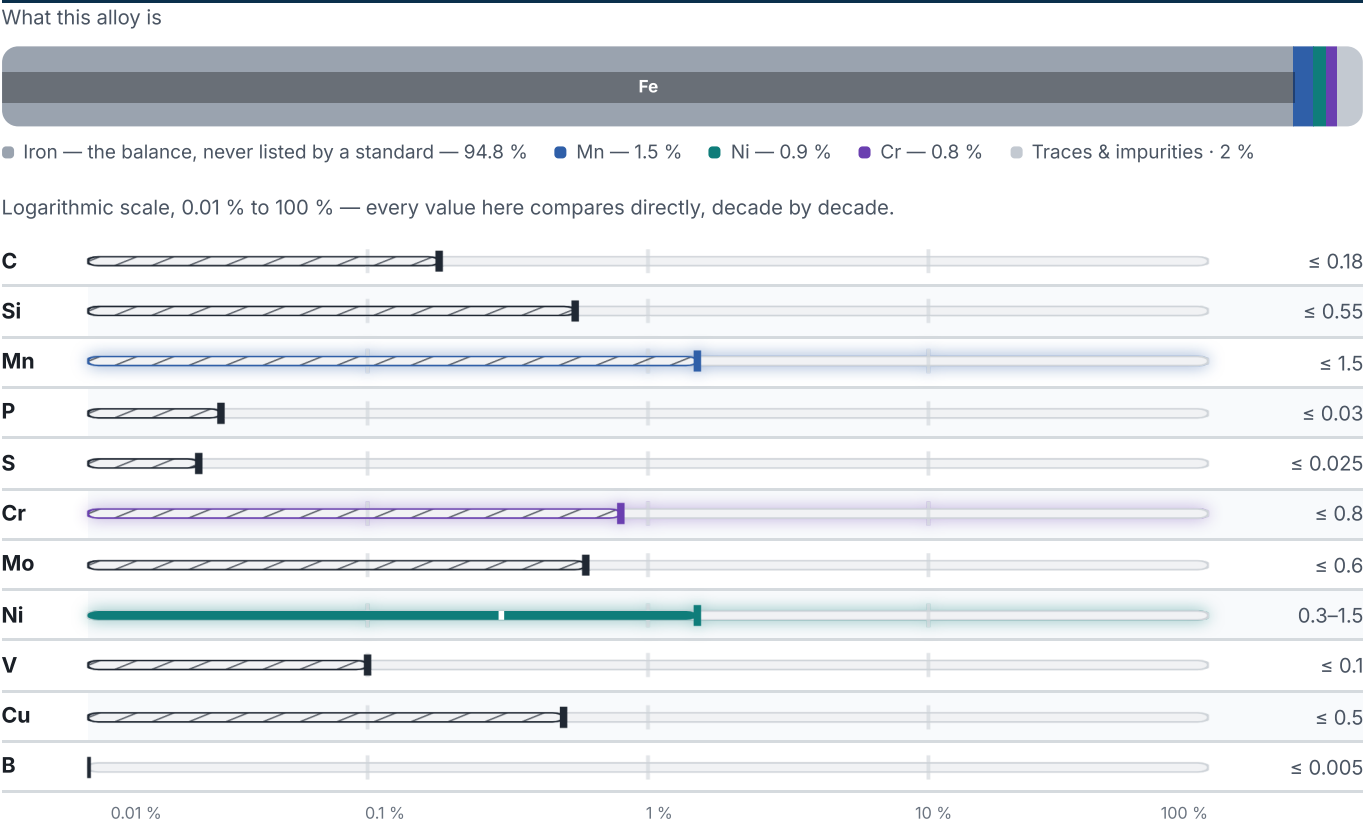
SHY685N

Chemical composition, mechanical and physical property values, and 1 standard designations from 1 regions.

OTHER DESIGNATIONS	PROPERTY VALUES
1 in 1 regions	11 on file

Chemical composition

Mass fraction in %



The scale is logarithmic, not the element’s raw share of the alloy — the only honest way to fit 0.01 % and 100 % in one picture, and it means every value here can be compared with every other.

Predicted transformation temperatures

computed from composition · °C

PREDICTED AE3 798 °C	PREDICTED AE1 711 °C	PREDICTED ACM 437 °C	PREDICTED BS 500 °C
-------------------------	-------------------------	-------------------------	------------------------

Mechanical properties

3 values across 1 conditions

CONDITION · DIMENSION	RM N/mm ²	RE N/mm ²	A %
Plates Quenching and tempering	760–930	665–685	16–24

Designations across standards

1 designations · 1 documented as identical

Japan	1
SHY685N This grade's own name	jis

Note on use. The data is compiled to the best of our knowledge from publicly available standards and manufacturer documentation. It replaces neither material testing nor an inspection document to EN 10204. Please request a mill certificate to EN 10204 2.1, 3.1 or 3.2 together with your enquiry. The standard in its current valid edition always prevails.

Enquiry about SHY685N

Quotation, availability, mill certificate or a technical question — directly on the material page.

[Start an enquiry](#)

DATASHEET ONLINE View the material page	GRADE SEARCH Search all grades	MATERIAL NO. —	ISSUED Aug 20, 2026
---	--	--------------------------	-------------------------------