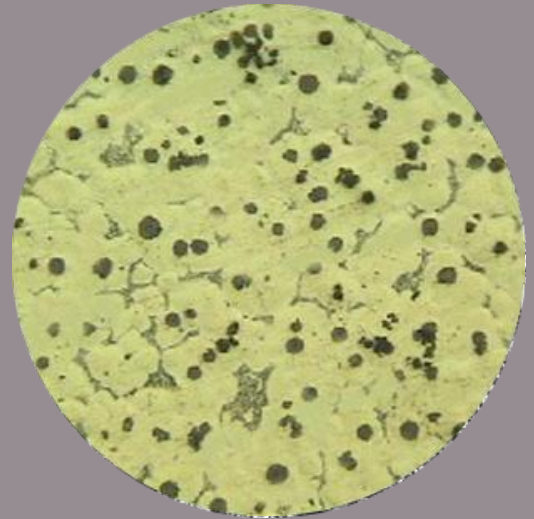




## Austenitic Cast Iron (Ni Resist)

Durham Foundry manufactures austenitic cast iron, often referred to as Ni Resist, to ISO 2892. Within this standard are a range of grades which can be certified by ultimate tensile strength and 0.2% proof stress in N/mm<sup>2</sup>, percentage elongation and, for some grades, impact value in J. All grades have a required chemical analysis.

Although there are twenty grades in the standard, all of which can be produced, there are two grades that we manufacture on a regular basis. The first is a grey iron with the following chemical analysis and mechanical properties.



Grade	C max %	Si %	Mn %	Ni %	Cr %	Cu %	Tensile Strength N/mm <sup>2</sup>
ISO 2892 L-Ni Cu Cr 15 6 2	3.0	1.0 to 2.8	0.5 to 1.5	13.5 to 17.5	1.0 to 2.5	5.5 to 7.5	170

The second is a spheroidal graphite grade. There is no impact data for this grade.

Grade	C max %	Si %	Mn %	Ni %	Cr %	P max %	Cu max %
ISO 2892 S-Ni Si Cr 20 5 2	3.0	4.5 to 5.5	0.5 to 1.5	18.0 to 22.0	1.0 to 2.5	0.080	0.5

Grade	Tensile Strength N/mm <sup>2</sup>	0.2% Proof Stress N/mm <sup>2</sup>	Elongation %
ISO 2892 S-Ni Si Cr 20 5 2	370	210	7

ISO 2892 is not the only standard for austenitic cast iron. There is a Euronorm standard, BS EN 13835 and there are comparable standards in the ASTM, DIN and SAE ranges. Also, many people still refer to this material either as Ni Resist or as one of the grades out of the obsolete British standard, BS 3468, such as F1 or S2.

This data sheet can be read in conjunction with our information sheet for austenitic cast iron which can be downloaded from our website at <http://www.durhamfoundry.com/technical-data-sheets.html>

If you need to order a casting in ausferritic cast iron and are confused by its description, unsure as to which grade you need or it has a specification you don't recognise, please contact us as there is a good chance we will be able to help.

For further information please contact Mike Naylor on [castings@durhamfoundry.com](mailto:castings@durhamfoundry.com) or 0044 (0)114 249 4977.