

# Class and Grade

## Tensile Strength Comparison



This resource outlines the two different classifications regarding the tensile strengths of various steels. You will find values for the tensile strengths of different classes and grades of steel, according to ISO and ASTM standards in manufacturing fasteners. These will give you an idea of how strong the bolts are based on different classes or grades of steel, this is to ensure you use the correct strength bolts for your applications.

Metric system uses **Class**

## Metric

MPa (N/mm<sup>2</sup>)

Conversion Factor

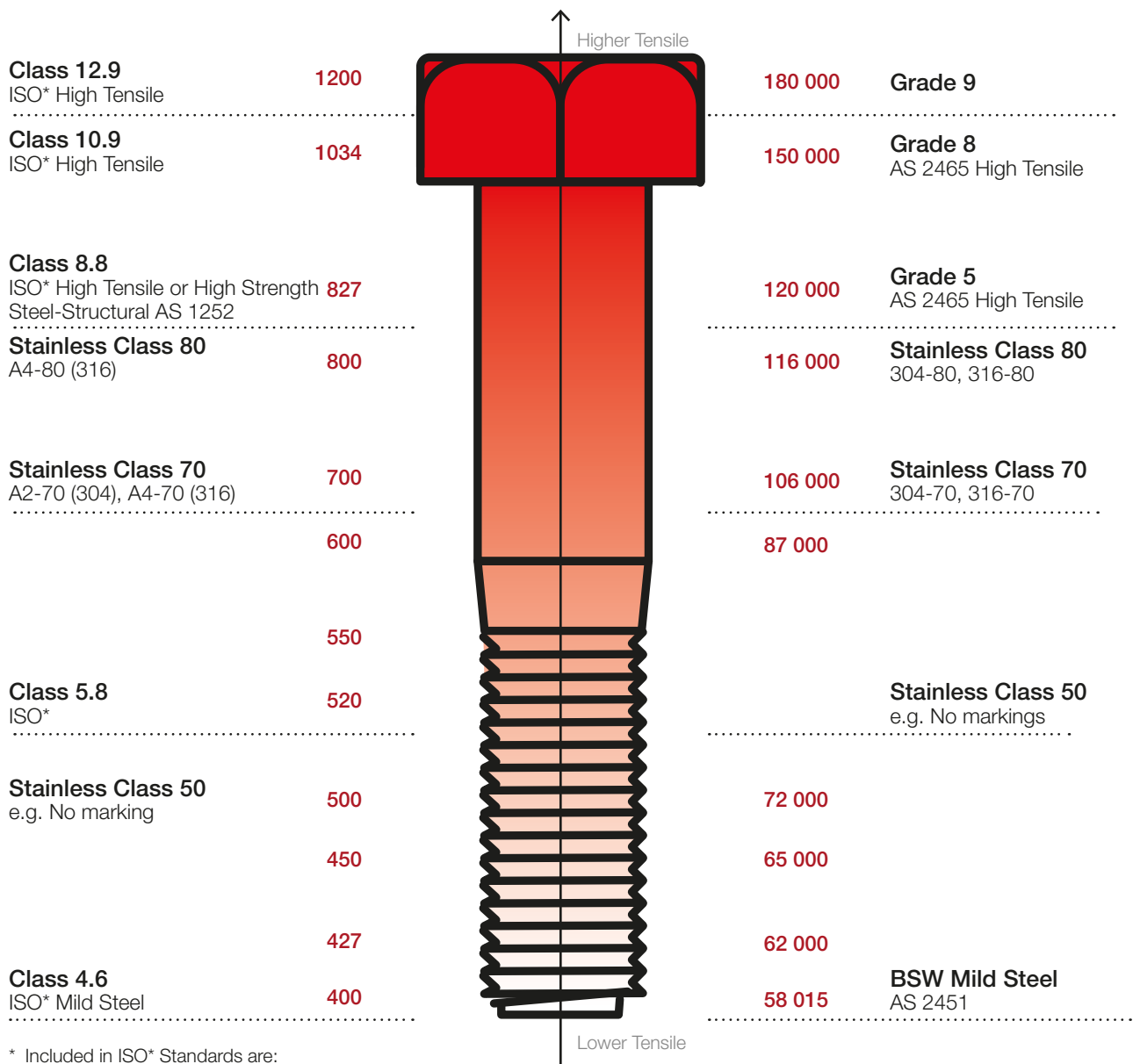
1000 PSI (lbf/in<sup>2</sup>) = 6.8948 MPa

1 MPa = 145.038 PSI (lbf/in<sup>2</sup>)

Imperial system uses **Grade**

## Imperial

LBF/In<sup>2</sup> (PSI)



\* Included in ISO\* Standards are:  
ISO 4014, ISO 4017, and ISO 4032

ⓘ The data provided in this document is for general guidance only and should not be solely relied upon when working to stringent specifications. We recommend consulting with qualified experts regarding any technical queries. This information may change without written notice.