(6) Flanges
   (-a) Impact tests are not required for the following flanges when used at MDMTs no colder than −20°F (−29°C):
      (-1) ASME B16.5 flanges of ferritic steel
      (-2) ASME B16.47 flanges of ferritic steel
      (-3) split loose flanges of SA-216 Grade WCB when the outside diameter and bolting dimensions are either ASME B16.5 Class 150 or Class 300, and the flange thicknesses are not greater than that of either ASME B16.5 Class 150 or Class 300, respectively
   (-b) Impact tests are not required for the flanges listed in (-a) for metal temperatures colder than −20°F (−29°C) and no colder than −55°F (−48°C) provided the MDMT is above the allowable temperature determined from applying the temperature reduction (Figure 523.2.2-1). The ratio used for determining the temperature reduction is defined as the design pressure at the MDMT to the maximum allowable pressure as permitted by ASME B16.5.

   (7) No impact testing is required for carbon steel 0.10 in. (2.5 mm) and thinner, but such materials shall not be used at design metal temperatures colder than −55°F (−48°C).

523.2.3 Gray Iron and Malleable Iron. Gray iron and malleable iron shall not be used for piping components in hydrocarbon or other flammable fluid service at temperatures above 300°F (149°C), nor at gage pressures above 300 psi (2070 kPa). Gray iron or malleable iron shall not be used at temperatures below that shown in Table 502.3.1-1, except for nonflammable service where a lower limit has been explicitly allowed by the component manufacturer, there is extensive, successful service experience under specific and comparable conditions.