

Materiais de construção X Temperatura de utilização

| | Design Temperature, °F | Material | Plate | Pipe | Forgings | Fittings | Bolting | |
|-----------------|------------------------|-----------------|----------------------------------|---------------------------------------|----------------------------------|----------------------------------|----------------------------|--------------------------|
| Cryogenic | -425 to -321 | Stainless steel | SA-240-304, 304L, 347, 316, 316L | SA-312-304, 304L, 347, 316, 316L | SA-182-304, 304L, 347, 316, 316L | SA-403-304, 304L, 347, 316, 316L | SA-320-B8 with SA-194-8 | |
| | -320 to -151 | 9 nickel | SA-353 | SA-333-8 | SA-522-1 | SA-420-WPL8 | | |
| Low temperature | -150 to -76 | 3½ nickel | SA-203-D | SA-333-3 | SA-350-LF63 | SA-420-WPL3 | SA-320-L7 with SA-194-4 | |
| | -75 to -51 | 2½ nickel | SA-203-A | | | | | |
| | -50 to -21 | Carbon steel | SA-516-55, 60 to SA-20 | SA-333-6 | SA-350-LF2 | SA-420-WPL6 | | |
| | | | -20 to 4 | SA-516-All | | | | SA-333-1 or 6 |
| | | | 5 to 32 | SA-285-C | | | | |
| Intermediate | 33 to 60 61 to 775 | | Carbon steel | SA-516-All SA-515-All SA-455-II | SA-53-B SA-106-B | SA-105 SA-181-60,70 | SA-234-WPB | SA-193-B7 with SA-194-2H |
| | | | | Elevated Temperature | 776 to 875 | C-½Mo | SA-204-B | |
| 876 to 1000 | 1Cr-½Mo | SA-387-12-1 | SA-335-P12 | | SA-182-F12 | SA-234-WP12 | | |
| | 1Cr-½Mo | SA-387-11-2 | SA-335-P11 | | SA-182-F11 | SA-234-WP11 | | |
| 1001 to 1100 | 2¼Cr-1Mo | SA-387-22-1 | SA-335-P22 | | SA-182-F22 | SA-234-WP22 | with SA-193-B5 SA-194-3 | |
| 1101 to 1500 | Stainless steel | SA-240-347H | SA-312-347H | | SA-182-347H | SA-403-347H | SA-193-BB with SA-194-B | |
| | Incoloy | SB-424 | SB-423 | | SB-425 | SB-366 | | |
| Above 1500 | Inconel | SB-443 | SB-444 | SB-446 | SB-366 | | | |

Material Selection Guide [Moss, cited in Bednar 1991]