

## Material - ASTM A 312 S34565

Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications

**Group - Ferrous Stainless Steel Alloys** 

Sub Group - ASTM A 312 S34565 Chromium and Chromium-Nickel Stainless Steel for Pressure Vessels and for General Applications

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade Belongs to the Industry - Steel and Pipe

| Chemical Composition |      |                 | Heat Treatment                |          |
|----------------------|------|-----------------|-------------------------------|----------|
| Carbon               | C %  | 0.030 max.      |                               |          |
| Silicon              | Si % | 1.000 max.      |                               |          |
| Manganese            | Mn % | 5.000 - 7.000   |                               |          |
| Phosphorus           | Р%   | 0.030 max.      | Solution Annealing            |          |
| Sulphur              | S %  | 0.010 max.      |                               |          |
| Chromium             | Cr % | 23.000 - 25.000 |                               |          |
| Molybdenum           | Mo % | 4.000 - 5.000   |                               |          |
| Nickel               | Ni % | 16.000 - 18.000 |                               |          |
| Niobium              | Nb % | 0.100 max.      | Mechanical Properties         |          |
| Nitrogen             | N %  | 0.400 - 0.600   | Tensile Strength in Mpa       | 795 min. |
| Iron                 | Fe % | Balance         | Yield Strength in Mpa         | 415 min. |
|                      | -    | -               | Elongation in %               | 25 min.  |
|                      | -    | -               | Reduction of Area in %        | -        |
|                      | -    | -               | Hardness in BHN               | -        |
| -                    | -    | -               | Impac <mark>t in Joule</mark> | -        |
|                      |      | -               |                               |          |

| Cross Reference Table |          |                                      |                               |  |
|-----------------------|----------|--------------------------------------|-------------------------------|--|
| Material              | Standard | Country Grade Belong to the Industry |                               |  |
| A240 UNS S34565       | ASTM     | USA                                  | Steel, Plate, Sheet and Strip |  |
| S34565                | UNS      | USA                                  | Steel                         |  |
| A167 S34565           | ASTM     | USA                                  | Steel, Sheet, Plate and Strip |  |
| A213 S34565           | ASTM     | USA                                  | Steel and Tube                |  |
| A249 S34565           | ASTM     | USA                                  | Steel and Tube                |  |
| A276 S34565           | ASTM     | USA                                  | Steel, Bar and Shapes         |  |
| A959 S34565           | ASTM     | USA                                  | Steel                         |  |

## Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com

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