

This page is mainly introduced the 215S 15 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 215S 15, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 215S 15

| 215S 15 Standard Number: | | |
|--------------------------|-----------------|---|
| ITEM | Standard Number | Descriptions |
| 1 | BS 3059-2 | Steel boiler and superheater tubes. Specification for carbon, alloy and austenitic stainless steel tubes with specified elevated temperature properties |
| 2 | BS 3605-1 | Austenitic stainless steel pipes and tubes for pressure purposes. Specification for seamless tubes |

| 215S 15 Chemical composition(mass fraction)(wt.%) | | | | | | | | | |
|---|----|---------|----|----|---------|----|----|----|-------|
| Chemical | | Min.(%) | | | Max.(%) | | | | |
| C | | 0.06 | | | 0.15 | | | | |
| Si | | 0.20 | | | 1.00 | | | | |
| Mn | | 5.50 | | | 7.00 | | | | |
| P | | | | | 0.040 | | | | |
| S | | | | | 0.030 | | | | |
| Cr | | 14.00 | | | 16.00 | | | | |
| Mo | | 0.80 | | | 1.20 | | | | |
| Ni | | 9.00 | | | 11.00 | | | | |
| V | | 0.15 | | | 0.40 | | | | |
| Nb | | 0.75 | | | 1.25 | | | | |
| B | | 0.0030 | | | 0.0090 | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |
| | | | | | | | | | |

Austenitic stainless steel pipes and tubes for pressure purposes. Specification for seamless tubes

215S 15 Physical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 115-234 | σ_b /MPa |
| Yield Strength | 23 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 65 | $\delta 5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | $Akv \geq$ /J |
| HBS | 123-321 | - |
| HRC | 30 | - |

215S 15 Mechanical Properties

| | | |
|------------------|---------|--------------------------|
| Tensile strength | 231-231 | σ_b /MPa |
| Yield Strength | 154 | $\sigma_{0.2} \geq$ /MPa |
| Elongation | 56 | $\delta 5 \geq$ (%) |
| ψ | - | $\psi \geq$ (%) |
| Akv | - | $Akv \geq$ /J |
| HBS | 235-268 | - |
| HRC | 30 | - |

215S 15 Heat Treatment Regime

| Annealing | Quenching | Tempering | Normalizing | Q & T |
|-----------|-----------|-----------|-------------|-------|
| √ | √ | √ | √ | √ |

215S 15 Range of products

| Product type | Products | Dimension | Processes | Deliver Status |
|-----------------|----------------------|-------------------|---------------------------------------|---|
| Plates / Sheets | Plates / Sheets | 0.08-200mm(T)*W*L | Forging, hot rolling and cold rolling | Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting |
| Steel Bar | Round Bar, Flat Bar, | Φ8-1200mm*L | Forging, hot rolling and | Black, Rough Turning, |

| | | | | |
|---------------|--|----------------------------|-----------------------------------|---|
| | Square Bar | | cold rolling, Cast | Shot Blasting, |
| Coil / Strip | Steel Coil /Steel Strip | 0.03-16.0x1200mm | Cold-Rolled & Hot-Rolled | Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting |
| Pipes / Tubes | Seamless Pipes/Tubes, Welded Pipes/Tubes | OD:6-219mm x WT:0.5-20.0mm | Hot extrusion, Cold Drawn, Welded | Annealed, Solution and Aging, Q+T, ACID-WASHED |

We can produce Specialsteel the specifications follows: