

This page is mainly introduced the NCF625TB Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of NCF625TB, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel NCF625TB

NCF625TB Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--|
| 1 | D 3757 (2003) | Seamless nickel-chromium-iron alloy heat exchanger tubes |

NCF625TB Chemical composition (mass fraction) (wt.%)

| Chemical | Min.(%) | | | | | Max.(%) | | | | |
|----------|---------|----|----|----|----|---------|----|----|-------|--|
| C | | | | | | 0.10 | | | | |
| Si | | | | | | 0.50 | | | | |
| Mn | | | | | | 0.50 | | | | |
| P | | | | | | 0.015 | | | | |
| S | | | | | | 0.015 | | | | |
| Cr | 20.00 | | | | | 23.00 | | | | |
| Ni | 58.00 | | | | | | | | | |
| Cu | | | | | | | | | | |
| Al | | | | | | 0.40 | | | | |
| Ti | | | | | | 0.40 | | | | |
| Fe | | | | | | 5.00 | | | | |
| Nb+Ta | 3.15 | | | | | 4.15 | | | | |
| Mo | 8.00 | | | | | 10.00 | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta | |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other | |
| | | | | | | | | | | |

Seamless nickel-chromium-iron alloy heat exchanger tubes

NCF625TB Physical Properties

| NCF625TB 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 | - |

NCF625TB Mechanical Properties

| NCF625TB 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 | - |

NCF625TB Heat Treatment Regime

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

NCF625TB 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: