

This page is mainly introduced the 17-22-A V Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 17-22-A V, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

Datasheet for Steel Grades Specialsteel 17-22-A V

17-22-A V Standard Number:

| ITEM | Standard Number | Descriptions |
|------|----------------------|--|
| 1 | SAE AMS 6303H (2012) | Steel Bars and Forgings, Low Alloy, Heat-Resistant 0.65Si - 1.25Cr - 0.50Mo - 0.85V (0.25 - 0.30C) |
| 2 | SAE AMS 6436C (2001) | Sheet, Strip and Plate, Low-alloy, Heat Resistant, 0,65Si - 1,25Cr - 0,50Mo - 0,85V - (0,25-0,30C) |
| 3 | SAE J 467 (1968) | Special Purpose Alloys ("Superalloys") |

17-22-A V Chemical composition(mass fraction)(wt.%)

| Chemical | Min.(%) | Max.(%) | | | | | | | |
|----------|-----------|---------|----|----|----|----|----|----|-------|
| C | | 0.28 | | | | | | | |
| Si | | 0.65 | | | | | | | |
| Mn | | 0.75 | | | | | | | |
| P | | | | | | | | | |
| S | | | | | | | | | |
| Ni | | | | | | | | | |
| Cr | | 1.25 | | | | | | | |
| Al | | | | | | | | | |
| Cu | | | | | | | | | |
| Ti | | | | | | | | | |
| Fe | remaining | | | | | | | | |
| V | | 0.85 | | | | | | | |
| Mo | | 0.50 | | | | | | | |
| C | Si | Mn | P | S | Cr | Ni | Mo | V | Ta |
| W | N | Cu | Co | Pb | B | Nb | Al | Ti | Other |

Steel Bars and Forgings, Low Alloy, Heat-Resistant 0.65Si - 1.25Cr - 0.50Mo - 0.85V (0.25 - 0.30C)

17-22-A V 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 | - |

17-22-A V 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 | - |

17-22-A V Heat Treatment Regime

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

17-22-A V 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, Square Bar | Φ8-1200mm*L | Forging, hot rolling and cold rolling, Cast | Black, Rough Turning, 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: