

This page is mainly introduced the 08X17H5M3 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 08X17H5M3, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Heat-Resistant Steel 08X17H5M3

| 08X17H5M3 Standard Number: |                 |              |
|----------------------------|-----------------|--------------|
| ITEM                       | Standard Number | Descriptions |

| 08X17H5M3 Chemical composition (mass fraction) (wt.%) |          |          |           |          |           |           |           |          |       |
|-------------------------------------------------------|----------|----------|-----------|----------|-----------|-----------|-----------|----------|-------|
| Chemical                                              |          |          |           | Min.(%)  |           |           | Max.(%)   |          |       |
| C                                                     | Si       | Mn       | P         | S        | Cr        | Ni        | Mo        | V        | Ta    |
| 0.06-0.10                                             | Max 0.80 | Max 0.80 | Max 0.035 | Max 0.02 | 16.0-17.5 | 4.50-5.50 | 3.00-3.35 |          |       |
| W                                                     | N        | Cu       | Co        | Pb       | B         | Nb        | Al        | Ti       | Other |
| Max 0.20                                              |          |          |           |          |           |           |           | Max 0.20 |       |

### 08X17H5M3

| 08X17H5M3 Physical Properties |         |                          |
|-------------------------------|---------|--------------------------|
| Tensile strength              | 115-234 | $\sigma_b$ /MPa          |
| Yield Strength                | 23      | $\sigma_{0.2} \geq$ /MPa |
| Elongation                    | 65      | $\delta_5 \geq$ (%)      |
| $\psi$                        | -       | $\psi \geq$ (%)          |
| Akv                           | -       | $Akv \geq$ /J            |
| HBS                           | 123-321 | -                        |
| HRC                           | 30      | -                        |

| 08X17H5M3 Mechanical Properties |         |                          |
|---------------------------------|---------|--------------------------|
| Tensile strength                | 231-231 | $\sigma_b$ /MPa          |
| Yield Strength                  | 154     | $\sigma_{0.2} \geq$ /MPa |

|            |         |                      |
|------------|---------|----------------------|
| Elongation | 56      | $\delta 5 \geq (\%)$ |
| $\psi$     | -       | $\psi \geq (\%)$     |
| Akv        | -       | $Akv \geq J$         |
| HBS        | 235-268 | -                    |
| HRC        | 30      | -                    |

### 08X17H5M3 Heat Treatment Regime

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

### 08X17H5M3 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          | $\Phi 8$ -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 Heat-Resistant Steel the specifications follows:**