

This page is mainly introduced the 45X14H1482M Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 45X14H1482M, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel 45X14H1482M

### 45X14H1482M Standard Number:

| ITEM | Standard Number | Descriptions |
|------|-----------------|--------------|
|------|-----------------|--------------|

### 45X14H1482M Chemical composition (mass fraction) (wt.%)

| Chemical |    |    | Min.(%) |    |    |    | Max.(%) |    |       |
|----------|----|----|---------|----|----|----|---------|----|-------|
| C        |    |    | 0.40    |    |    |    | 0.50    |    |       |
| Si       |    |    |         |    |    |    | 0.80    |    |       |
| Mn       |    |    |         |    |    |    | 0.70    |    |       |
| P        |    |    |         |    |    |    | 0.035   |    |       |
| S        |    |    |         |    |    |    | 0.020   |    |       |
| Cr       |    |    | 13.00   |    |    |    | 15.00   |    |       |
| Ni       |    |    | 13.00   |    |    |    | 15.00   |    |       |
| Mo       |    |    | 0.25    |    |    |    | 0.40    |    |       |
| W        |    |    | 2.00    |    |    |    | 2.80    |    |       |
| Ti       |    |    |         |    |    |    | 0.20    |    |       |
| C        | Si | Mn | P       | S  | Cr | Ni | Mo      | V  | Ta    |
|          |    |    |         |    |    |    |         |    |       |
| W        | N  | Cu | Co      | Pb | B  | Nb | Al      | Ti | Other |
|          |    |    |         |    |    |    |         |    |       |

Russia GOCT standard stainless steel and heat resistant steel steel grade and chemical composition

### 45X14H1482M Physical Properties

|                  |         |                 |
|------------------|---------|-----------------|
| Tensile strength | 115-234 | $\sigma_b$ /MPa |
|------------------|---------|-----------------|

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

### 45X14H1482M Mechanical Properties

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

### 45X14H1482M Heat Treatment Regime

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

### 45X14H1482M 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 Specialsteel the specifications follows:**