

This page is mainly introduced the 11X13H3 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of 11X13H3, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel 11X13H3

### 11X13H3 Standard Number:

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

### 11X13H3 Chemical composition (mass fraction) (wt.%)

| Chemical | Min.(%) | Max.(%) |    |    |    |    |    |    |       |
|----------|---------|---------|----|----|----|----|----|----|-------|
| C        | 0.08    | 0.15    |    |    |    |    |    |    |       |
| Si       |         | 0.60    |    |    |    |    |    |    |       |
| Mn       |         | 0.60    |    |    |    |    |    |    |       |
| P        |         | 0.030   |    |    |    |    |    |    |       |
| S        |         | 0.025   |    |    |    |    |    |    |       |
| Cr       | 12.50   | 14.50   |    |    |    |    |    |    |       |
| Ni       | 2.20    | 3.00    |    |    |    |    |    |    |       |
| Mo       |         | 0.30    |    |    |    |    |    |    |       |
| 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

### 11X13H3 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      | -            |

| 11X13H3 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      | -                        |

| 11X13H3 Heat Treatment Regime |           |           |             |       |
|-------------------------------|-----------|-----------|-------------|-------|
| Annealing                     | Quenching | Tempering | Normalizing | Q & T |
| √                             | √         | √         | √           | √     |

| 11X13H3 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:**