

This page is mainly introduced the A841 Class8 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of A841 Class8, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Carbon Steel A841 Class8

| A841 Class8 Standard Number: |          |               |               |              |
|------------------------------|----------|---------------|---------------|--------------|
| Area                         | Standard | Standard Code | Standard Year | Descriptions |
|                              |          |               |               |              |

| A841 Class8 Chemical composition(mass fraction)(wt.%) |         |         |             |
|---|---------|---------|-------------|
| Chemical  | Min.(%) | Max.(%) | Similar (%) |
|   |         |         |             |

| A841 Class8 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      | -                        |

| A841 Class8 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      | -                        |

### A841 Class8 Heat Treatment Regime

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

### A841 Class8 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 Carbon Steel the specifications follows:**