

**This page is mainly introduced the HSLA-80 Datasheet, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of HSLA-80, 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 HSLA-80

| HSLA-80 Standard Number: |          |               |               |              |
|--------------------------|----------|---------------|---------------|--------------|
| Area                     | Standard | Standard Code | Standard Year | Descriptions |
|                          |          |               |               |              |

| HSLA-80 Chemical composition (mass fraction) (wt.%) |         |         |             |
|---|---------|---------|-------------|
| Chemical  | Min.(%) | Max.(%) | Similar (%) |
|   |         |         |             |

| HSLA-80 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      | -                        |

| HSLA-80 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      | -                        |

## HSLA-80 Heat Treatment Regime

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

## HSLA-80 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:**