

This page is mainly introduced the **GMW10M-IR-C N800M-2 Datasheet**, including chemical information, mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of **GMW10M-IR-C N800M-2**, such as it is commonly used in bars, sheet, plates, steel coils, steel pipes, forged and other materials application.

## Datasheet for Steel Grades Specialsteel **GMW10M-IR-C N800M-2**

### GMW10M-IR-C N800M-2 Standard Number:

| ITEM | Standard Number | Descriptions      |
|------|-----------------|-------------------|
| 1    | GMW 10-2011     | Nodular Cast Iron |

### GMW10M-IR-C N800M-2 Chemical composition(mass fraction)(wt.%)

| Chemical |    |    |    | Min.(%) |    |    |    | Max.(%) |       |  |  |
|----------|----|----|----|---------|----|----|----|---------|-------|--|--|
| C        |    |    |    | 3.30    |    |    |    | 3.39    |       |  |  |
| Mn       |    |    |    | 0.2     |    |    |    | 1.00    |       |  |  |
| Si       |    |    |    | 1.80    |    |    |    | 2.70    |       |  |  |
| P        |    |    |    |         |    |    |    | 0.05    |       |  |  |
| Cu       |    |    |    |         |    |    |    | 0.70    |       |  |  |
| S        |    |    |    |         |    |    |    | 0.02    |       |  |  |
| Cr       |    |    |    |         |    |    |    | 0.10    |       |  |  |
| Mg       |    |    |    | 0.03    |    |    |    | 0.05    |       |  |  |
| C        | Si | Mn | P  | S       | Cr | Ni | Mo | V       | Ta    |  |  |
|          |    |    |    |         |    |    |    |         |       |  |  |
| W        | N  | Cu | Co | Pb      | B  | Nb | Al | Ti      | Other |  |  |
|          |    |    |    |         |    |    |    |         |       |  |  |

### Stainless Steel for Exhaust Applications **GMW10M-IR-C N800M-2**

### GMW10M-IR-C N800M-2 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      | -                |

| GMW10M-IR-C N800M-2 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      | -                         |

| GMW10M-IR-C N800M-2 Heat Treatment Regime |           |           |             |       |
|-------------------------------------------|-----------|-----------|-------------|-------|
| Annealing                                 | Quenching | Tempering | Normalizing | Q & T |
| √                                         | √         | √         | √           | √     |

| GMW10M-IR-C N800M-2 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:**