GRAVITY CAST PVT. LTD.
GRAVITY GROUP OF COMPANIES

# Material - Gravity 214MNCW

## Standard Specification for Stainless and Heat Resisting Steels

**Group - Ferrous Stainless Steel Alloys**

**Sub Group - Gravity 214MNCW Stainless and Heat Resisting Steels**

**Application - Intended for Valve, Pump, General Engineering, Automotive and other Industries**

**Grade Belongs to the Industry - Steel, Bars, Rods, Casting and Forging**

| Chemical Composition | | |
|---|---|---|
| Carbon | C % | 0.450 - 0.550 |
| Silicon | Si % | 1.500 max. |
| Manganese | Mn % | 8.000 - 10.000 |
| Phosphorus | P % | 0.040 max. |
| Sulphur | S % | 0.040 max. |
| Chromium | Cr % | 20.000 - 22.000 |
| Nickel | Ni % | 3.500 - 5.500 |
| Tungsten | W % | 0.800 - 1.500 |
| Nitrogen | N % | 0.400 - 0.600 |
| Nb + Ta | Nb% + Ta% | 2.500 max. |
| Other | Ot % | 1.000 max. |
| Iron | Fe % | Balance |
| - | - | - |
| - | - | - |
| - | - | - |

| Heat Treatment |
|---|
| As-Raw or As-Cast or Solution Annealing |

| Mechanical Properties | |
|---|---|
| Tensile Strength in Mpa | 400 max. |
| Yield Strength in Mpa | 200 min. |
| Elongation in % | 25 min. |
| Reduction of Area in % | 40 min. |
| Hardness in HB | 130 - 230 |
| Impact in Joule | - |

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| Cross Reference Table | | | |
|---|---|---|---|
| **Material** | **Standard** | **Country** | **Grade Belong to the Industry** |
| EN 10090 1.4882 | DIN | Germany | Steel |
| EN 10090 X 50 CrMnNiNbN 21 9 | DIN | Germany | Steel |
| 17480 1.4882 | DIN | Germany | Steel |
| A 35-579 Z 50 CMNNb 21-09-02 Az | AFNOR NF | France | Steel |
| A 35-579 Z 53 CMNNb 21-09-02 Az | AFNOR NF | France | Steel |
| 10090 1.4882 | EN | European Union | Steel |
| 10090 X 50 CrMoNiNbN 21-9 | EN | European Union | Steel |

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email marketing@gravitycastindia.com**

All information in our data sheets and website is indicative only and is not intended to be a substitute for the full specification from which it is extracted. It is intended to provide typical values to allow comparison between metal alloy option rather than a definitive statement of mechanical performance or suitability for a particular application as these will vary with temperature, product type and product application. It is presented apart from contractual obligations and does not constitute any guarantee of properties or of processing or application possibilities in individual cases. Our warranties and liabilities are stated exclusively in our terms of business.