



**GRAVITY CAST PVT. LTD.**  
**GRAVITY GROUP OF COMPANIES**

## Material - AFNOR NF Z 2 NCDU 31-27

### Standard Specification for Seamless Steel Tubes for Pressure Purposes

Group - Ferrous Stainless Steel Alloys

Sub Group - AFNOR NF Z 2 NCDU 31-27 Seamless Steel Tubes for Pressure Purposes

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

Grade Belongs to the Industry - Steel

Chemical Composition			Heat Treatment	
Carbon	C %	0.020 max.	Solution Annealing	
Silicon	Si %	0.500 max.		
Manganese	Mn %	2.000 max.		
Phosphorus	P %	0.025 max.		
Sulphur	S %	0.010 max.		
Chromium	Cr %	26.000 - 28.000		
Molybdenum	Mo %	3.000 - 4.000		
Nickel	Ni %	30.000 - 32.000		
Copper	Cu %	0.700 - 1.500		
Iron	Fe %	Balance		
-	-	-	<b>Mechanical Properties</b> Tensile Strength in Mpa      490 - 690 Yield Strength in Mpa      210 min. Elongation in %      35 min. Reduction of Area in %      - Hardness in BHN      - Impact in Joule      60 J @ RT	
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-	-	-		
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
10216-5 EN 1.4563	BS	British	Tube
1.4563	DIN	Germany	Steel, Plate and Strip
1.4563	EN	European Union	Steel, Plate and Strip
X1NiCrMoCu31-27-4	UNI	Italy	Steel, Plate and Strip
X1NiCrMoCu31-27-4	AFNOR NF	France	Steel
X1NiCrMoCu31-27-4	DIN	Germany	Steel, Bar and Rod
X1NiCrMoCu31 27 4	ISO	International	Steel, Bar and Rod

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

**ONE STOP SOLUTION FOR METAL PARTS**