CUSTOMER INFORMATION

Chemical elements in the inspection certificate

Revision 1, November 2023

The analytical accuracy of our chemical laboratory enables a substantially more accurate determination of the chemical elements than requested by the different material standards. That is why we certify the chemical elements in the certificate with a greater precision than required.

Example: instead of C = 0,10 % Material standard
C = 0,102 % Certificate

This procedure results in more precise knowledge of the chemical composition for the individual chemical elements. Moreover, the frequently requested carbon equivalent values and alloy restrictions are calculated and certified with a far higher precision.

For the heat analysis release and for the certified chemical values an accurate attention is paid to the conformity with the agreed values. In this connection the international rules concerning the rounding of numbers (ISO 80000-1, Annex B, Rule B or ASTM A751 § 12 + ASTM E29) are being applied.

Example

Steel grade according to material standard	Exemplary value given in the certificate (actual value)	Value according to the international valid rounding rules ISO 80000-1, Annex B, Rule B or ASTM A751 §12 + ASTM E29	Requirement according to the standard (specified value)
	Chemical element		
EN 10028-2: P265GH	C = 0,204 %	C = 0,20 %	C ≤ 0,20 %
ASME-2A+SA20: SA516 Gr. 60	Si = 0,404 %	Si = 0,40 %	Si 0,15 - 0,40 %
EN 10025-5: S355J5W	S = 0,0254 %	S = 0,025 %	S ≤ 0,025 %
EN 10025-4: S460ML	Cu = 0,554 %	Cu = 0,55 %	Cu ≤ 0,55 %

Revision 1
Dillingen, November 2023
Marketing & Technical Support - Wind Power & Construction
marketing-steel-construction@dillinger.biz
www.dillinger.de