

GUARANTEED PERFORMANCE FOR CEMENT APPLICATION

ARL 9900 Intellipower 3600
Combined XRF-XRD spectrometer
Clinker samples prepared in the form of pressed powders

Analytes on Fixed channels	Range (%)	Guaranteed Repeatability (%) 1 sigma at Mid range in 30 s	Guaranteed Reproducibility (%) 1 sigma at Mid range in 30 s
CaO	59 - 66	0.03	0.045
SiO ₂	18 - 24	0.014	0.021
Al ₂ O ₃	3 - 6	0.008	0.012
Fe ₂ O ₃	1 - 4	0.004	0.006
S tot	0.2 - 2	0.005	0.009
MgO	0.6 - 3	0.006	0.009
K ₂ O	0.1 - 2.0	0.002	0.003
Na ₂ O	0.1 - 0.8	0.004	0.006
P ₂ O ₅	0.05 - 0.3	0.001	0.002
TiO ₂	0.1 - 0.4	0.002	0.003
Mn ₂ O ₃	0.05 - 0.3	0.001	0.002
L.S.F	90 - 96	0.08	0.12
Cl	0.002 - 0.02	0.001	0.002
Free CaO on Compact integrated XRD system	0.2 - 3.0	0.012	*

Nota:

- Repeatability is 10 consecutive runs on a stable sample
- Reproducibility is 1 analysis per hour during 24 hours using a stable sample
- Above specifications are valid for XRF Fixed monochromator channels
- Free lime specifications are valid for our Compact Integrated XRD system
- ***This test is difficult to perform as free lime is not stable in air**
- **L.S.F. = lime saturation factor**
- For guarantees of reproducibility, repeatability values have been multiplied by a factor 1.5