

**ArcelorMittal - Long Products Luxembourg**

ArcelorMittal Belval & Differdange  
Quality Management  
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**Fully Killed Steel (FF): defined in chapter 6.1.2 and sheet 1 and 2 in European standard EN10025-2 and -4**

The grades S355J2+M - S355K2+M - S460J2+M - S460K2+M according to EN 10025-2:2019 and the grades S355M - S355ML - S460M - S460ML according to EN 10025-4:2019 are 'fully killed' steel grades containing Nitrogen binding elements in amounts sufficient to bind the available Nitrogen.

The usual guideline is a minimum Aluminium to Nitrogen ratio 2:1, when no other Nitrogen binding elements are present (EN10025-2 and -4).

Arcelormittal Belval & Differdange makes use of Titanium and/or Niobium and/or Vanadium as Nitrogen binding elements in replacement of 0.020% Al for fully killed steels according to EN 10025. In this case the maximum value for Nitrogen does not apply.

The above-mentioned Nitrogen binding elements are duly reported on material test certificate MTC.

A handwritten signature in blue ink, appearing to read "D. Dal Magro", is positioned above the printed name.

**D. DAL MAGRO**  
Quality Management