

Primary Controllable Elements

Lists the basic elements on a sample that should be communicated to the furnace or caster on each grade. This list does not include residual elements (Pb, Al, P, Cu, Mo, Sn, Ni, and N) as they should be checked on every grade. This is a quick reference sheet for training purposes and should not be used in place of the specsheet.

All Grades

Furnace (Radio channel 2): Must notify Melter if Pb is .0030 or higher

Ladle Top (Phone ext. 52323): Must notify Casting Tech / Ladleman if Al is .010 or higher

40 Grade (A61540)

FR:

C Mn

LT:

C Mn Si

60 / A61580 Grade (A61560, 400R, A61580, 500R)

FR:

C Mn

LT:

C Mn Si V (Depending on bar size and Cr level)

Weldable / Weldable 80 Grade (A70660, DG60, 400W, K706 , A70680, 500W, K780)

*All weldable grades have a **hard max** of .30C and .045S. Some grades may lower the max even further.*

FR:

C Mn S

LT:

C Mn Si V S

Multigrade (4W , MG)

*Most multigrade heats have a **hard max** of .050S.*

FR:

C Mn S

LT:

C Mn Si Cb S

Wire Grade (K10 S, K11 S, KA36)

Wire grades have very tight aims and must maintain ratios of at least 3:1 Mn/Si, and 2:1 Mn/S. Si additions can revert to Mn. Notify the Melter if N values are too close to the max or start climbing.

FR:

C Mn S

LT:

C Mn Si S

This list does not include special order / non-standard grades.