

Switch

To Steel
Casting !

ALLOY DATA SHEET



L'esprit industriel

Steel Casting

**Advantages
&
Possibilities**

Visit our website
www.safe-metal.com



WHO ARE WE ?

Safe Metal is the world leader in steel components made by green sand casting. Our teams operate as part of an international network that stretches across Europe, America and Asia, and partner their sales and project management skills with those of their customers.

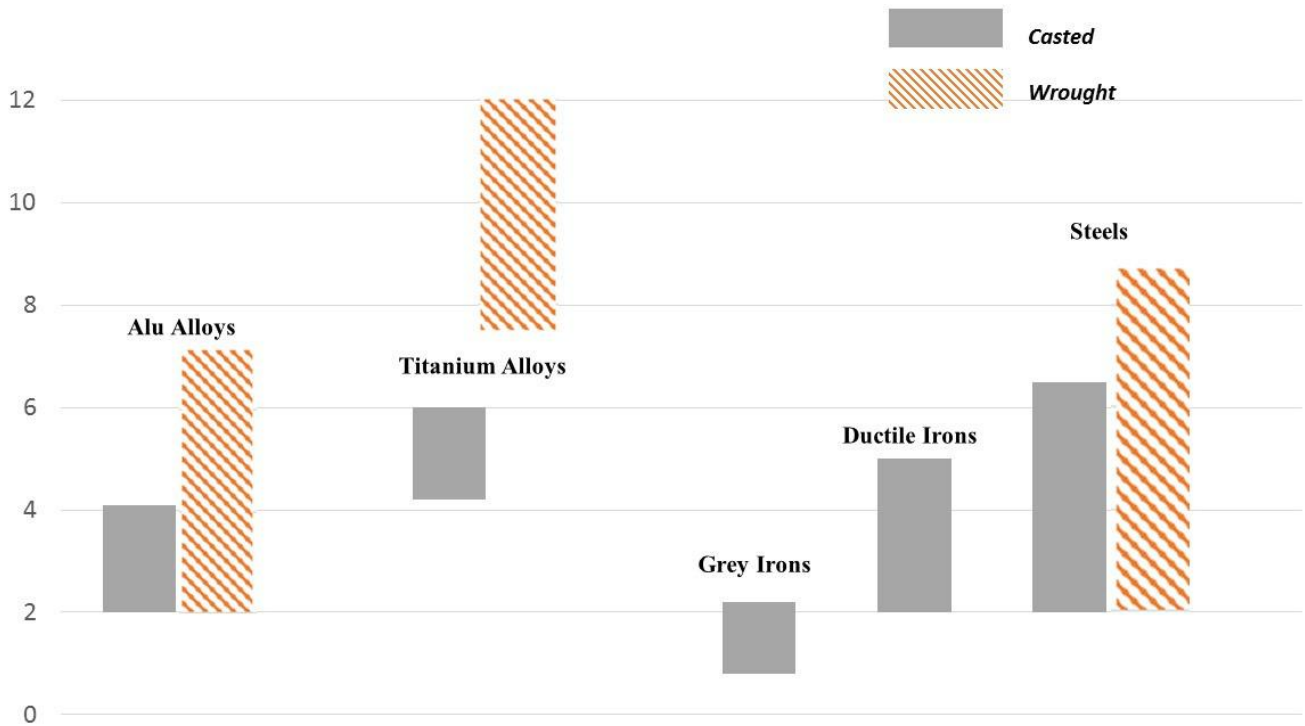
MAKING WORLD CLASS

Thanks to the expert skills of our R&D department, we are able to improve our industry knowledge and hence our products, our production process and metalworking by choosing the most appropriate methods for the product

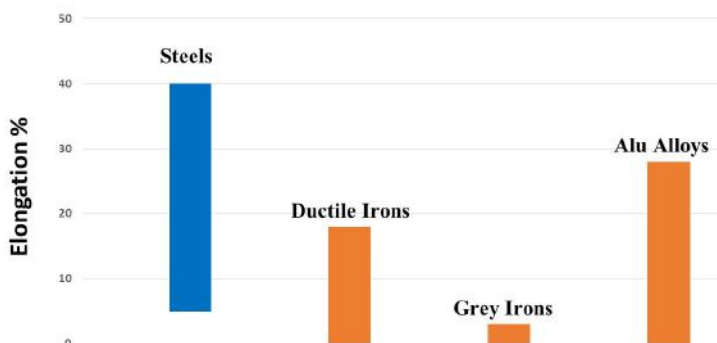


Cast alloys comparison

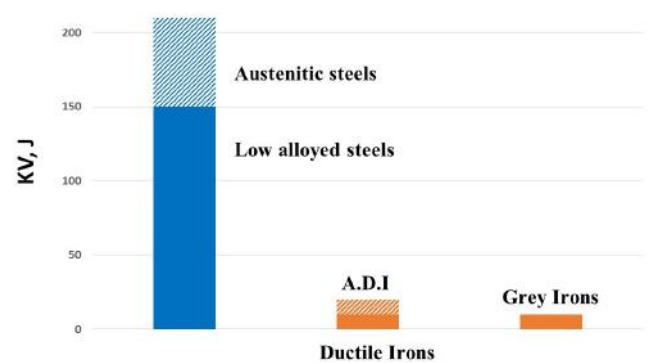
Tensile / Density ($\frac{R_m}{\rho}$)



Elongation (A%)

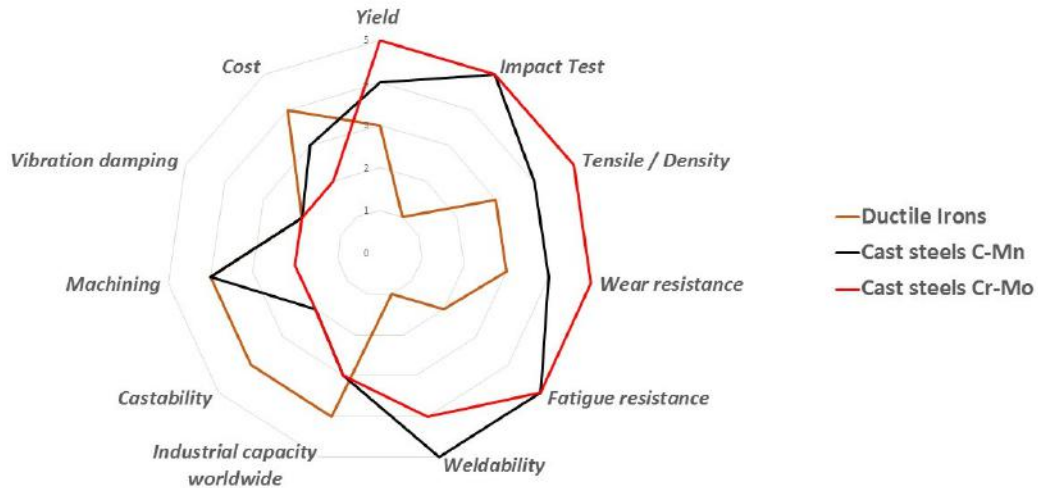


Impact test values (Kv)

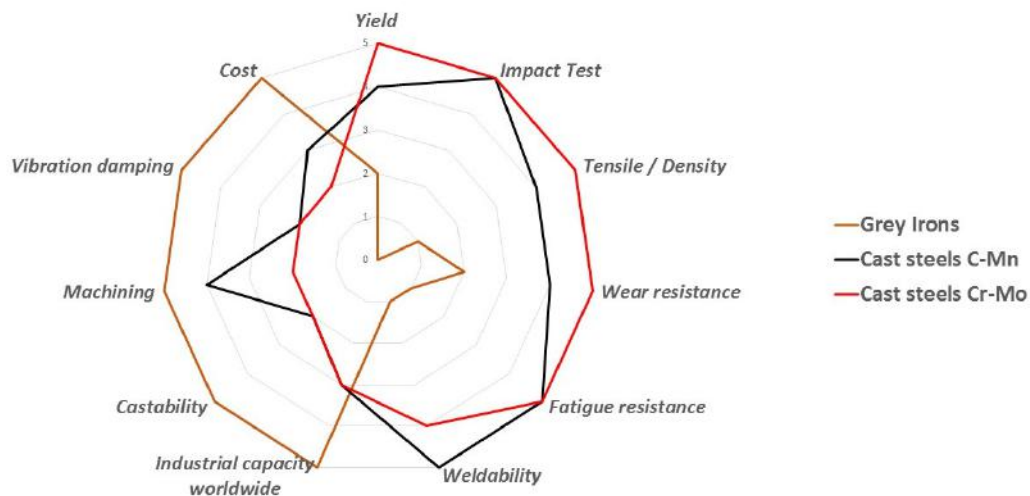


Cast alloys comparison

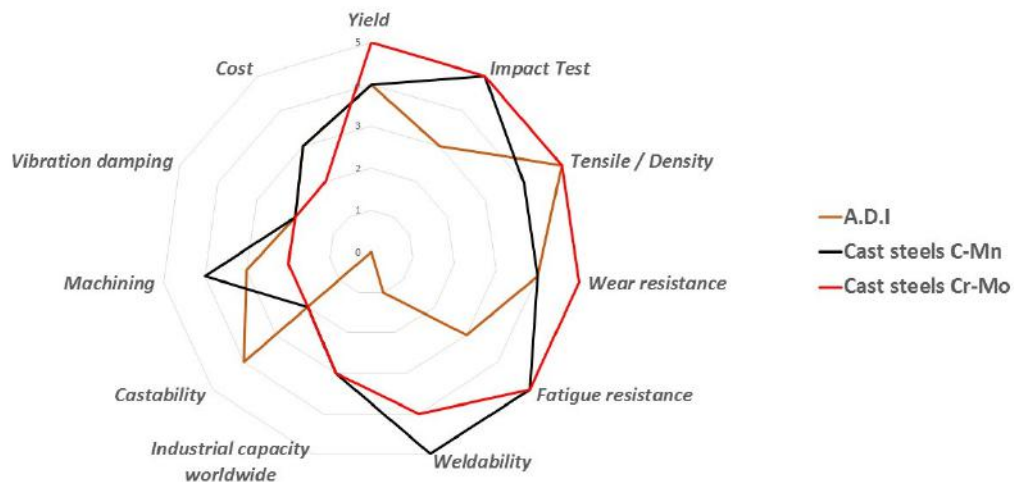
Cast Steels vs Ductile Irons



Cast Steels vs Grey Irons

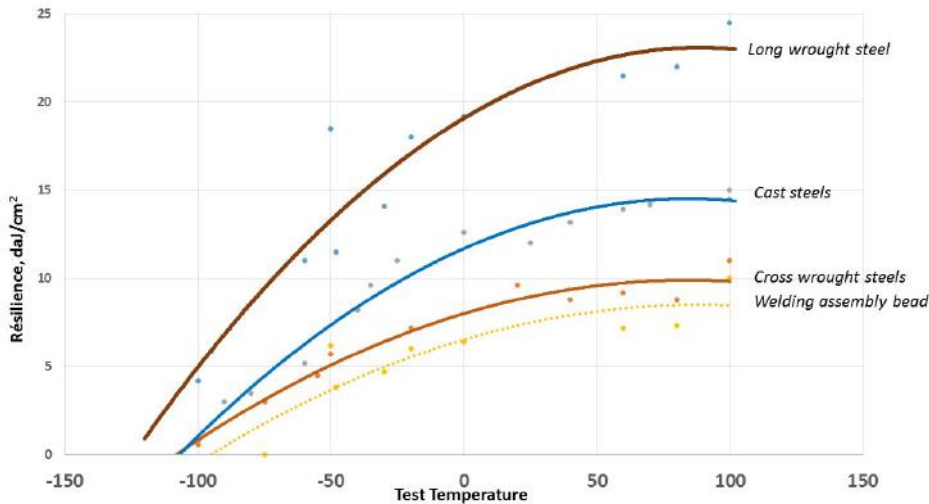


Cast Steels vs A.D.I



Cast steel & steel fabrication

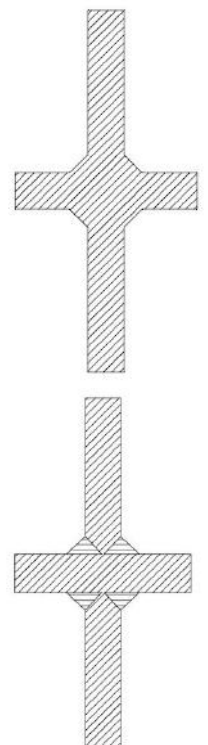
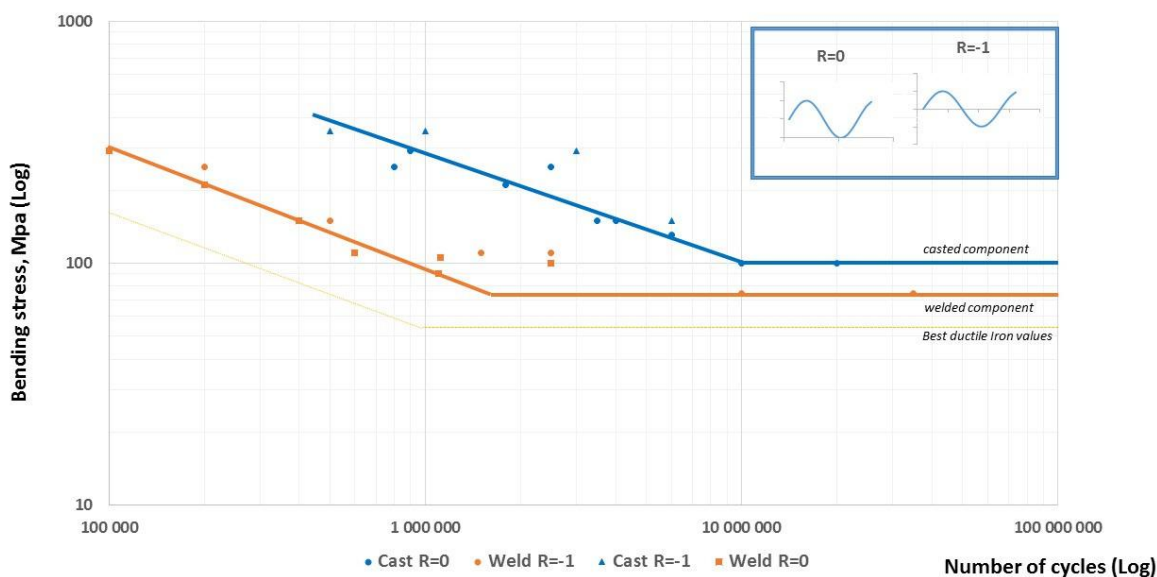
Impact test value

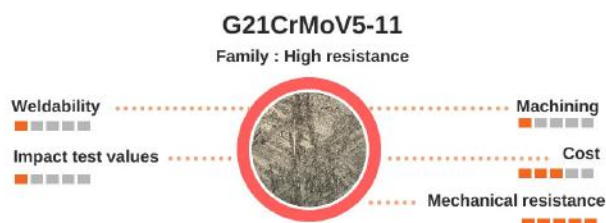
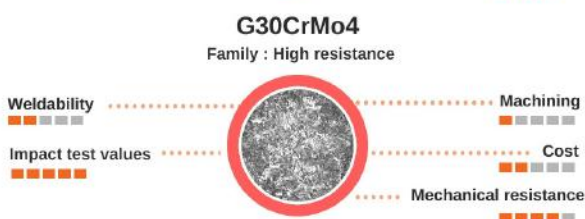
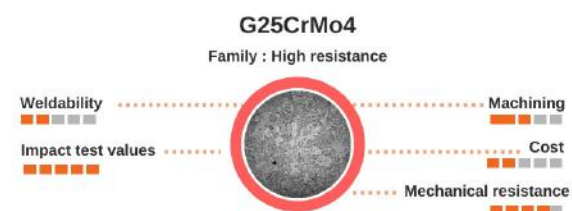
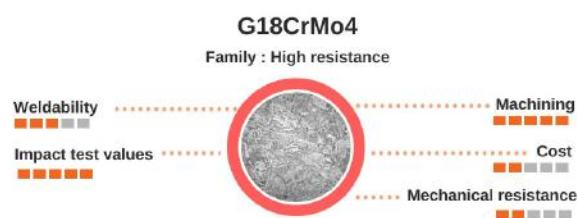
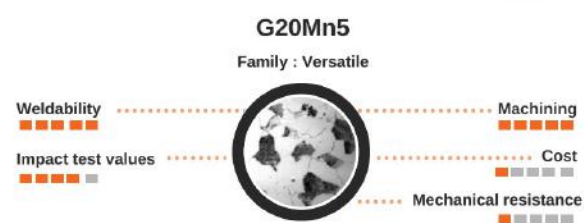
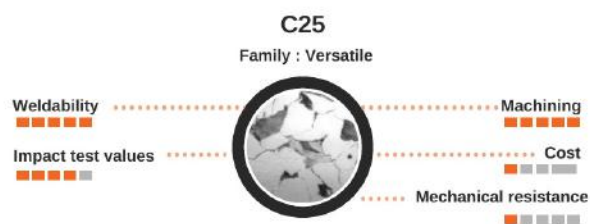


	Fabrications	Cast steel
Cost	Depend on raw material stock exchange market	
Weight	90 - 130	70 - 110
Development lead time	Quicker	Slower
Fatigue resistance	+ -	+++
Stress concentration	-	++
Multifunction	-	+++
Design	-	+

Isotropic cast steel structure drives same mechanical behavior on every directions while wrought steel gets anisotropic structure with large mechanical differences between long and cross directions. Fabrication with welded assembly of wrought steel keeps totally or partially stresses on cross fiber directions. Cast steel toughness is usually not as good as wrought steel in long directions but much better as wrought steel in cross directions.

C-Mn Steel Fatigue Resistance







L'esprit industriel



Learn more about us on our website :



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