	Gauge	Yield stress	r-Lankford n-Hollomon	Earing ΔC	Elongation	Microstructure
Denting resistance	■	■				
Appearance (smooth surface)		□			□	■
Printing quality				■		■
Shelf life						■
Pressure resistance (peaking)	■	■				
Single operation drawing			■		■	
Manufacturing - Efficiency			■			
Manufacturing - Trimming			■			

Steel for drawn cans

The drawn can is a unique way to demonstrate the outstanding forming ability of steel. The challenge can be assessed based on the height/diameter ratio: up to 0.8 in the case of a single draw using high performance steel, and much higher when a draw-redraw technique is used. Market is expecting an attractive appearance (smooth surface, good print quality) and the ablility to withstand seaming, retorting and palletisation constraints, without damage. Strong with eye-catching appeal.
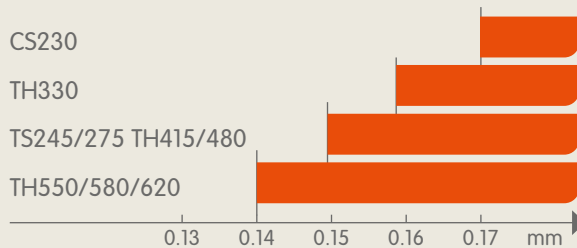
For successful production by drawing, the steel material has to combine quite specific properties:

- High r-Lankford value to make the manufacturing process much easier and minimise trim.
- Low earing, a true requirement for round cans, again to minimise trim.
- Very high values for elongation, r-Lankford and n-Hollomon if the designers are looking for very complex shapes: conical wall, non-linear contour, etc.
- A controlled microstructure and consistency of metal properties to enhance printing quality.

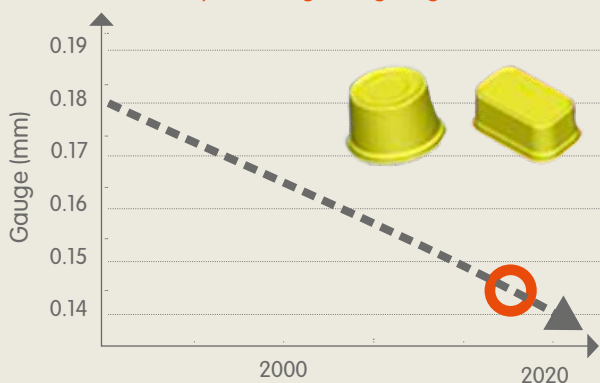Any drawn metal packaging will find an optimised solution in the ArcelorMittal catalogue:

- Creasteel® CS230 is the ultra high performance grade for very demanding shapes. It is the best choice to compete with aluminium.
- TH330 is specifically intended for round or rectangular cans, preferably those to be retorted with counter-pressure.
- TH550/580/620 is the cost-effective solution preferred for standardised formats, for example the famous tuna can. The gauge can be as low as 0.130 mm. High strength is required for retorting without counter-pressure or harsh conveying-palletisation conditions.

More than fifteen years of lightweighting

CS230 *Aluminium 5000 series*

Product offer for drawn cans