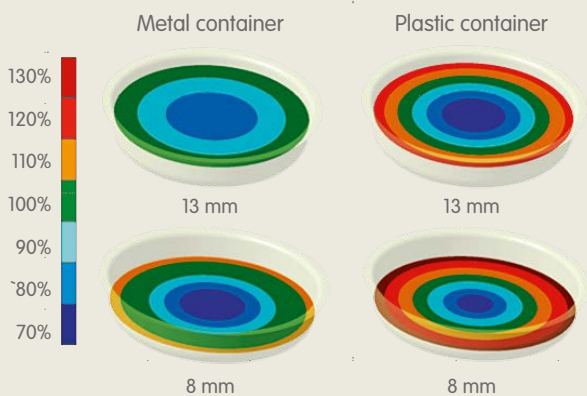




More uniformed heating



Temperature dispersion in metal and plastic containers at 8 mm and 13 mm height

Steel for microwaveable cans

With more and more people spending less and less time cooking and eating at home, the ready-meals market is very dynamic and is steadily growing worldwide (by around 10% per year for chilled ready meals). The consumer only needs to put the meal in the microwave oven for a few minutes and can then eat directly from the container. Most of these products today are packed in unattractive plastic trays that lose their rigidity when heated. This is not an environmentally friendly option either, since plastic trays are not recyclable and need secondary cardboard packaging. Thanks to its unique properties, steel packaging can offer added value to this market.

The Fraunhofer Institute in Feising, Germany, has demonstrated that the use of steel packaging in microwave ovens is totally safe, as long as a few basic guidelines are followed. The Institute also concluded that heating is more homogeneous in steel trays than in plastic trays, avoiding the formation of hot spots in the food. It recommends the use of wide, shallow containers (plate or bowl shape) for improved heating efficiency.

ArcelorMittal's special Creasteel® grade is perfectly suitable for drawing cans with low height and large diameter (90 mm and above). Creasteel® also makes it possible to draw attractive shapes in order to offer high-quality containers, thanks to its soft mechanical properties, high formability and high elongation (more than 35%). These trays can be drawn in just one operation, without any wrinkles, reducing the investment needed to develop a new shape. With Creasteel®, you can offer your customers premium decorated packaging for the ready-meals market!

	Yield stress (MPa)	Elongation (%)	Drawability properties
Steel 0.160 TH620	620	< 3	Standard
Aluminium 0.190-0.240	~ 200	~ 8	Standard
Creasteel® 0,170 CS230	230	> 35	High