



CASE STUDY

INVESTMENT CASTING

Size: 32 lbs | Alloy: CF8M

*Notes: This one-piece casting eliminated the need for costly and time-consuming fabrication.

Hand Tamale Maker Frame

One Piece Investment Casting Eliminates Welding. This investment casting was a dual effort between TPM, Inc. and their customer.

"Our customer approached us looking for a method to produce a frame which required no welding. The TPM, Inc. engineering team established a one-piece design, eliminating all previously required welding. The customer's lead welder, who was previously responsible for the welding of the assembly, thanked TPM for "taking this difficult weldment off of his plate," Antonio Garcia, VP, Sales & Marketing, explained.

The investment casting process was ideal for this component, which is now a one-piece casting. The only parameters given were the mating parts must still fit and function and the casting needed to be fit for food production. Weight reduction



pockets were added to make the cast as light as possible, while still maintaining the strength needed for utilization. Branding was also incorporated into the casting design.

The new casting is stronger, more aesthetically pleasing and does not have any crevasses where food or bacteria could be trapped. Now it is easier to clean and maintain, thus safer for the customer. The customer is so pleased with the CF8M design that they are interested in tooling to offer an aluminum investment cast frame.