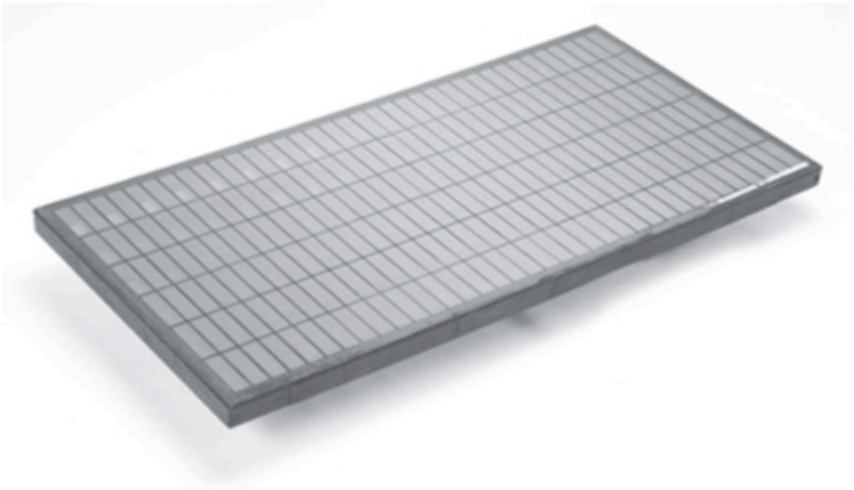
Sweco Filter Frames



Molder: Bemis Manufacturing Company

Product Description
The two styles represent two types of filters used for separation/filtering. These parts each contain molded-in metal reinforcements for strength. The plastic covering eliminates the need for stainless steel so carbon steel is used. They are insert molded and then overmolded with the sealing material.

Why is the product innovative?
These two similar products represent some of the largest metal inserted plastic encased products in the marketplace. The large rectangular product has a carbon steel caste made from both strips

of flat steel and rod. Both types are held in place by the injection die as the high pressure plastic is introduced into the mold. The flow pattern of the material is both complex and must be complete. The steel cage is far more costly than the plastic enclosing it. Short shots cannot be accepted. Once overmold is complete the robot transfers the frame to the second cavity where the seal is overmolded. The final product is produced at the OEM where additional screening materials are applied. Both products are produced in the manner described above. Both can be produced with low cost carbon steel. Both can be molded gaskets or seals applied in one machine within one cycle. Because of these similarities the two types were entered as one submission. Because these frames are engineered for both durability and strength they last significantly longer than their counterparts, are lighter weight and have more open surface area. Round filters are used in vibratory separators marketed by Sweco, a division of SI Swaco, who produces a variety of products for the oil drilling industry that markets the rectangular frame.