Using air instead of water to separate your recycling materials.
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Separating recyclables by density is nothing new. For many years, the use of wet tanks to remove heavy materials from lights has been very successful. Unfortunately, the disadvantages of this technology are increasingly apparent. With stringent and increasing environmental regulations, use of water is quickly become a messy proposition.

When material enters a wet tank, any contaminant on the material is quickly disappated into the water. Further, the material is now wet, and becomes increasingly difficult to handle and process further. Finally, periodic cleaning of the wet tank means the user needs to either pump out and save the water from the tank, or find a way to dispose of this now contaminated liquid.

Air classification is the answer to these issues. Machines such as the General Kinematics DE-STONER air classifier efficiently separate heavy materials from lights. Energy-efficient vibratory action and high velocity, low pressure air streams work in tandem to fluidize and stratify commingled materials according to differences in terminal particle velocity. Many De-Stoner systems are designed with "air curtains" to provide further separation after the initial cut of "heavies". The result: fast, efficient removal of heavy materials such as stones, metallics, and glass from lightweight materials such as aluminum, paper, plastics and wood.