



Asset 2345 Triple/S Dynamics Gravity Separator T-20R1

Description of Operation from Triple/S

The T-20 gravity separator from Triple/S Dynamics represents the largest of this company's separators, offering 20 square feet of surface. This unit offers superior separation performance in a compact, economical design, and simplified and rugged controls ensure that machine settings will be trouble-free as well as drift-free.

Material is fed onto a flat porous deck which is sloped in two directions. Low-pressure air is forced through the deck to fluidize and stratify the material bed. A vibrating action is applied to the deck in order to convey the heavier particles, which will have sunk to the bottom of the material bed, and up the inclination of the deck. Lighter particles are suspended in the rising airflow and slide down the slope of the deck.

The final result, presented at the discharge face of the deck, is a continuous gradation of material from the densest, largest particles to the lightest, smallest particles. Adjustable diverters, which are installed in the discharge chutes, are set to split off light or dense materials, with often a mixed 'middlings' fraction for re-treatment. The T-20 is equipped with an integral supply air blower, exhaust hood and slideout deck panel

Density separation is achieved with basically two components, mechanical vibration and air fluidization.

The Gravity Separator makes a highly sensitive dry separation on the basis of one of three particle characteristics: density, size or shape. When size and shape are controlled within certain limits, the gravity separator is unmatched in its ability to separate a complex mixture

by density. The relative size and shape of each component of the mixture also bear on the efficiency of the separation. Wide variations in these material characteristics can dramatically affect the separation results.