TDD TECHNIC

PRODUCT CATALOGUE · 2026

THS SERIES

AIR CLASSIFIER

A high-efficiency air separator system for precise particle-size control.



MICRONIZED MINERAL PRODUCTION TECHNOLOGIES

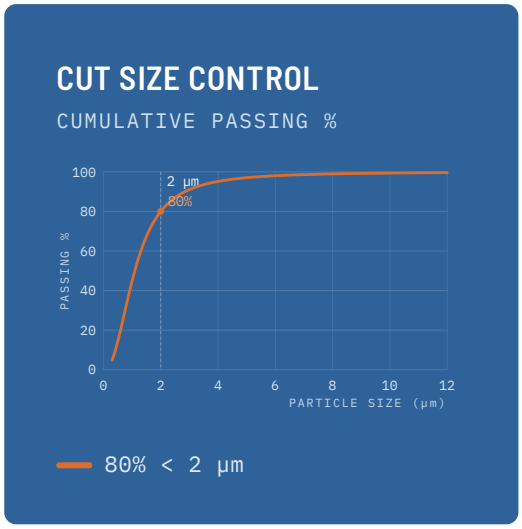
tddtechnic.com

PRECISE PARTICLE SIZE CONTROL

The THS Air Classifier is a high-efficiency air separator developed for classifying dry mineral powders with precise particle-size control. It is engineered to deliver high efficiency and sharp separation across the ultrafine range.

Through independent control of rotor speed and air flow, a target cut size of d50 ≤ 1 µm is achieved, with a sharp separation limit and a narrow particle-size distribution. Low pressure drop and low specific energy consumption ensure economical and reliable operation.

Operating in a closed circuit with ultrafine grinding lines, the system enables the production of premium-quality micronized products for the plastics, paint, paper and pharmaceutical industries.



KEY FEATURES

01

SHARP SEPARATION

d50 ≤ 1 µm; sharp cut limit and narrow particle-size distribution.

02

INDEPENDENT CONTROL

Rotor speed and air flow are adjusted independently for flexible fineness control.

03

LOW ENERGY

Low pressure drop and low specific energy consumption.

04

WEAR PROTECTION

Long service life through a wear-resistant rotor/blade design.

05

LOW CONTAMINATION

Material selection that minimizes metal/iron contamination.

06

EASY INTEGRATION

Easy, closed-circuit integration into grinding lines.

TECHNICAL SPECIFICATIONS & MODELS

MODEL OPTIONS

PARAMETER	THS-030-4	THS-030-6
Capacity*	0.5 – 1 t/h	1 – 3 t/h
Target particle size	d97 ≤ 5 – 10 µm	d97 ≤ 5 – 10 µm
Number of classifier rotors	4	6
Rotor speed	600 – 6000 rpm	600 – 6000 rpm
Total motor power	88 kW	132 kW

* Capacities are approximate values for calcite and vary with material type, feed fineness and target particle size.

APPLICATIONS

- Calcite, limestone and dolomite
- Talc and similar soft minerals
- Micronized mineral fillers



WORKING PRINCIPLE

The dry feed powder is directed toward the rotating classifier rotor together with the air stream. The balance between the rotor's centrifugal force and the drag force of the air flow determines the cut size: fine particles are collected as product, while coarse particles are returned. Independent adjustment of rotor speed and air flow rate ensures sharp and repeatable separation.

Forms a closed-circuit grinding–classification line together with the **TAM Beads Mill**.

WHY TDD TECHNIC

ENGINEERING THE MICRON
UNDER ONE ROOF.

01

ULTRAFINE LEVEL

Original machine design and manufacturing at the ultrafine particle-size level in Türkiye.

02

SINGLE-SOURCE SOLUTION

Engineering, machine manufacturing and spare-part supply under one roof.

03

CORE PRODUCT GROUP

The THS Air Classifier is the core product group that TDD Technic manufactures and services in Türkiye.

LET'S BRING YOUR PROJECT TO LIFE

Let's assess your needs with our expert team — request a quotation. →

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