

FILTERING

▶ Ceramic Vacuum Filter

Principle

Ceramic vacuum filter is mainly composed of several parts including roller system, agitation system, feeding and discharging system, vacuum system, filtrate discharge system, scraper system, back flushing systems, joint cleaning (ultrasonic cleaning, automatic acid feeding and cleaning) system, automatic control system, tank, and rack.

It has been widely used in the concentration of nonferrous metals, precious metals, ferrous metals, and non-metallic and the dewatering of the tailings in the mining industry, the dewatering of oxide, electrolysis slag, leaching slag, and slag in the chemical industry, and the sewage, sludge and waste acid treatment of the environment protection industry, etc. The fineness of the materials ranges from -200 to -450 meshes, and even ultra-fine.



Features

Vacuum (vacuum 0.09 - 0.098MPa), and low cake moisture.

Solid content <50ppm. Repeated use and emission reduction.

Compared with conventional ceramic vacuum filter, the filter cake washing is equipped for the material to be washed.

PLC, microcomputer control combined with automatic valves, high degree of automation, and labor intensity reduction.

Compact, small floor area, easy installation and maintenance.

Advanced drain system may be suitable for use under all operating conditions.

Technical Parameters

| Model | Filter Area (m ²) | Number of Filter Disc (Circle) | Number of Filter Plate (Piece) | Tank Volume (m ³) | Installed Power (kW) | Operation Power (kW) | Main Frame (L×W×H) (m) |
|--------|-------------------------------|--------------------------------|--------------------------------|-------------------------------|----------------------|----------------------|------------------------|
| TC-1 | 1 | 1 | 12 | 0.21 | 3.5 | 2.0 | 1.6×1.4×1.5 |
| TC-4 | 4 | 2 | 24 | 1.0 | 7.0 | 3.0 | 2.4×2.5×2.1 |
| TC-6 | 6 | 2 | 24 | 1.2 | 7.0 | 6.0 | 2.4×2.9×2.5 |
| TC-9 | 9 | 3 | 36 | 1.7 | 9.0 | 7.0 | 2.7×2.9×2.5 |
| TC-12 | 12 | 4 | 48 | 2.2 | 11.0 | 7.5 | 3.0×2.9×2.5 |
| TC-15 | 15 | 5 | 60 | 2.7 | 11.5 | 8.0 | 3.3×3.0×2.5 |
| TC-21 | 21 | 7 | 84 | 4.0 | 13.5 | 9.0 | 4.6×3.0×2.6 |
| TC-24 | 24 | 8 | 96 | 4.5 | 16.5 | 10.5 | 4.9×3.0×2.6 |
| TC-27 | 27 | 9 | 108 | 5.0 | 17.0 | 11.0 | 5.2×3.0×2.6 |
| TC-30 | 30 | 10 | 120 | 5.5 | 17.5 | 11.5 | 5.5×3.0×2.6 |
| TC-36 | 36 | 12 | 144 | 7.0 | 23.0 | 16.0 | 6.6×3.0×2.6 |
| TC-45 | 45 | 15 | 180 | 8.5 | 25.0 | 19.0 | 7.5×3.0×2.6 |
| TC-60 | 60 | 15 | 180 | 12.5 | 33.0 | 22.0 | 7.5×3.3×3.0 |
| TC-80 | 80 | 20 | 240 | 16.2 | 40.0 | 24.0 | 9.0×3.3×3.0 |
| TC-102 | 102 | 17 | 204 | 18.5 | 53.0 | 35.0 | 8.8×3.6×3.3 |
| TC-120 | 120 | 20 | 240 | 20 | 60.0 | 40.0 | 9.7×3.6×3.3 |
| TC-150 | 150 | 25 | 300 | 24 | 75.0 | 47.0 | 11.2×3.6×3.3 |