TECHNICAL SPECIFICATION SHEET

Heavy-Duty Industrial Centrifugal Blower / Induced Draft Fan

1. Product Overview

This specification sheet outlines the design parameters and operational capabilities of the high-pressure industrial centrifugal blower shown in the reference image. Commonly designated for **Induced Draft (I-D)** and **Forced Draft (F-D)** boiler systems, cement mills, and heavy manufacturing ventilation, this equipment is engineered to efficiently move large volumes of air, flue gases, and particulate matter under high structural stress.

2. Design & Construction Features

• **Drive Configuration:** Belt-driven setup protected by a distinct heavy-duty, ventilated safety yellow guard for maximum workplace safety and easy maintenance access.

• **Housing & Casing:** Ruggedly fabricated from high-grade carbon steel (or customizable stainless steel) with an aerodynamic scroll casing to optimize velocity-to-pressure conversion.

• **Base Frame:** Heavy steel channel structure provides rigid grounding, minimizing vibrations and ensuring structural alignment between the motor mount assembly and bearing blocks.

• **Bearing Block:** Dual parallel block high-performance bearing system to guarantee stable long-term continuous rotation.

3. Technical Parameters & Operational Ranges

Parameter	Standard Operational Range / Value
Model Reference	Y5-47 / Y5-48 Series Boiler Centrifugal Fan Equivalent
Drive Configuration	Belt Drive (SISW - Single Inlet Single Width)
Flow Capacity (Air Volume)	2,500 – 98,000 m^3/h (dependent on size)
Total Pressure Rate	500 – 3,500 Pa
Motor Power Options	0.55 kW to over 150 kW (Customizable)
Rotational Speed	900 / 1500 / 2800 / 3150 RPM configurations
Maximum Gas Temperature	Standard: up to 80°C | High-Temp/Boiler: up to 250°C
Dust & Hard Particle Limit	≤ 150 mg/m^3
Supported Voltages	220V / 380V / 440V / 6KV (Phase 3 options)
Certification Alignment	ISO, CE, CCC, RoHS compliant design criteria

4. Primary Industrial Applications

This category of high-efficiency centrifugal blowers is primary utilized in: **1) Industrial Steam Boilers & Power Stations:** For handling hot flue gas extraction and smoke mitigation. **2) Material Processing & Cement Plants:** Circulation in raw material mills and air supply purification lines. **3) Forging & Chemical Processes:** Safe conveyance of non-flammable, non-hypergolic, non-corrosive exhaust gases.

Disclaimer: The operational parameters stated in this document represent aggregated baseline technical data aligned with standard Y5 series centrifugal blowers and industrial fan engineering principles. Exact specifications must be verified against specific motor selections, impeller profiles, and manufacturer certification metrics.