

OFFICIAL B2B ENGINEERING SPECIFICATION DOSSIER · BESTCLEAN-DOC-2026-01

MODULAR CLEANROOM TURNKEY EPC & ENVELOPE PACKAGE
MASTER GUIDE

ISO 14644-1 Class 5–8 · EU GMP Grade A–D · FDA cGMP · HACCP Zoning · Direct Factory Supply

Executive Engineering Summary: Zhangzhou Bestclean Technology Co., Ltd. (BESTCLEAN) and our wholly-controlled manufacturing plant Longhai Berking Purification Equipment Co., Ltd. (BERKING / 佰净) engineer, manufacture, and deliver modular cleanrooms from 100 m² to 10,000+ m². Because we self-manufacture the air showers, pass boxes, FFUs, HEPA terminal boxes, cleanroom doors/windows, and DX AHUs on our own CNC sheet-metal lines in Zhangzhou, Fujian (45 minutes from Xiamen Port), total project CAPEX closes 20–40% below contractors who outsource equipment.

1. Quantitative Engineering, Compliance & FOB Xiamen Reference Matrix

Cleanroom Class / Standard	Air Changes (ACH) & Velocity	Envelope & Wall/ Ceiling Core	HVAC & Pressure Cascade	Ref. FOB Xiamen (USD/ m²)
ISO Class 5 (Class 100 / GMP A)	Unidirectional 0.36–0.54 m/s	50/75mm SUS304 or antibacterial steel + Aluminum Honeycomb	ULPA U15 / HEPA H14 FFU grid (>=80% ceiling) + +15 Pa cascade	\$210 – \$260 / m²
ISO Class 6 (Class 1,000)	50 – 70 ACH	50mm Double-Skin Color Steel + Class A Rockwool (100 kg/m³)	H14 Gel-Seal / FFU ceiling + DX/Chilled Water AHU + +12.5 Pa	\$155 – \$210 / m²
ISO Class 7 (Class 10,000 / GMP C)	25 – 40 ACH	50mm Color Steel + Rockwool / Magnesia Oxsulfide (MgO)	G4+F8+H13 AHU + HEPA terminal diffusers + +10 Pa cascade	\$115 – \$160 / m²
ISO Class 8 (Class 100,000 / GMP D)	15 – 25 ACH	50mm Color Steel + Rockwool / PU (Food & Supplement cGMP)	B-JZP DX Hygienic AHU (18–26C, RH 45–65%) + H13 terminals	\$85 – \$125 / m²
HACCP Food & Beverage Hall	12 – 20 ACH + Ozone Sterilization	50/75mm SUS304 or Food-Grade PVDF Coated Panel + Coved R50	Washdown hygiene entry (Boot Washer + Air Shower) + ZCA Ozone	\$78 – \$115 / m²

2. BESTCLEAN / BERKING Factory Verification & Buyer Protection Guarantees

1. Direct Factory Manufacturing
Longhai Berking Purification Equipment Co., Ltd. (Zhangzhou, Fujian · 45 min to Xiamen Port). In-house fiber laser CNC, press brakes, and mini-pleat HEPA lines cut 15-25% middleman markups.

2. Verified FAT & Certificates
ISO 14644-1:2015, ISO 9001:2015, CE Machinery/LVD, US EPA Est. No. 102553-CHN-1, EN 1822 H13/H14, EN 10204 3.1 SUS304/316L MTC. Pre-shipment SGS/BV/TUV witness testing welcomed.

3. Global & SE Asia Delivery
3 delivery modes: (A) Modular Material & Equipment Kit FOB/ CIF; (B) Kit + Chief Engineer Supervision; (C) Turnkey EPC across Vietnam, Thailand, Indonesia, Malaysia & Philippines.

Fast-Track Stage-1 Engineering Scope, CAD Layout & Itemized BOQ (2-Hour Response SLA)

Send your floor plan, room dimensions, target ISO class, or equipment list to **Alex Gao** at **alex@bestcleanmfg.com** or WhatsApp **+86 139 2512 2895** (Web: **www.bestcleanmfg.com/contact**). We return a preliminary CAD zoning layout, airflow/ozone sizing calculation, and itemized factory-direct FOB/CIF quotation within 24 hours.