Automatic Fluorescence Sample Preparation Press 40 Ton Lab Pellet Press For Xrf Analysis

Número de artículo: PYGA

Introducción

Maximize your XRF analytical accuracy with this premium automatic 40-ton fluorescence sample preparation press featuring advanced PLC touchscreen controls integrated automatic demolding cycles and high-pressure hydraulic reliability to deliver consistent high-density pellets for precise industrial spectroscopic laboratory material testing.

Aprende más

Application	Description	Key Benefit
Scientific Research	High-pressure preparation of powder pellets for advanced XRD, XRF, and FTIR spectroscopic analysis in university and national laboratories.	Eliminates human error, yielding highly uniform pellets for ultra-precise academic research.
Pharmaceutical & Chemical	Compacting active pharmaceutical ingredients (APIs), excipients, and raw chemical powders into high-density discs for structural analysis.	Maintains high chemical purity with easy-to-clean mold surfaces to avoid cross-contamination.
Catalytic Reaction	Compacting catalyst substrates and active metallic powder mixtures into stable pellets for high-temperature and high-pressure reactor testing.	Prevents sample crumbling under thermal stress, ensuring accurate evaluation of catalytic efficiency.
Ceramic Materials	Compaction of high-performance technical ceramics, oxides, and nitrides prior to sintering and microstructural evaluation.	Ensures high green density and uniform pore distribution, minimizing defects during downstream firing.
Electronics Industry	Processing semiconductor materials, target sputtering materials, and piezoelectric components into dense, uniform disks.	Delivers outstanding physical density and structural integrity required for precise electronic characteristic mapping.
Battery & Energy Research	Compressing solid-state electrolytes, lithium-ion battery electrode formulations, and supercapacitor powder materials for electrochemical testing.	Maximizes particle-to-particle contact, providing highly accurate electrical conductivity and ionic transport measurements.
Jewelry & Gemstones	Nondestructive analysis preparation of precious metals, minerals, and gemstone powders for rapid elemental composition verification.	Retains sample matrix integrity, enabling precise classification and grading of valuable minerals.
Cement & Ore Processing	Pressing raw meal, clinker, cement powder, iron ore, and geological slag with boric acid backing for routine XRF quality control.	Rapid, high-throughput sample prep that stands up to harsh, high-dust industrial processing environments.

Technical Parameter	Specification Value
Model Identifier	PYGA
Control Mode	PLC Program Control via Color Touchscreen (Bilingual Chinese/English support)
Maximum Compression Force	40 Metric Tons (40 T)
Dwell Time (Hold Time)	Fully Adjustable / Arbitrary Duration
Piston Maximum Stroke	100 mm
Daylight / Vertical Column Clearance	220 mm
Compatible Mold Formats	Boric Acid Cup, Aluminum Cup, Steel Sleeve, Plastic Cup / Ring
External Dimensions (L x W x H)	650 mm x 540 mm x 1240 mm
Total Net Weight	Approx. 325 kg

Technical Parameter	Specification Value
Electrical Power Supply	AC Three-Phase 380 V ± 5%, 50 Hz
Rated Power Consumption	1.3 kW
Power Cable Assembly	Five-Core (3 Phase Lines + 1 Neutral + 1 Ground), Length > 2 meters
Recommended Hydraulic Fluid	L-HM46 High Wear-Resistant Hydraulic Oil
Safe Operating Temperature Range	10 °C to 40 °C