

Synthetic Diamond Cubic Hydraulic Press for Super-Hard Materials

This hydraulic press is designed for synthesizing diamonds and processing super-hard materials. The cubic hydraulic press uses high pressure and temperature to create synthetic diamonds.



Overview

High-Performance Synthesis Press

This hydraulic press is engineered for the high-pressure, high-temperature synthesis of super-hard materials including industrial-grade diamonds and polycrystalline diamond (PCD). Featuring advanced control systems like PLC and programmable heating, the unit ensures precise synthesis conditions within chambers ranging from 30mm to 50mm. Designed for reliability and structural integrity, it stands as a proven solution for industrial-scale synthetic material production.

Technical Specifications

Available Press Models (Clamping Force)

- 14,000 KN
- 18,000 KN
- 20,000 KN
- 25,000 KN
- 28,000 KN
- 30,000 KN

Synthesis Chamber Diameter

30 mm

Min Diameter

50 mm

Max Diameter

Features

Automation & Control

- Programmable Logical Controller (PLC)
- Touch Screen Interface
- Digital Pressure Controller
- Constant Power Heating Controller

Core Patent Technologies

New Type Working Cylinder, Thin Wall Working Cylinder, Advanced Hydraulic System, Temperature Control System

Service & Support

Included Services

Installation • Test-run • Spare Parts Supply • Personnel Training