

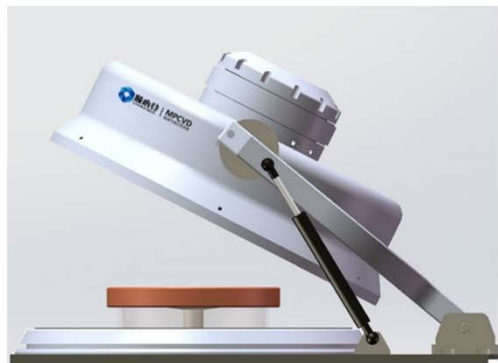


Let there be no difficult diamond manufacturing in the world

# 上海顺心谷半导体科技有限公司



Shanghai Shunxingu Semiconductor Technology Co., Ltd.



Determined to become the No.1 MPCVD supplier in China

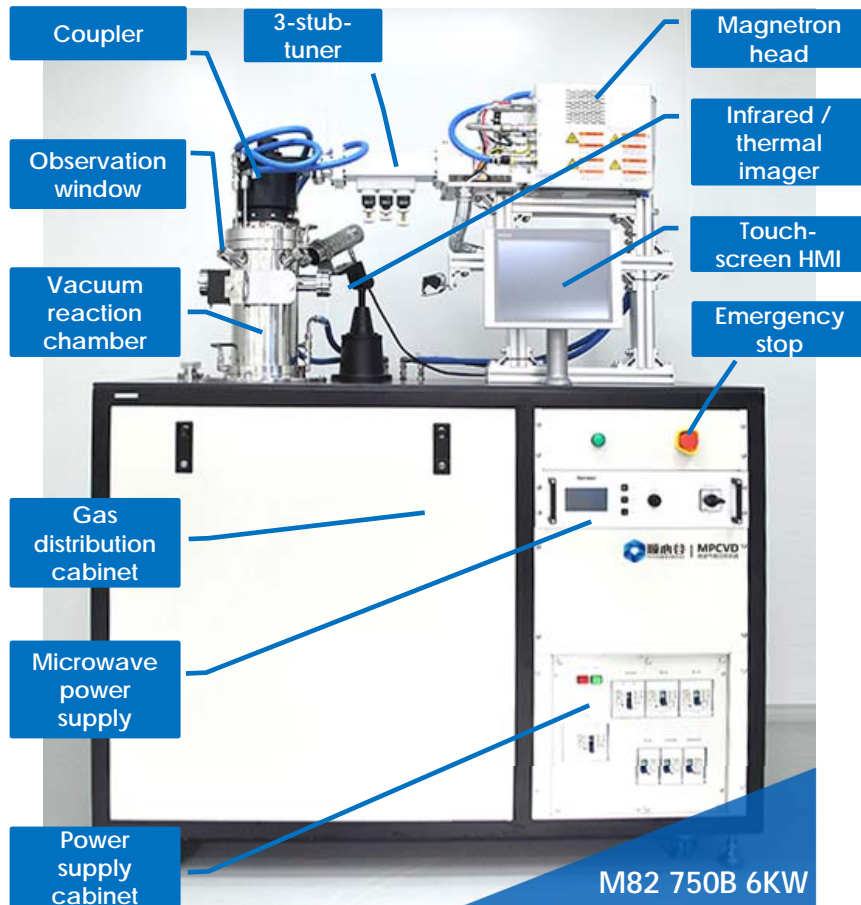


## Introduction M82 750B 6KW

- Designed with profound engineering skills to make sure that cutting edge technologies are made available to our valued customers
- Extremely stable operations and outstanding cost-efficiency
- All components are carefully selected and/or processed with great precision
- During the assembly, stringent and multi-level test procedures are rigorously carried out with zero tolerance for flaws
- To ensure a safe and productive operation, a distinguishing user-friendly program interface with various applications and protection mechanisms was established
- Customers applying M82 750B 6K are rewarded with a quality of synthesized diamonds which can repeatably fulfill the F, E and under circumstances even D color classes.



# Device Parameters



Item	Data
Device model	M82 750B 6KW
Power supply	AC380V±10% 50Hz
Operating system	SXG-MPCVD Control System
Microwave Source	Muegge 2450MHz/6KW
Chamber nominal power	10 KW
Substrate size	Φ 2 inches
Working pressure	10-200 Torr
Standardized gas configuration	5-6 gas lines (can be customized)
Temperature measurement	Infrared or thermal imaging measurement; temperature range: 300~1400 °C
System vacuum tightness (leak detection by helium mass spectrometer)	$<1 \times 10^{-9}$ Torr·L/sec
Vacuum pump	17.1 m <sup>3</sup> /h
Monocrystalline growth rate	10-15 μm/h (acc. to customer reference)
Equipment dimension	1500mm(length)* 800mm(depth)* 1980mm(height)
Equipment weight	490 kg



## Highlights

High precision and integration level of the equipment, high space utilization

Optimized cavity and adapter design by means of field simulation, enhancing growth efficiencies

Precisely controlled temperature-water-cooled reaction chambers and automatically real-time adjustable growth substrate

High-precision process-gas flow control enables longtime and stable operations



Upon customer's requirements, it's optionally available to monitor the temperature field within the reaction chamber with a thermal imaging camera

Flexible automatic/manual switching operation and extensive data logging capabilities

Imported microwave system from Europe with high output energy density within which the plasma ball can maintain a high degree of stability



## Contact us



Thank you for your attention!



**Location:** Qingpu district, Shanghai, PR. China  
**Website:** [www.shunxingu.com](http://www.shunxingu.com)  
**Agent:** [kevinpu@dreyppunkt.com](mailto:kevinpu@dreyppunkt.com)