

TECHNICAL SPEC FOR Deposition tool

System Model:

Watkins Johnson WJ 999R

Process: TEOS and HYDRIDE

Wafer size: Set up for 6" (double wide). Can do 4", 5" (double wide), also 8" after carrier modification ?

Pumps: N/A

Controllers: Integrated

Handler type: Front platform, loading left, unloading right (2 X in, 2X out + overflowcarrier)

Manipulator: MECS

Double wide wafer transfer: Yes

Thru beam LS Sensor: Yes

HPE Parameters: Integrated

Exhaust: Yes

Gas specification: TEOS process : TEOS, TMPi, TMB
Hydride process : SiH₄, PH₃, B₂H₆
Belt etch : HF

MFC's & Ranges: LongList

Flow meter setup: LongList

AutoDepoStop: Yes

Belt revs: Actual

Etcher power interlock: Yes

Sonic cleaner power interlock: Yes

Wafer cassette slots: 25 slots, 2 load- and 2 unload stations and overflow

Maximum batches: > 6

Gas controller injector purge time: Setup

Temperature / Belt speed range: Up to 550 °C ? / 0~8 inch/min

Belt speed reset: Yes

Exhaust system type: Process exhaust with MKS throttle valve

Monoblock: No, parallel plates

Injector temperature: 45°C HYDRIDE / 65°C TEOS

Film: TEOS / HYDRIDE

Missing/defective parts: None

SW Version: Various

Vintage: 1992

Serial plate of Mainframe 4816 / 4817