



TSV Clean

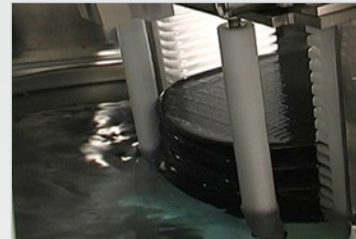
Solvent Technology

Soaking



- Immersion in Inert Environment
- Heated, Re-Circulated Solvents

Equal Time Soaking



- Single Wafer Soak Processing
- Equal Time Software

Wet Transfer



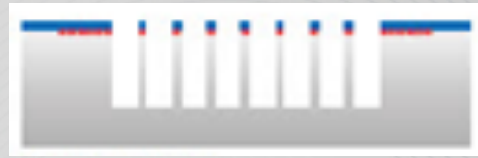
- Solvent Wet Wafer Transfers
- Maintain Solvent Film with 4-Blade Robot

High Pressure Spray

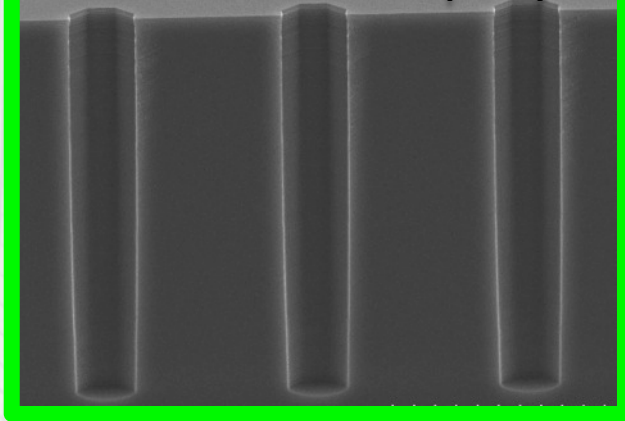


- 300 to 3000 PSI solvent spray
- Heated, Re-circulated with Flow Rate Control

Use Case 1: TSV Clean

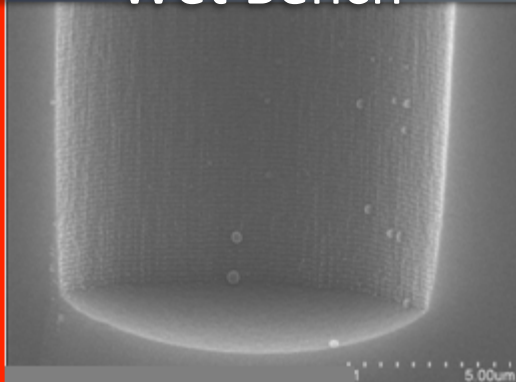


SSEC "Soak & Spray"



- ✓ Complete photoresist removal
- ✓ Complete sidewall polymers removal
- ✓ Fast throughput using "Soak & Spray" Technology

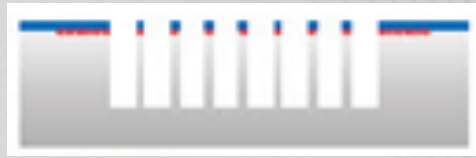
Wet Bench



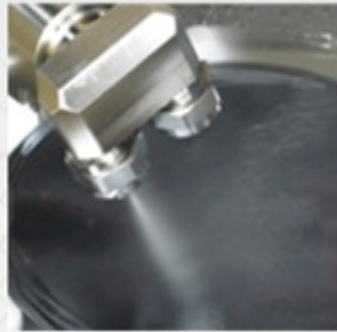
Spray only



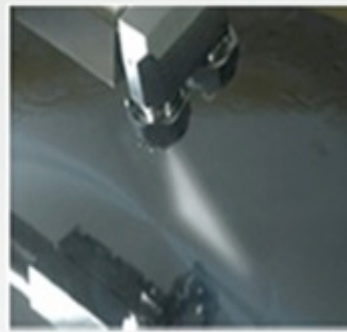
Use Case 1: TSV Clean



Step 1: Heated immersion process



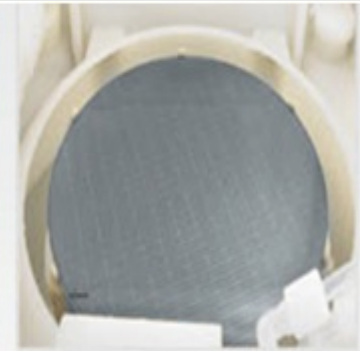
Step 2: Heated HPC fan solvent spray



Step 3: IPA Rinse

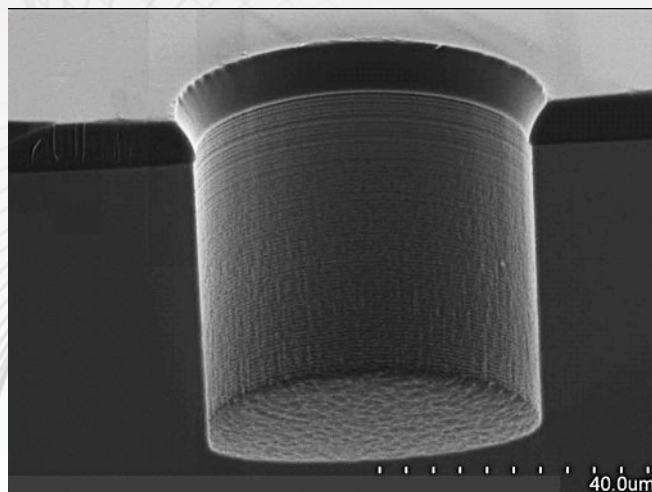


Step 4: Megasonics



Step 5: Spin Dry

After DRIE



After Cleaning

