

PCT-CRS-150 is PicoTrack’s latest development that offers the most advantages. With a flexible configuration, it easily adapts too many kinds of lithography process such as MEMs, IC, LED, etc.

Offers in one tool a capacity up to 4 spin modules, 6 Hotplates and dual robot arms for wafer handling yielding the highest throughput and smallest foot print.

High quality design using open commercial part that easily facilitates spare parts management by end users.



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| General | Model |
| ***CRS-150*** | ***CRS-200*** |
| Wafer size | 2’’-6’’ | 6’’-8’’ |
| Waferload port | X4 | X4 |
| Substrate handling(Round/Square) Silicon / Saphire / Glass / Ceramic |
| Wafer transfer | 2 robots with 2 ends each |
| Modules configurations |
| 6 Hotplate | 4Cups | 4Cups |
| 4 IO port |
| 0 Hotplate | 8Cups | NA |
| 4 IO port |
| System Basic |
| System Basic | Distributed module controlle |
| Wafer size | wafer 5” &6” setup |
| Wafer handling | Shuttle Robot Arm |
| Wafer contact material | PFA , Anodized Alu |
| Position accuracy | ≤ 0.1 mm |
| Indexer |
| Cassette sensor | Microswitch |
| Wafer mapping | Optical mapping |
| Position accuracy | ≤ 0.1 mm |
| Indexer Type | STD |
| HPO |
| Temperature range | 25 – 250ºC |
| Temperature uniformity | ≤ 1%(50-150ºC), ≤ 1.5% (151-250ºC) |
| Temperature accuracy | +/-1ºC |
| Plate type  | Black/Clear anodized Aluminum |
| Bake method | Contact bake (standard)Fixed proximity bake (option)Proximity bake ( Programmable) |
| Chill Plate |
| Temperature range | 18 – 25ºC |
| Temperature uniformity | ≤ 0.2ºC |
| Plate type | Black anodized Aluminum |
| Chill method | Contact  |
| Coater |
| Maximum spin speed | 7000 rpm (7500 Without wafer) |
| Spin speed accuracy | ≤ 2 rpm |
| Acceleration range | 0-30000 rpm/sec |
| Chuck temp. uniformity | ≤ 0.2ºC across spin chuck |
| Disp. Arm motion control | Stepper motor |
| Disp. Arm motion type | Rotation |
| Disp. Arm accuracy | ≤ 0.1 mm |
| Number of nozzles | 03 nozzles (3/16” ODT) |
| Pre-dispense | Yes |
| Bottom EBR | Yes |
| Solvent nozzle tip bath | Option |
| Catch Cup Rinse | Option |
| Wafer centering | ≤ 0.1 mm |
| Drain | 5 gallon Waste jar or direct facility |
| Resist pump | Interface P/R pump P-600-2D |
| Resist temp. controller | ≤ 0.1ºC (18-30ºC range), option |
| Air temp. control | ≤ 0.1ºC (18-30ºC range), option |
| Humidity control | ≤ 0.1ºC (18-30ºC range), option |
| Top EBR accuracy | ≤ 0.5 mm |
| Wafer centering  | ≤ 0.3 mm |
| Drain | 1 gallon drain bottle or direct drain |
| Within wafer coating uniformity | ≤ 130Å (3σ) with cooling system |
| ≤ 150Å (3σ) without cooling system |
| Wafer to wafer coating uniformity | ≤ 135Å (3σ) with cooling system |
| ≤ 150Å (3σ) without cooling system |
| Cassette to cassette coating uniformity | ≤ 150Å (3σ) without cooling system |
| Developer |
| Maximum spin speed | 7000 rpm ( 7500 rpm without wafer) |
| Spin speed accuracy | ≤ 2 rpm |
| Acceleration range | 0-30000 rpm/sec |
| Acceleration accuracy | ≤ 3% |
| Spin direction | Clockwise(+) & Counterclockwise (-) |
| Spin Motor type | Servomotor  |
| Chuck temp. uniformity | ≤ 0.2oC across spin chuck |
| Dispense arm motor control | Stepper motor |
| Dispense arm accuracy | ≤ 0.1 mm |
| Number of nozzles | 01 DED spray, stream, DIW rinse |
| Fluid temp. control | ≤ 0.2oC (18-30oC range), option |
| Dispense method | Pressurized canister |
| Exhaust control | Option |
| Backside rinse | Standard |
| Wafer centering | ≤ 0.4 mm |
| Eo uniformity | ≤ 3% |
| Within wafer CD uniformity | ≤ 0.04 µm (3σ) with Cooling system |
| ≤ 0.06 µm(3σ) without cooling system |
| Wafer to wafer CD uniformity | ≤ 0.05 µm (3σ) with cooling system |
| ≤ 0.07 µm (3σ ) without cooling system |
| Long term Dev. Process | ≤ 0.06 µm (3σ) with cooling system |
| ≤ 0.08 µm (3σ) without cooling system |
| Reliability |
| MTBF | ≥ 500 hours |
| MTBA | ≥ 200 hours |
| MWBF | ≥ 10000 wafers |
| MWBA | ≥ 2000 wafers |
| MTTR | ≥ 2hours |
| Uptime | ≥ 98% |
| Wafer breaker | ≥ 1 in 10000 wafers |
| Safety |
| Teflon wiring | Standard |
| Solvent plumping | Teflon or SS |
| Exhaust Alarm | Standard |

