SPECIFICATIONS FOR NSR-2005i10C

1. GENERAL

This system exposes a 5 : 1 reduction of a reticle pattern on to a wafer through step-and -repeat operations. It automatically performs reticle positioning and exposure focusing. The system also automatically performs pattern registration using the laser step alignment and field image alignment system.

2. SYSTEM CONFIGURATION

2.1 Main body

(1) Reduction projection optical system
(2) Illumination optical system
(3) Auto focus system
(4) Auto leveling system
(5) Reticle alignment system
(6) Auto reticle blind system
(7) Wafer global alignment system
(8) Field image alignment system (FIA)
(9) Laser step alignment system (LSA)
(10) Interferometer unit
(11) X-Y stage
(12) Wafer table
(13) Wafer loader: Type2 (Left or Right Cassette) 1ea
(14) Reticle loader (Center 13slots)
(15) Vibration isolation table
(16) Environmental chamber

2.2 Control Rack

(1) Stage controller
(2) Interferometer counters
(3) Wafer alignment controller
(4) Reticle controller
(5) Lens controller (including automatic laser compensator)
(6) Wafer loader controller & Reticle loader controller
(9) Mini computer system (PDP11/93)
(10) Operation Panel
(11) CRT & ITV controller

3. PERFORMANCE

1) Resolution

0.45 ㎛

2) Lens Type

5ib3

3) N.A. 0.57

4) Reduction Ration 5 : 1

5) Exposure Area 31.11㎜ dia.

22.0㎜(hor) × 25.2㎜(ver)

6) Exposure wavelength i-line (365 nm)

7) Ultra-high-pressure mercury lamp 2000W

4. RETICLE AND WAFER SPECIFICATIONS

1) Reticle size: 6 Inch × 6 Inch

2) Wafer size: 8inch wafer