



# Product Portfolio

**World Leading  
Supplier Of  
Lithography  
Solutions**

# Nanoimprint Lithography Tools

Our nanoimprint lithography product portfolio ranges from easy-to-use semi-automated tools to fully automated tools suitable for high volume manufacturing.

## Highlights

- Thin and uniform residual layer
- Capable of performing UV as well as thermal NIL processes
- Highly customizable through tool options
- Integrated IPS handling as well as optional CVD anti-stick treatment (large substrate only)
- Automated IPS application and demolding (large substrate only)

## Features

- Full area imprint up to 500x500 mm substrate size
- SoftPress technology ensuring conformity between stamp and substrate for uniform residual layer thickness
- Sub 20nm pattern replication capability
- Capabilities to imprint on curvatures and non-flat surfaces
- STU (Simultaneously Thermal and UV) process capability



# SINDRE® INTEGRA/ SINDRE® LITHO TRACK

## Highlights

- Fully automated production tool
- Industry leading cost-of-ownership
- Throughput up to 70 WPH
- In-line CVD anti-stick of IPS®
- In-line IPS® resist coating

## Features

- Reliable High Volume Manufacturing capabilities
- Sub 20 nm resolution
- Excellent CD control
- Substrates sizes up to 300 mm Ø

## Highlights

- Fully automated & modular NIL system
- Available modules; substrate clean, coat, bake, alignment and nanoimprint as well as integrated IPS manufacturing and antistick treatment
- Throughput up to 45 WPH

## Features

- Integrated resist processing
- Integrated alignment function
- Reliable High Volume Manufacturing capabilities
- Sub 20 nm resolution
- Excellent CD control
- Substrates sizes up to 500x500 mm



# Resist Processing Tools

We offer both automated and semi-automated resist processing tools, suitable for high volume manufacturing as well as R&D work.

## Highlights

- Suitable for R&D
- Available both as open bowl or with Obducat's patented Rotating Covered Chuck Technology (RCCT) enabling excellent coating uniformity on square/rectangular and irregular shaped substrates
- Process modules are the same as in HVM tools - enables easy migration to volume production
- Industry leading customization level possible for specific customer needs

## Features

- Obducat's highly appreciated QS platform provides the perfect semi-automatic solution for current and future R&D as well as pilot manufacturing requirements
- The systems can handle substrate sizes up to 300 mm Ø or 9" x 9"
- Also available as Large Substrate model capable of handling substrates up to 1400 mm Ø or 1000 x 1000 mm



## Highlights

- Suitable for Low Volume manufacturing (LVM)
- High reliability, yield and uptime
- Industry leading configuration flexibility of the Micro Cluster makes it adaptable to processing requirements

## Features

- The system can handle substrate sizes up to 300 mm Ø or 2" x 2" to 9" x 9"
- Up to 3 process modules + I/O station



# MICROCLUSTER TRACK

## Highlights

- Suitable for High Volume Manufacturing (HVM)
- High reliability, yield and uptime
- Competitive Cost-of-Ownership
- Highly configurable tool
- Customization possible for specific customer process and throughput requirements

## Features

- The system can handle substrate sizes up to 300 mm Ø or 9" x 9"
- Also available as Large Substrate model capable of handling substrates up to 1400 mm Ø or 1000x1000 mm
- Up to 9 process modules + I/O station



# Wet Processing Tools

We provide you with highly configurable semi-automated as well as fully automated wet processing tools for cleaning, lift-off, etching or developing.

## Highlights

- Suitable for R&D
- Process modules are the same as in HVM tools – enables easy migration to volume production
- Industry leading customization level possible for specific customer needs

## Features

- Obducat's highly successful QSW platform provides the perfect semi-automatic solution for current and future R&D as well as pilot manufacturing requirements.
- The systems can handle substrate sizes up to 300 mm Ø or 2"x 2" to 9"x 9"
- Also available as Large Substrate model capable of processing substrates up to 1400 mm Ø or 1000x1000 mm



# MICROCLUSTER WET

## Highlights

- Suitable for R&D and Low Volume Manufacturing (LVM)
- High reliability, yield and uptime
- Highly configurable tool
- Customization possible for specific customer process and throughput requirements

## Features

- Obducat's high performance Microcluster WET modular tool provides cutting edge solutions for current and future R&D and low volume manufacturing (LVM) requirements.
- The configuration flexibility of the tool makes it adaptable to processing requirements for a wide variety of processes, chemicals and applications
- The system can handle substrate sizes up to 300 mm Ø or 9" x 9"
- Up to 3 process modules + I/O station





## Highlights

- Suitable for High Volume Manufacturing (HVM)
- High reliability, serviceability, yield and uptime
- Competitive Cost-of-Ownership Highly configurable tool
- Full customization possible for specific customer process and throughput requirements

## Features

- The system can handle substrate sizes up to 300 mm Ø or 2" x 2" to 9" x 9"
- Also available as Large Substrate model capable of handling substrates up to: 1400 mm Ø or 1000x1000 mm
- Up to 9 process modules + I/O station



# Substrate Cleaning Tools

## Key benefits

- Tool platform suitable for mask cleaning, post CMP cleaning and other cleaning processes
- Tool platform configurable for R&D as well as high throughput use with high reliability, yield and uptime
- High level of customization possible for customer specific process and throughput requirements
- Possibility for separate cassette stations for input wafers (wet) respectively output wafers (dry)
- Dual end-effector (wet & dry)
- 2 separate dual side PVA brush cleaners for pre- & final cleanSC1 as well as SC2 cleaning in same chamber allowing minimal footprint
- The system can handle substrate sizes up to 200 mm Ø



# Foundry Service

## Key benefits

- Obducat can act as your manufacturing partner for production if you follow a fabless strategy.
- We also offer the service to do initial pilot production for evaluation purposes, to enable a more data driven investment decision for the setup of your own internal production capability.
- Based on our 25 years of experience in nanoimprint technology, Obducat has the capability to replicate extremely accurate micro- and nanosized structures on a wide variety of substrate sizes and materials.
- Obducat also provides lithography services related to other optical and e-beam lithography methods as well as services in the fields of deposition and pattern transfer by etching – all in an industrial environment.

## Key features

- All processes are available up to 200 mm ø substrate size
- State of the art lithography using Obducat's Patented Nanoimprint technology and processes
- Both semi-automatic and fully automatic infrastructure available depending on volume requirements
- All processes done in Europe by highly qualified personnel





#### **Obducat AB**

Nytänkaregatan 4  
223 63 Lund  
Sweden

#### **Contact**

[sales@obducat.com](mailto:sales@obducat.com)  
+46 46 10 16 00

#### **Obducat Europe gmbh**

Robert-Gerwig Str. 9  
78315 Radolfzell  
Germany

#### **Contact**

[sales@obducat.com](mailto:sales@obducat.com)  
+49 7732 97 898-0

#### **Obducat North America Inc**

1870 El Camino  
Real, Ste 209  
Burlingame, Ca 94010  
USA

#### **Contact**

[kristian.thulin@obducat.com](mailto:kristian.thulin@obducat.com)  
+1 510-871-0041

#### **Sales offices China**

12F, Sail Tower,  
266 Hankou Road,  
Huangpu District,  
200001 Shanghai  
P. R. CHINA

#### **Contact**

[phillip.zhang@obducat.com](mailto:phillip.zhang@obducat.com)  
+86-21- 54653756

#### **Sales office Japan**

1-10-3-901  
Roppongi  
Minato-ku  
Tokyo 106-0032  
Japan

#### **Contact**

[mikihiko.sano@obducat.com](mailto:mikihiko.sano@obducat.com)  
+81-70-8355-6496

**Contact us:** [www.obducat.com](http://www.obducat.com)