

User fees in the context of academic research projects

General fees

In the context of academic research projects, a minimum amount of 18 \$ per day and per person is charged as an access fee to the clean room.¹ Operation of the tools by the LMN staff will be charged 75 \$ per hour (based on the real worktime spent) plus the tools cost per hour without operator.

Costs per utilization hour for the different tools

Tools	Cost per hour ²
Ebeam Lithography (Vistec VB6 EWF) ³	150
Data Preparation (CAD, CATS, Proxecco) ³	35
Laser Writer Lithography (Heidelberg DW66fs) ³	75
Mask Aligner (EVG620), Asher, RTA, Polishing, Wire-bonding, Prober, Profilometer (Ambios XP2), Ellipsometer, Sputter Emitech, Dicing Saw	42
Scanning Electron Microscope (JEOL JSM7401F), EDX, AFM (XE150)	70
Ion Implantation ³ , Plasma etching (ICP), PECVD	95
E-beam evaporator, Sputtering, Pulsed Laser Dep., Tystar Furnaces ³	67
Wet benches, Spin-coaters, Optical microscope Nikon, Semitool SRD, APT Chrome wet etch	25

► All the tools must be reserved in advance and the users need to properly login to access the clean room.

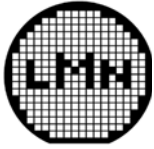
► The billed time will correspond to the maximum between the reserved time and the real time spent on the tool rounded off to the half-hour (a half-hour being the minimum billing time).

Notes :

1. This cover expenses related to general clean room furnitures (gloves, shoe-covers, head-covers, clean room suits, sticky carpets, etc.) and to services related to class 10 and 100 environment (air filtering, DI water, electricity, etc.). Non-conventional substrates and materials will be charge to the user. [Price for deposited materials function of the weight consumed. For instance Au @ 1 \$/nm for sputtering and 3 \$/nm for evap. Prices subject to change without notice].

2. These costs are the costs without operator. The training necessary to an autonomic usage of the tools will be charged 75 \$ per hour plus the cost per hour without operator.

3. Autonomic operation of these tools requires an intensive training that will be given only on an exceptional basis with the agreement of the fab managers.



User fees in the context of contracts or services to the private sector

General fees

In the context of contracts or services to the private sector, a minimum amount of 50 \$ per day and per person is charged as an access fee to the clean room.¹ Operation of the tools by the LMN staff will be charged 150 \$ per hour (based on the real worktime spent) plus the tools cost per hour without operator.

Costs per utilization hour for the different tools

Tools	Cost per hour ²
Ebeam Lithography (Vistec VB6 EWF) ³	500
Data Preparation (CAD, CATS, Proxecco) ³	70
Laser Writer Lithography (Heidelberg DW66fs) ³	150
Mask Aligner (EVG620), Asher, RTA, Polishing, Wire-bonding, Prober, Profilometer (Ambios XP2), Ellipsometer, Sputter Emitech, Dicing Saw	125
Scanning Electron Microscope (JEOL JSM7401F), EDX, AFM (XE150)	145
Ion Implantation ³ , Plasma etching (ICP), PECVD	220
E-beam evaporator, Sputtering, Pulsed Laser Dep., Tystar Furnaces ³	145
Wet benches, Spin-coaters, Optical microscope Nikon, Semitool SRD, APT Chrome wet etch	72

► All the tools must be reserved in advance and the users need to properly login to access the clean room.

► The billed time will correspond to the maximum between the reserved time and the real time spent on the tool rounded off to the half-hour (a half-hour being the minimum billing time).

Notes :

1. This cover expenses related to general clean room furnitures (gloves, shoe-covers, head-covers, clean room suits, sticky carpets, etc.) and to services related to class 10 and 100 environment (air filtering, DI water, electricity, etc.). Non-conventional substrates and materials will be charge to the user. [Price for deposited materials function of the weight consumed. For instance Au @ 1.5 \$/nm for sputtering and 4.5 \$/nm for evap. Prices subject to change without notice].

2. These costs are the costs without operator. The training necessary to an autonomic usage of the tools will be charged 150 \$ per hour plus the cost per hour without operator.

3. Autonomic operation of these tools requires an intensive training that will be given only on an exceptional basis with the agreement of the fab managers.