

# Monolayer Graphene film on copper foil

Innovation and a Passion for Challenge



**NANO CARBON**  
GRAPHENE TECHNOLOGIES

Nano Carbon stays at the cutting edge of graphene technology. A pioneer in large-scale graphene we offer you superior quality monolayer graphene transferred on an array of substrates to fulfill your specific requirements. Our advantage lies in the ability to produce films up to 300 mm x 300 mm using specially designed equipment built by First Nano exclusively for Nano Carbon. We have also constructed an innovative unit for transferring graphene on to arbitrary substrates.

Our ability to deliver high quality personalized service is widely appreciated by our clients.

## Properties

Our products demonstrate outstanding properties owing to precision control over the nucleation stage and seeds growth.

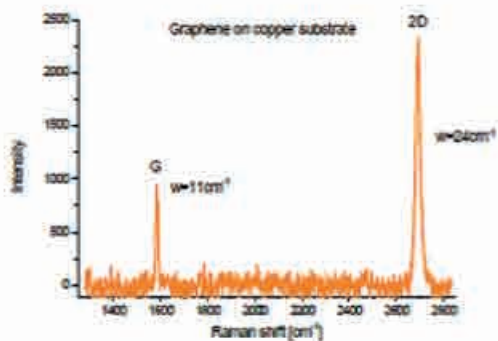
- **Coverage** - exceeding 99.5%
- **Grain size** - up to 1 mm.
- **Copper foil purity**- from 99.9 (for standard product) to 99.999;
- **Thickness**: 20 $\mu$ m.



Unique system for the manufacturing of 300mm x 300mm high quality Graphene at commercial levels, custom-built by First Nano, a subsidiary of CVD Equipment Corporation for Nano Carbon.

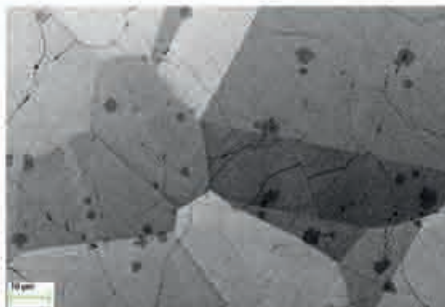
### Raman spectrum of graphene on Cu

- extremely low 2D band FWHM (24 cm<sup>-1</sup>)



### SEM image of graphene on Cu

- a small number of 2nd graphene layer islands



### Optical microscope image of graphene on Cu

- two-dimension structure of graphene crystallites and up to 1 mm grain size



Quality and reliability is high priority at Nano Carbon. Product quality and conformity are secured by comprehensive tests of all individual products.

## Applications

Our products are ideal for use in: supercapacitors, catalysts, solar energy, biomaterials, graphene semiconductor chips, conductive graphene film, graphene computer memory, transparent conductive coatings.

## Size

The standard size is 1" x 1", 2" x 2", 4" x 4".

Any other size up to 12" x 12" can be ordered on request.

A current price list is available at the following link:  
[www.nano-carbon.pl/buy-graphene/epitech](http://www.nano-carbon.pl/buy-graphene/epitech)

# GRAPHENE shop .PL

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