O&O mdc
Ophthalmic & Orthopaedic
medical devices consultant

"Nothing generates more value than innovation..."

From Christian BROCHIN

I started AMCC in January 1996, and with my colleagues, we are celebrating fittingly the company's 10th anniversary...
Located in an air and space activities district near Toulouse in southern France, AMCC studies and makes turnkey industrial systems.

The idea of making icing plates came up in 1997, in order to clamp a series of highly-fragile graphite parts. Initially designed to meet the needs of workshops in the air and space sector, the icing plates then compelled recognition in all the fields where delicate parts are manufactured, all industries put together (medical, technical ceramics, electronics R&D, watchmaking, jewellery, etc.).
It didn't take long before I realized that these same icing plates could be of use in the Ophthalmology Industry, to make Intraocular Lenses (IOLs), so AMCC naturally offered its products to various major players in the French market for IOLs.

It's on that occasion that I got the opportunity to meet Patrick MEUNIER who considered right away that our idea was particularly innovative.
Thanks to our collaboration and our shared ideas, we were able to optimize and develop a specific range of icing plates fully dedicated to the Ophthalmology Industry that I propose you to discover in the following pages.
O&O mdc also helped us to meet different world players in the Ophthalmology Sector, like the IOLs lathing/milling machines Designers; the raw materials Manufacturers intended for the fabrication of Intraocular Lenses but also, of course the IOL manufacturers...

May I invite you to follow the Penguin, AMCC's mascot, to discover our range of icing plates?

So surf safely on the ice floe of Hydrophobic IOLs...!

AMCC ICING PLATE for IOLs

"Frost" is an extremely strong adhesive used in many micro-mechanicals applications for minuscule parts that are difficult to handle as watch hands for example.
Thanks to this natural property, AMCC Icing Plates uses it as a clamping system that has many advantages:

- Rigid bonding is achieved with several materials as PMMA, acrylics, silicone, etc.
- Stress-free mechanical clamping.
- Deep cooling enhances cutting surface conditions, more especially for hydrophobic materials.
- No solid residues after deblocking parts.

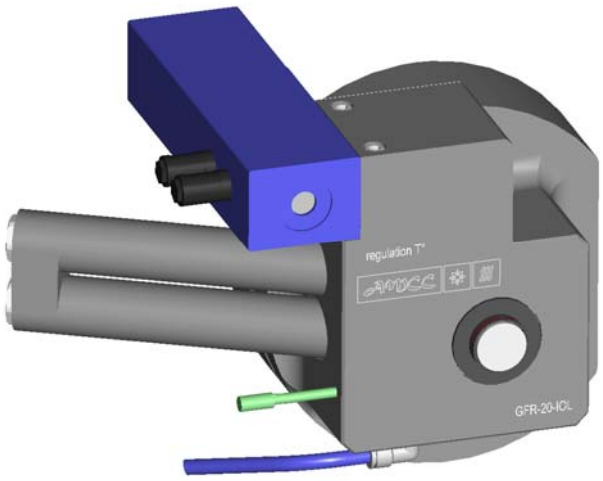
AMCC "GF" plates are cooled down by a patented thermal exchanger with double flux, therefore needing only clean and dry compressed air to function.
The Icing Plates are user-friendly for IOL manufacturing:

- Spray water on blanks;
- Position blank on the freezing mandrel;
- In few seconds water will freeze and machining can begin:
- Deblocking is even easier by reversing air flow from freezing to thawing.

Originally made for being used in workshops for air-space industry these Icing Plates have been shown in areas making fine parts, and more especially in the Intraocular Lens industry.

LATHING

Using GFR-20-IOL icing plate for lathing perfectly rounded blanks is no longer a necessity as any collet is avoided. Thinner blanks can be used, leading to a material saving with a deep core freezing and easy repositioning for the next step.



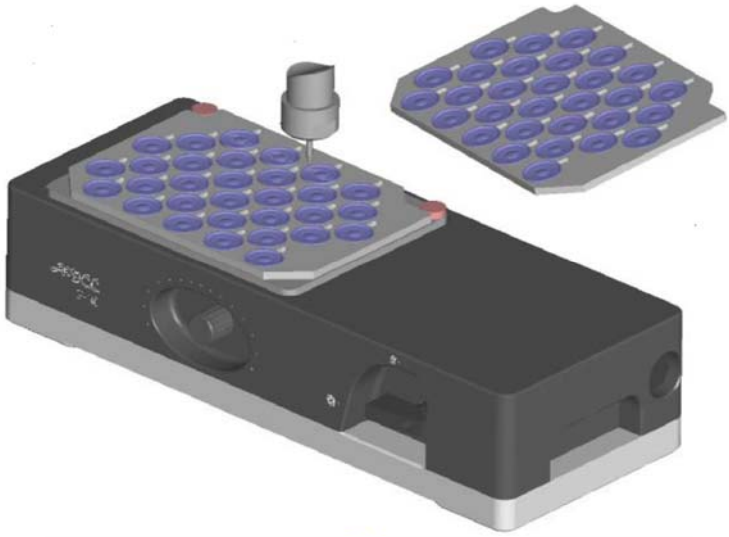
Freezing mandrels GFR-20-IOL are interchangeable in order to fit various manufacturing steps. Generally the mandrel used for the first side is flat to fit the blank surface, while mandrels for the second side are machined with a mirror image of the lens profile.

Thanks to an optional external centering device, positioning of lathed disks can be achieved easily.

As the original "dead length" collet is used underneath the freezing device, shifting to "classical" manufacturing stays simple.

MILLING

Following the manufacturing sequence choice (as described in our leaflet), the milling step can be accomplished...



Either on the **GF-140** icing plate - each freezing plate GF-PLQ-140 incorporates several cell positions allowing milling the IOL through the disk and can either clamp disk after being lathed on one or both surfaces,

Or on the **GFF-20-Iol** freezing stand (one by one) - the ***GFF-20-Iol*** freezing plate is repeatedly using the lathing Icing chuck GFR-M-20-iol. Thanks to the thermal inertia of the lathing Icing Chucks, blank can stay clamped during loading transfer from lathing to milling.

Please visit our website, www.amcc.fr as we would like to stay at your disposal for any further information, so please do not hesitate to contact us.

Christian BROCHIN
AMCC President