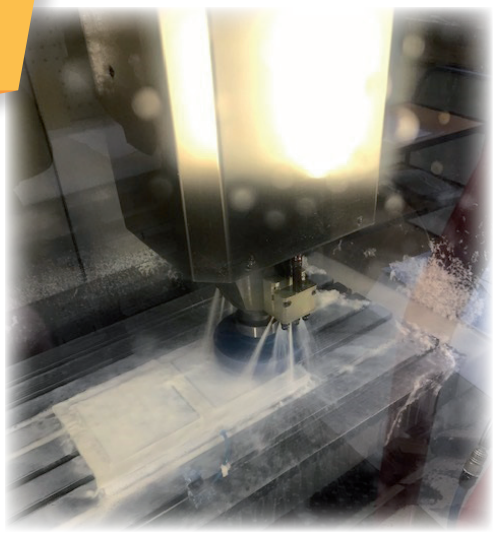
EXAMPLE OF APPLICATION

GLASS MILLING ACRYLIC RADIATION PROTECTION

APPLICATION FIELD :
MEDICAL TECHNOLOGY

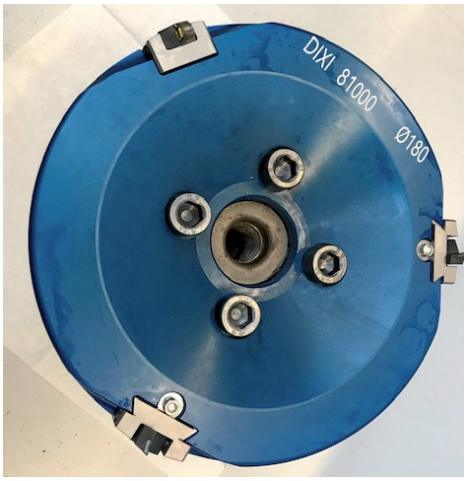


MACHINING

Tool

MIRROR FINISH MILLING HEAD
DIXI 81000 Ø 180 X 58 X Ø 40 Z=3

With angular adjustment, combined chuck holder Ø 40, guide groove



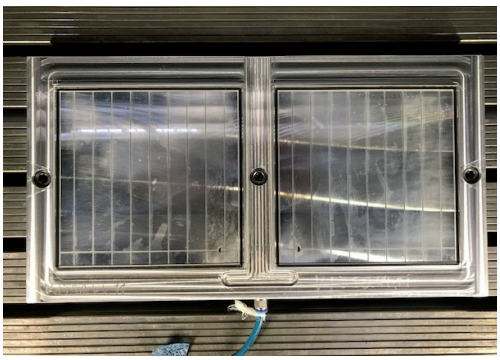
MISSION

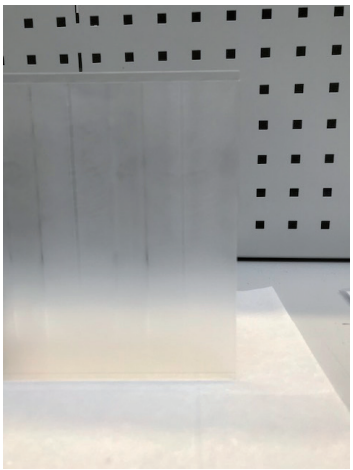
The customer needs a transparent and homogeneous surface after milling. Overlaps caused by pre-milling must not be visible.

As the surface to be machined has a width of approximately 163 mm, the use of a standard tool is excluded (the material is only available from 7 mm thick, the customer needs a thickness of 2.4 or 4.3 mm).

MACHINING CONDITIONS

Material	Acrylic radiation protection glass
Machining operation	Thickness milling and creation of a mirror-polished surface
Machine	Hermle B300
Lubricant	Emulsion with an oil content of less than 5%, external supply
Cutting conditions	Vc= 1700 m/min N= 3000 1/min F= 150 mm/min
Clamping of the part	Double vacuum clamping (internal production by the customer)



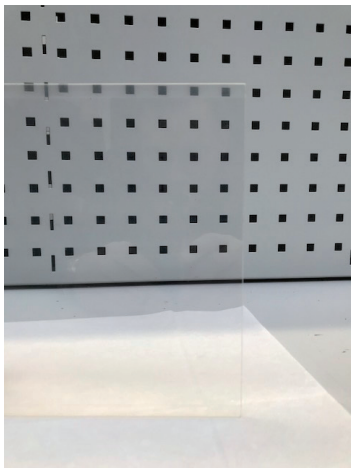


Part after pre-milling (finishing allowance of 0.2 mm) :

The overlaps and milky surface of the pre-milling are clearly visible.

Part after finishing machining :

No visible overlaps, homogeneous surface transparent and homogeneous according to demand of the customer.



RESULT

The customer's requirements are met, the customer can manufacture safely.