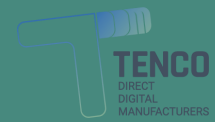


# CASE STUDY | Molecubes



Molecubes develops preclinical imaging cubes enabling researchers to perform high-performance SPECT/CT and PET/CT studies without the need for complex system handling and even if laboratory space is very limited.



## Initially..

Molecubes initial request was to produce accurate parts with perfect surface quality to avoid finishing materials which would influence the imaging capacities of their systems.

What started as delivery of prototypes for dimensional evaluation, ended up as an end-use part production through Additive Manufacturing since the mechanical properties of the produced parts were exceeding expectations.

Other considerations to choose for Additive Manufacturing were the need for limited production batches and flexibility in redesign.

## Streamlining the supply chain

Since Molecubes' core business focuses on developing hardware and software, Tenco's additional services were the answer to Molecubes' need to streamline the supply chain of complete components.

Next to production and post-processing Tenco's services concerns production of heating elements, purchase & stock keeping as well as full assembly and final programming and inspection of components.

## Moving on

As Molecubes' imaging technology still evolves, certain requirements change which initiated the co-development with Tenco of a new hybrid composite solution, consisting of carbon fibre parts and printed accessories.

Besides stiffness and cleanness, particle free components are one of the key success factors for setting the highest standard in their market.

## Ramping up

After thorough testing and further processes optimization, Tenco ramped up production for the redeveloped component containing different materials like carbon, plastics and special stainless steel and the integration of PCB's and laminated heat pads.



## Techniques:

Stereolithography (SLA), Direct Light Processing (DLP), Metal Milling, Carbon milling, Laminating.

## Services:

Purchasing & stock keeping, Production, High-end finishing, Engineering, Assembly, Calibration, Electronics, Potting, COC (Certificate of Conformity).



**MOLECUBES**  
MODULAR  
BENCHTOP  
IMAGING

