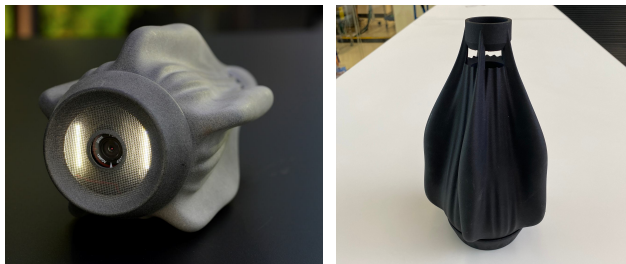


Water Pipes Inspection Camera

Efficient water pipe inspection solution through additive manufacturing technology

Challenge

Aigües de Barcelona was in search of an innovative solution that could expedite pipe inspections, ensuring greater efficiency while remaining cost-effective.

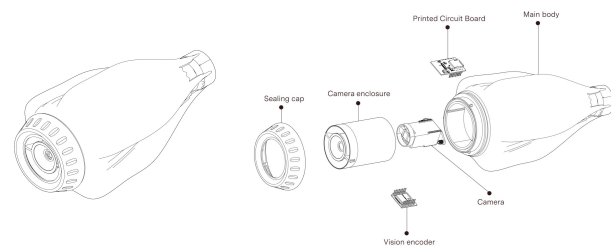


Solution

IAM3DHUB's design team developed a polypropylene pipe inspection device, seamlessly integrating a light and camera to guarantee stable and high-quality imaging. This device boasts built-in buoyancy for inspections and a tanker hose adaptor for efficient propulsion, ensuring a great performance throughout the inspection process.

Results

The device featured essential attributes of watertightness, compact size, impact resistance and cost-effectiveness, streamlining the pipeline inspection process while minimizing resource investments.



3D Printer

 HP MJF 5200

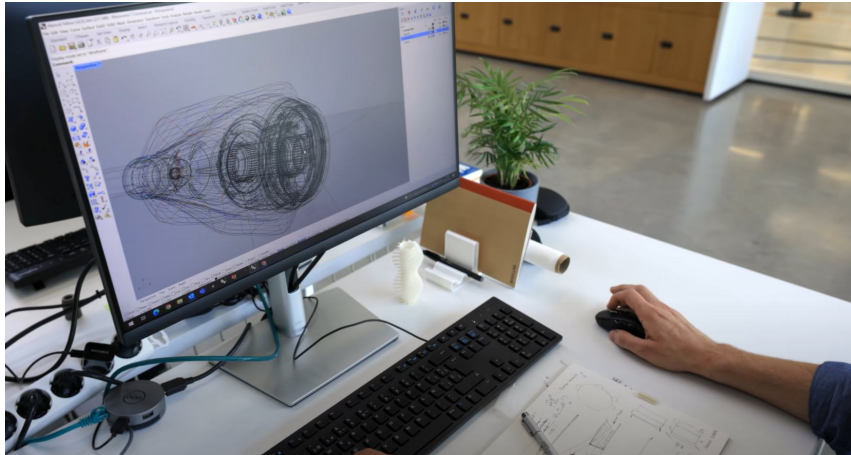
Material

 HP Polypropylene

Post-Processings

 Sandblasting

 Vapor Smoothing



AM Benefits

IAM3DHUB employed HP's MJF technology to craft an isotropic pipe inspection tool using PA11 material due to its moderate elasticity and robustness against impacts.

Subsequently, IAM3DHUB's technical team refined the fit through **post-processing sandblasting**, ensuring a device that is both watertight and water-resistant. Lastly, chemical **vapor smoothing** was applied, further enhancing its water resistance.

