

Transversal competencies



**Study and Realisations of Bonding Services:** We carry out studies of your bonding assemblies. We then execute these assemblies in our plant specially equipped for bonding techniques.

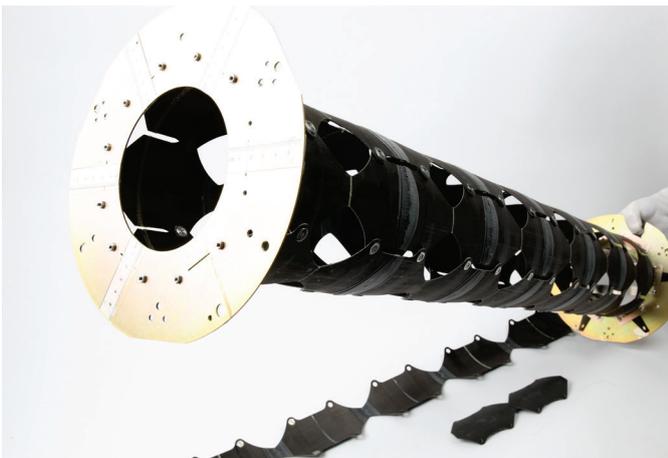
CLIX Industries has also developed products like self-deploying systems and other applications for the space industry. Many of them have been done in collaboration with the CNES or with other major players of this sector.

## COMPETENCIES & CAPABILITIES

CLIX Industries is specialized in developing bonding systems. We have our own R&D department, we run researches in bonding technics, materials and bonded assembly simulations (Abaqus). We engineer complete assemblies: CAD, bonding material definition, thermal and mechanical behavior, industrialization and validation.

For manufacturing our company is equipped with white rooms, robot units, and dispensing tables.

We cover the production of EM, QM and FM.



# CLIX Industries

## PRODUCTS & SERVICES

Self-deploying structures: CLIX composite Hinge and Mast are based on elastic composite parts and flexible membranes. They provide a spring function for self-deployment and locks itself in the open end-position. We also propose the Hold Down and Release Mechanisms adapted to these solutions.

Flexible Pivot: Mechanism based on orthogonal blades deformation around a virtual rotation axis. It is friction free and there is no need for lubrication. Our production process gives a great design freedom and material choice for the blades and the pivot body.

Magnetic laminar stack for Stator, Rotor or any other stack applications: The bonded magnetic laminar stack proposes a full insulation between every single sheet with around 5µm bonding material thickness. This process decreases Eddy currents, Joule effects and iron losses for electrical stator/rotor. Structural bonding allows high resistance strength of magnetic stacks and higher electromagnetic performances.

All these developments have been made in collaboration with the CNES

## MAJOR SPACE PROJECTS & REFERENCES

- Magnetic laminar stacks are flying since 2006 on a military space equipment.
- CLIX Hinges and HDRM are flying since 2019 on Eyesat nanosatellite.
- The other products are in qualification phase.

## POINT OF CONTACT

**ADDRESS** 2-3 Allée de Longueterre  
31850 MONTRABE France

**WEBSITE** [www.clix-industries.com](http://www.clix-industries.com)

**PHONE** +33 (0) 5 61 736 889

**POINT-OF-CONTACT** : BOUDINOT, Richard, CEO, [Richard.boudinot@clix-industries.com](mailto:Richard.boudinot@clix-industries.com), +33 (0)5 61 736 889

**TURNOVER** 1,5 M€

**WORK FORCE** 12 employees

**SPACE TURNOVER** 0,2 M€

**SPACE WORK FORCE** --