



SPACE
FOR BUSINESS
BUSINESS
FOR SPACE



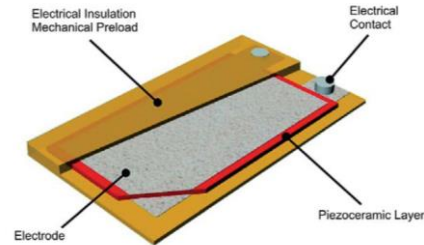
TECHNOLOGY DESCRIPTION

With a long history as adaptive materials, piezo actuators have been widely favoured for the monitoring and active damping of high-frequency vibrations. The innovative DuraAct™ patch transducers now provide a compact solution in this field. Whether applied directly to a substrate or integrated into the structure itself, DuraAct™ patch transducers can detect and generate vibrations or contour deformations internally within the structure. The extent of achievable deflection is heavily influenced by the properties of the substrate, reaching into the millimetre range. The standard transducer design includes a piezoceramic foil with metalised surfaces for electrical connectivity. Typically, these foils have a thickness ranging from 100 to 500 µm, though thinner layers are also feasible.



INNOVATIVE ASPECTS

- High damage immunity
- Short lead-time availability
- Compact & long lifetime
- High bandwidth
- Customised solutions & easy to use
- It can be applied to curved surfaces
- Cost-effective
- Operation as actuator, sensor or power source



TECHNOLOGY READINESS (in space application)

TRL 9 (2024)

COUNTRY OF ORIGIN

Germany

LATEST UPDATE

06/2024

TAGS #sensor #actuator #piezoelectric #self-correcting #compact #adaptive

APPLICATION AREAS

Aviation	Construction & Civil Engineering	Data Processing, Software & AI	Electrical & Electronic Engineering	Health	Mechanical Engineering	Safety & Security
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