

DEFENSE & INDUSTRY THICKNESS CONTROL OF FUEL PELLETS

CHALLENGES

To ensure the operation of assembled mechanical systems, parts must respect precise dimensions, with challenging tolerance intervals. It is therefore important to rigorously control these parts, whether they are made of radioactive materials or not.

In the case of nuclear fuel pellets, their **thickness must be controlled to avoid stacking** with the wrong mechanical fit and the early mechanical ageing that may consequently arise.

SOLUTION

Our **SETSMART FOR NUCLEAR** solutions ensure for your manufactured parts, dimensional control (inner or outer diameters, thicknesses, etc) and geometry (flatness, parallelism, perpendicularity).

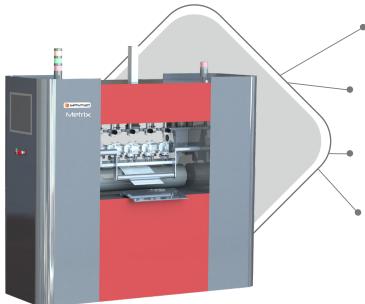
The **METRIX FILM** solution implemented for the control of fuel pellets' thickness is composed of a measurement table equipped with two pneumatic, contactless sensors. They avoid damage or debris on the pellets' surface. For reasons of safety, ergonomics or measurement productivity, controls can be automated with conveyors, rotating plates, robots or cobots.

BENEFITS

Rigorous control

- Exact and precise thickness measurements
 - Much more reliable than manual inspection
 - User-independent, thanks to an easy-to-use solution, even by non-specialists
- Traceable measurement results with our data treatment software.

METRIX FILM



ACCURATE AND PRECISE THICKNESS

MEASUREMENTS

Down to micrometers or better, and low R&R gage

VERSATILE MEASUREMENT

Applicable to various forms (e.g. plates, films, pads, tablets, pellets) and independent of the material's color or brightness

MATERIAL-FRIENDLY CONTROL

With contactless pneumatic sensors, that preserve the material's integrity

ONLINE MEASUREMENT OPTION

For automated measurement of moving parts or films

KEP