

# Picogen, A Patented Pico-turbine to Optimize Electricity Production



## RILSAN® FINE POWDERS

- Very low water absorption
- Excellent mechanical properties: Ductility and great impact resistance
- Specific design 3D printed by laser sintering in small series
- Installed in 2018 on the Eau de Paris' network

Courtesy of Bowman &

**NOVALL**

# Bowman Rollertrain<sup>®</sup> Bearing Cage

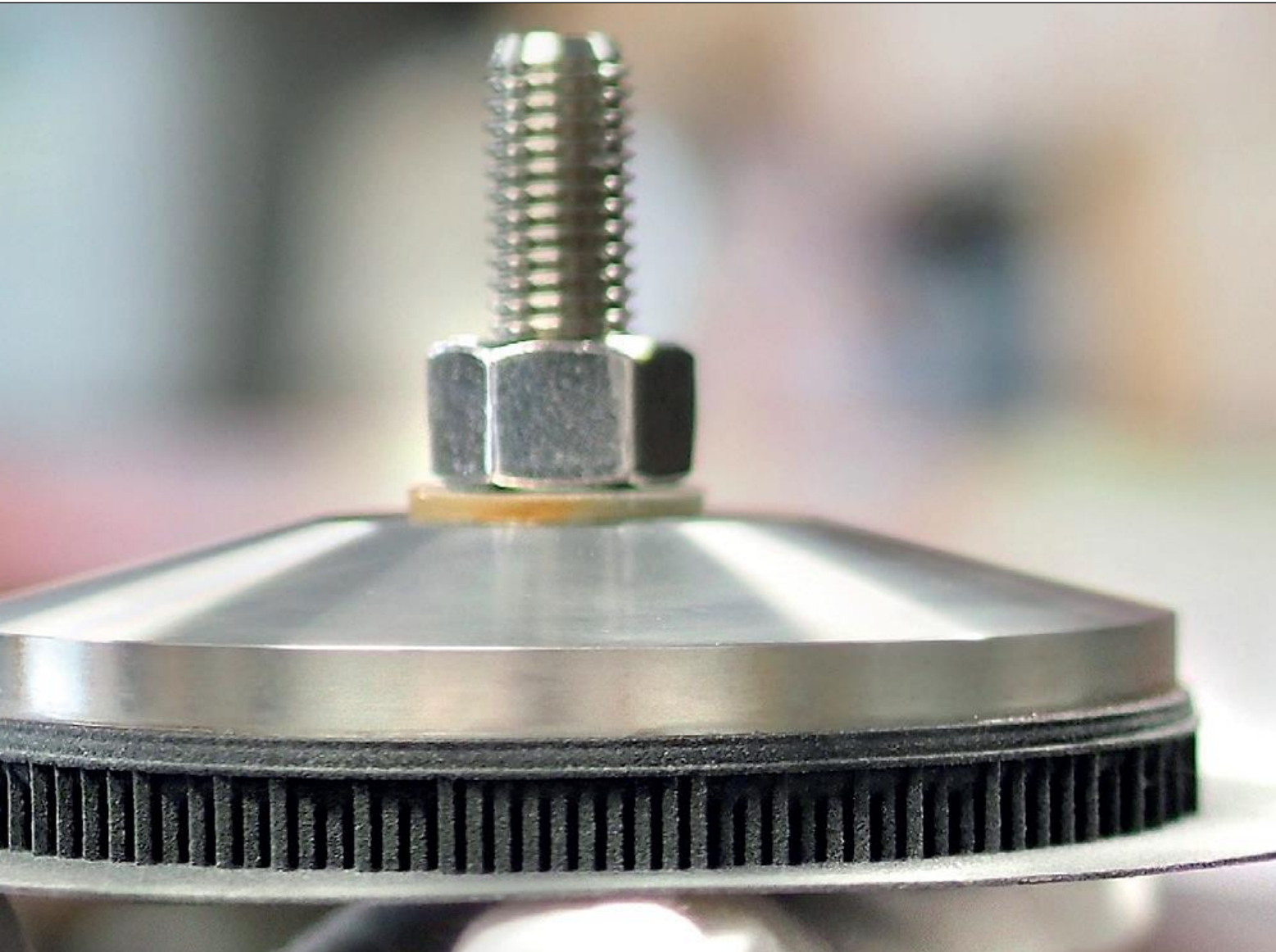


## RILSAN<sup>®</sup> FINE POWDERS

- High mechanical properties
  - Impact and fatigue resistance
  - Great elongation at break and isotropic properties
- Allows parts to be clipped together
  - Cage incorporating 45% more rollers
  - Design optimization of the bearing cages allowing better distribution of the stress and thus longer lifetime of the product.



# Non-intrusive concrete fastener by Cold Pad



## RILSAN® FINE POWDERS

- Polyamide 11, the material of choice for demanding applications
- A ductile material with outstanding fatigue resistance
- Resistance to radiation
- Freedom of design of the layer to achieve high performance properties

# Replacement pipe fittings with extrusion printing



## KYNAR®

- PVDF is a semicrystalline polymer for improved performance, tuned to minimize warping, maximize layer adhesion
- Fast and low cost replacement parts for extreme environments
- Suitable for outdoor use

# Near-net shape printing by FFF : back-up rings in Oil&Gas



## KEPSTAN<sup>®</sup>

- PEKK shows outstanding compressive properties for drastic uses
- PEKK printing by FFF is established as a serious option to produce high-performance parts via a near net-shape approach
- Significant reduction of wasted material compared to conventional machining process of stock shapes
- Simple geometry insuring a reliable and repeatable process with industrial-grade machine

# Hexam™ metal replacement



## KEPSTAN®

- PEKK passes stringent requirements for mechanical properties, high temperatures and flame retardancy
- Laser sintering process maximizes the properties of Kepstan® PEKK by developing the full crystallinity of the polymer
- Hexcel's technology further allows for the incorporation of carbon fiber to enhance part properties
- Metal replacement with additional built-in features and part integration for cost saving & weight saving