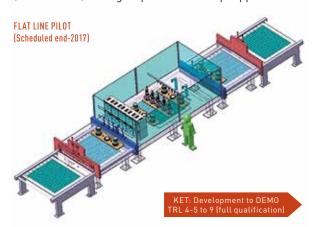# WaliBeam

INDUSTRIAL ION IMPLANTATION TECHNOLOGIES FOR CUTTING-EDGE MATERIALS

WaliBeam

INDUSTRIAL ION IMPLANTATION TECHNOLOGIES FOR CUTTING-EDGE MATERIALS

YOUR GLOBAL SOLUTION IN THE FIELD OF ION IMPLANTATION WITH OUR OPEN INNOVATION INDUSTRIAL APPROACH

Surface modifications, to improve a specific function of an object, have limited robustness. Our Ion implantation technologies (based on Quertech-Ionics ECR sources) open the way to innovative and lasting surface functional products. WaliBeam, our technological platform, will host exceptional industrial pilot installations as Key Enabling Technologies (KET) for environmental friendly pre-industrial demonstration on more mature products (TRL 4-5 to TRL 9). Various shapes (flat, rigid, flexible, Powders, 3D objects) can be treated for all key-markets. Some key industrial partners in surface treatment of glass, metals or alloys and polymers already support this initiative to minimize their industrial risks and time-to-market. Collaboration is also through R&D activities on new cutting-edge materials with lower technological maturity (TRL 1 to 3-4) through a proof-of-concept approach.

FLAT LINE PILOT
(Scheduled end-2017)

KET: Development to DEMO
TRL 4-5 to 9 (full qualification)

IMPROVING MATERIALS WITH ION IMPLANTATION

Ion impinging to a surface creates attractive surface conversion down to few µm into the bulk with no risk of delamination. Taming the ions beam improves several essential functions (e.g. wear/corrosion resistance or friction coefficient or surface wettability). Moreover, improving optical, electrical and catalytic efficiencies will also open the way to unlimited materials for future smart applications.

GLASS and Optical Ceramics
Hardening and Anti-reflective

METALS
Hardening, Friction-less and Corrosion resistance

POLYMERS
Hardening, Friction-less and Anti-Static Polymers

COLLABORATIONS AND SERVICES

- Collaborative R&D Projects (Proof-of-Concept, KET to DEMO)
- Line renting / Products manufacturing
- ECR Ion Sources / Factory Tools
- Products Analysis & Qualification

CONTACT: INFO@WALIBEAM.COM

PARTNERS

MateriaNova — MATERIALS R&D CENTRE

ionics surface technologies

AGC

GRAUX

CRM GROUP

iba

UMONS — Université de Mons

DIAROTECH

UNIVERSITÉ DE NAMUR

Any-Shape — additive-technologies for industry

MAGOTTEAUX

JTEKT

FEDER
UNION EUROPEENNE

Wallonie

LE FONDS EUROPÉEN DE DÉVELOPPEMENT RÉGIONAL ET LA WALLONIE INVESTISSENT DANS VOTRE AVENIR