

SURFACE MODIFICATION

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Don't change your design, transform your materials.

Inhance Technologies solutions allow you to tailor the surface properties of plastics to enable them to meet your specifications. Make your products more durable, stain resistant, change textures, increase lubricity, or improve adhesion and wear resistance... the possibilities are endless.

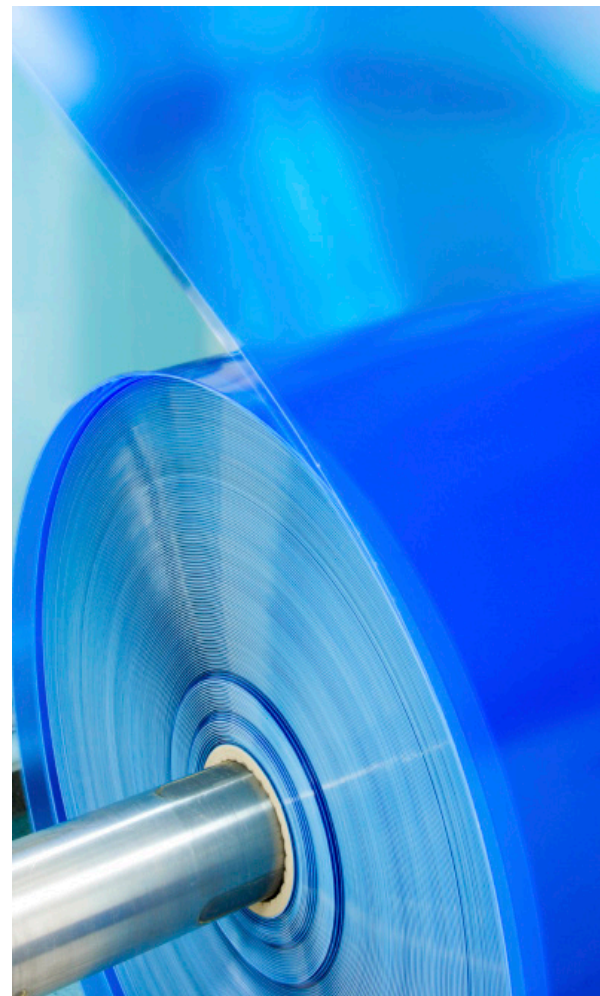
DURABILITY, FLEXIBILITY THAT LAST

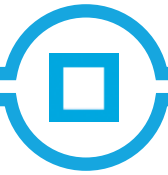
Inhance Technologies has developed the use of Reactive Gas Technology® for over 30 years. The technology modifies polymeric surfaces to impart a range of property enhancements such as:

- Adhesion for many inks and decorative finishes
- Hydrophilicity
- Stain resistance
- Lubricity
- Durability
- Wear resistance to materials as diverse as thermoplastics and thermoset to rubbers like EPDM and NBR

This surface modification process permanently alters the surface energy of polymeric materials. This enables articles to be stored for a long time without loss of properties. While treated materials are transformed at the surface, the bulk properties remain the same, thus the overall part integrity and recyclability are maintained.

Reactive Gas Technology® can be applied to virtually all plastics in any form to enhance performance and durability. Inhance Technologies solutions are applicable in numerous markets to improve product performance and sustainability.





BENEFITS

- Cost-effectively add new functionality and performance benefits to existing designs
- Achieve surface modifications that will last for the lifetime of the treated part or material
- Replace expensive materials and assemblies with conventional plastics
- Add or increase abrasion resistance, durability, chemical stability, lubricity, swelling resistance, adherence of coatings/adhesives/sealants, or stain resistance
- Enable increased adhesion properties for aqueous-based coatings and adhesives

APPLICATIONS

- EPDM and other elastomers for increased lubricity
- HDPE and other polyolefin containers for printing or decoration
- Adhesion of coatings, inks and adhesives and hydrographics
- Gaskets, o-rings and seals
- Applicators and wicks for personal care
- Packaging
- Filter media, films and fabrics, webs and fibers
- Three-dimensional complex parts
- Continuous films

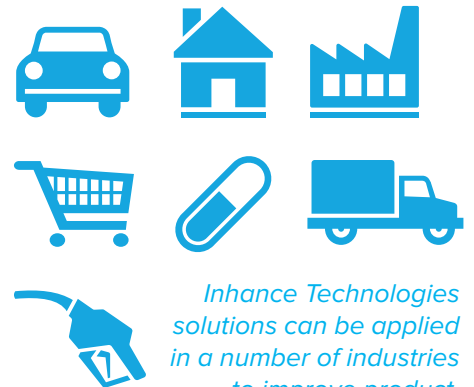
SPECIFICATIONS

Surface energy before and after treatment using our proprietary Reactive Gas Technology®.

MATERIAL	SURFACE ENERGY IN DYNE/CM	
	UNTREATED	TREATED
LDPE	32	54
HDPE	37	54
PET	32	72
PP	29	66
EPDM	40	72
PBT	30	58
PC	32	56
PPS	32	60
Polysiloxane	32	54



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Inhance Technologies solutions can be applied in a number of industries to improve product.

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