

Silicone Materials for LED

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The New Momentive

MOMENTIVE™

HEXION™
Specialty Chemicals



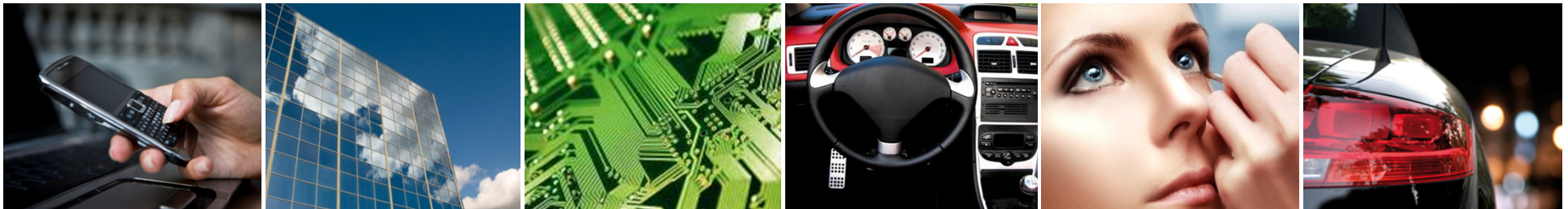

MOMENTIVE
performance materials
The science behind the solutions.

MOMENTIVE™

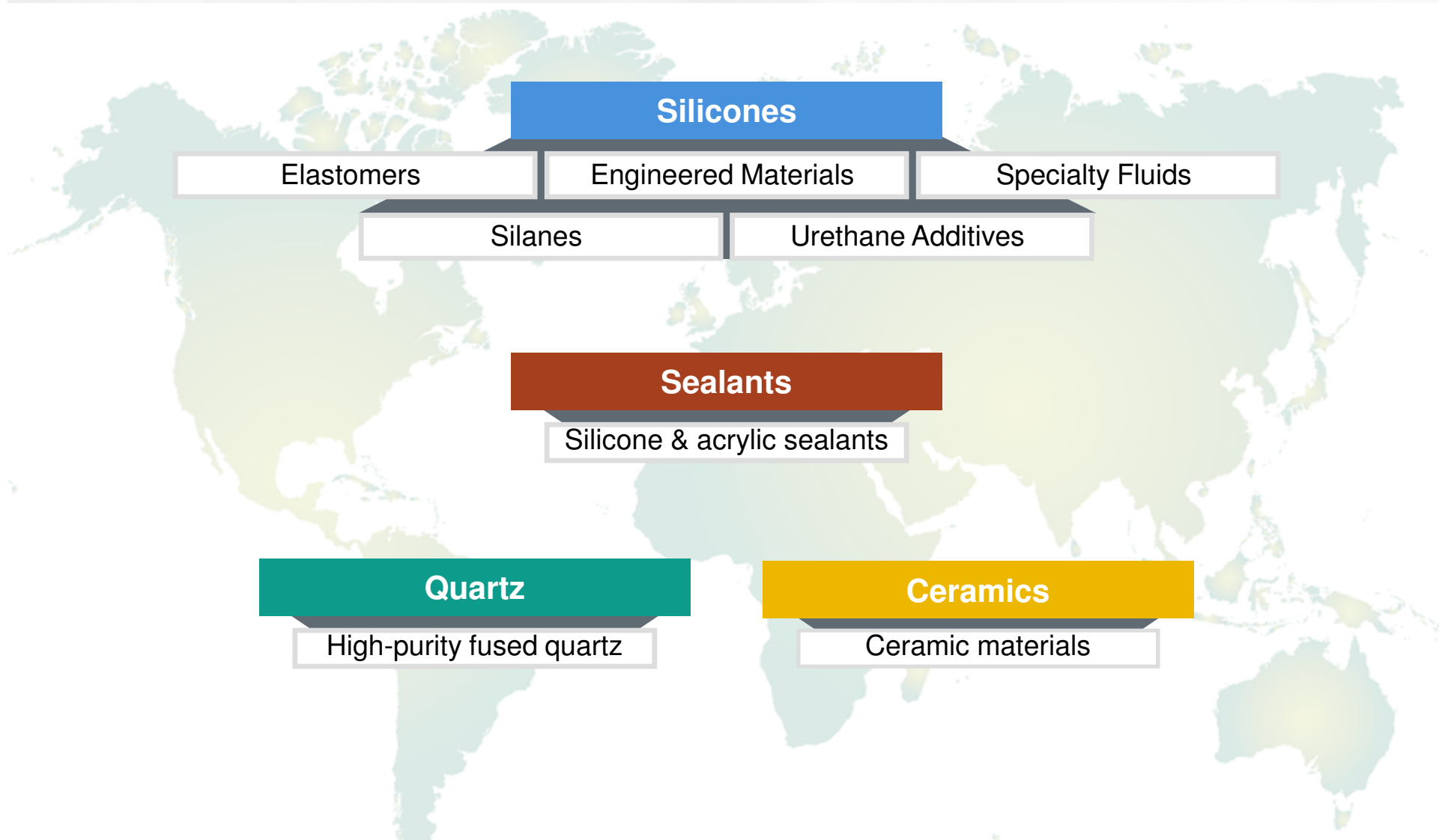
Transformational Combination Forges An Industry Leader

Momentive at a Glance

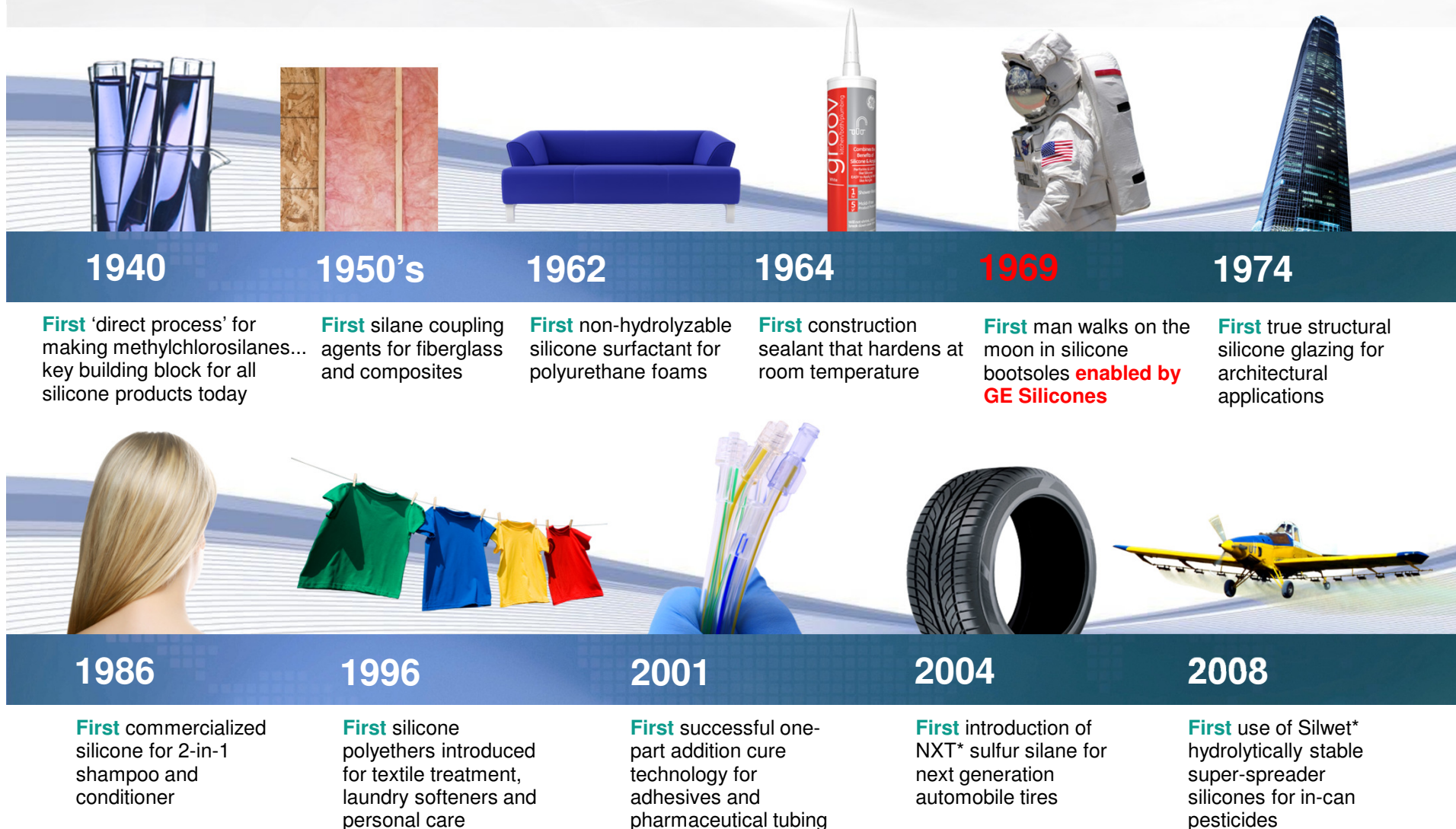
- **20,000** customers
- **117** production facilities around the world
- **10,000** Momentive associates
- Balanced geographic portfolio
- Sales of over **\$7.4 billion**
- Pro forma Adjusted EBITDA **\$1.2 Billion**
- Ability to serve global customers in all major regions worldwide
- New Product Development opportunities across a range of technologies in shared end use markets
 - Automotive, construction, electronics, energy among others



Global Leader In Silicones & Advanced Materials

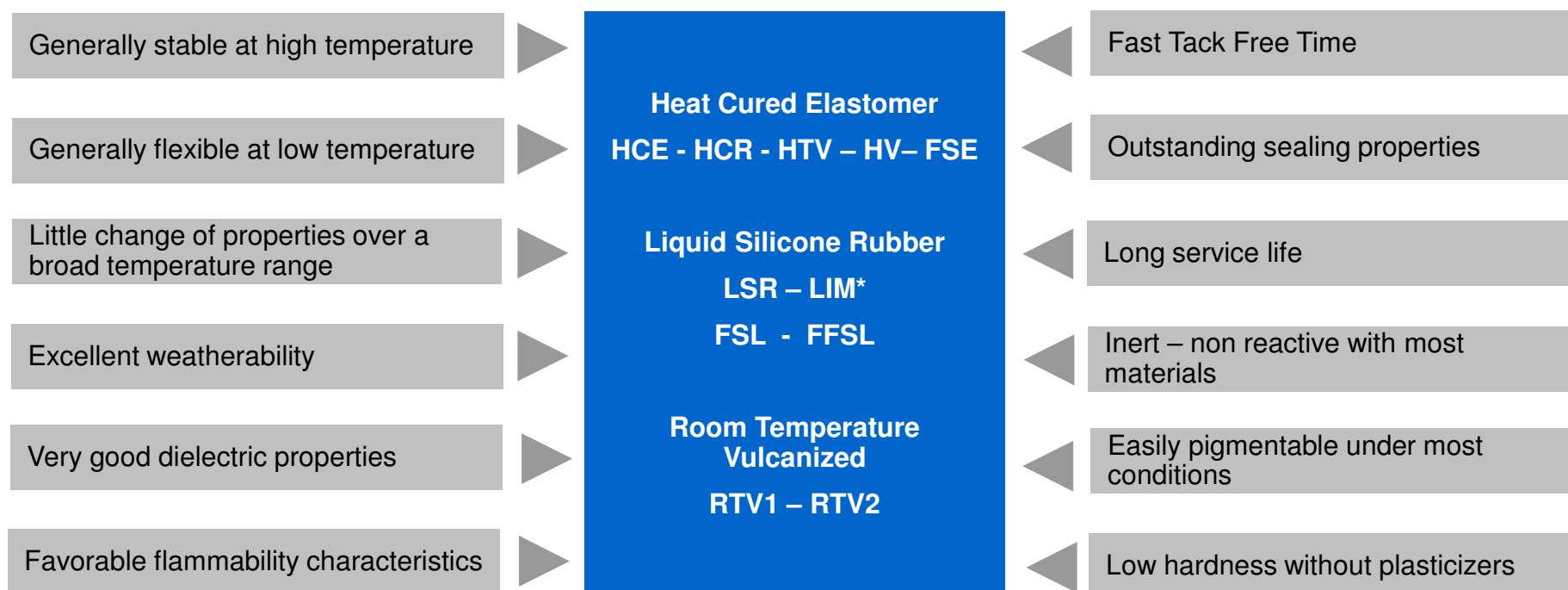


70+ Years of Silicone Innovations & Market 'Firsts'



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Why Silicone Elastomer?



Silicone Materials for LED Light Applications

Ultra Clear LSR

Transparent silicone elastomers intended to mold LED lenses:

- Injection moldable (LSR)
- High transparency
- UV and heat (150 C) stable
- Advantages over thermoplastics

Globe Cap Adhesives

RTV1 adhesives to bond globe caps in LED lamps:

- Fast tack free time
- Low volatiles
- Strong adhesion
- Neutral materials

InvisiSil* Encapsulants

Transparent RTV2 for LED chip encapsulation:

- Fast cure (Heat)
- Resistance to yellowing
- High refractive index
- No delamination

Thermally Conductive Materials

Gels, greases and compounds For heat dissipation:

- Good thermal conductivity
- RT or heat cured
- No bleed (grease)
- Soft TIM (stress relief)

