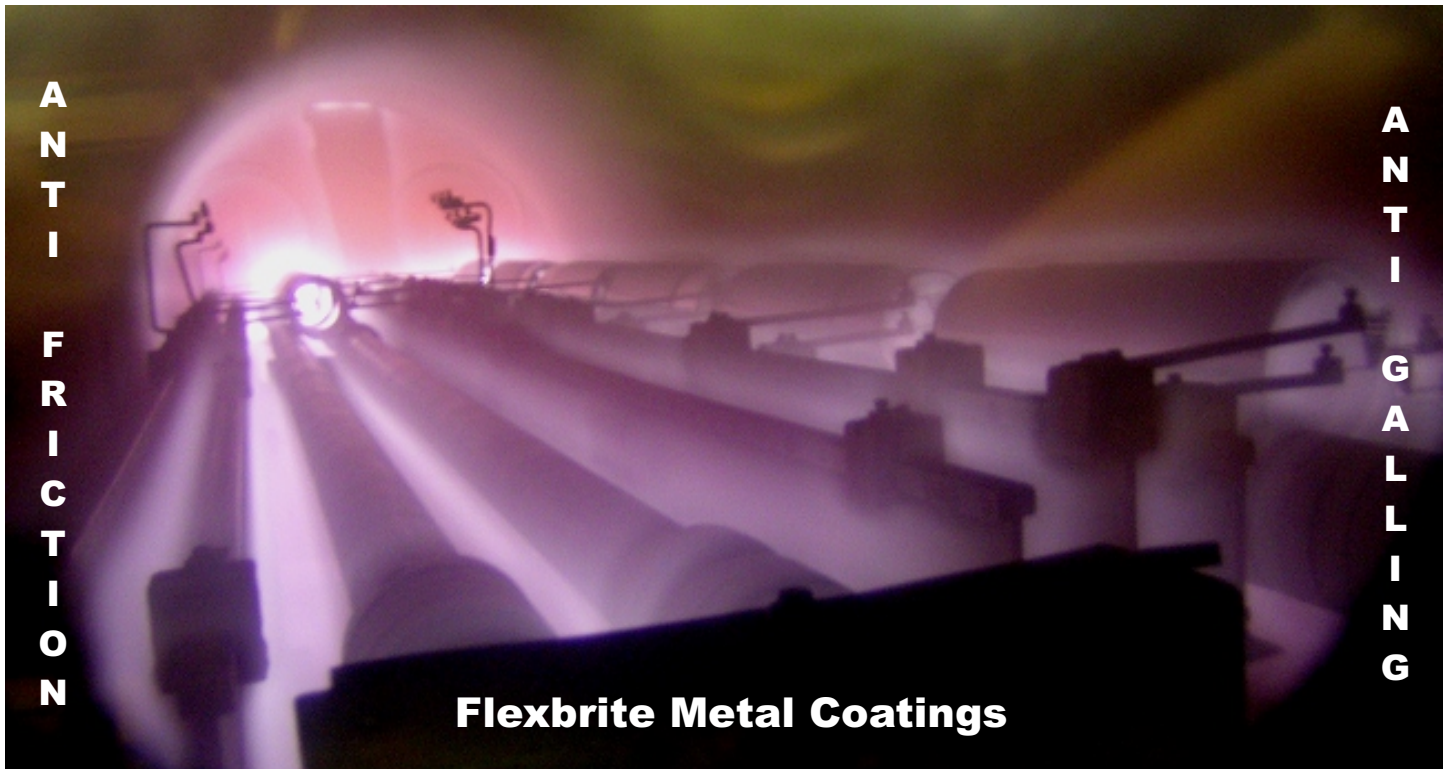


FLEXBRITE, inc.

T H I C K F I L M TM

An Industry Leader in Metal Coatings Applied by Ion Plating

Superior Coatings, Unsurpassed Results



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305 McFarland St.
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FLEXBRITE inc. T H I C K F I L M™

Superior Coatings, Unsurpassed Results

Flexbrite focuses on applying functional metal coatings to almost any surface

- ▶ Reduce friction and improve lubricity on your metal surfaces.
- ▶ Make any surface conductive, reflective or metal shielded.

SPECIALIZING IN

- ▶ Oil Tools
- ▶ Flow Controls
- ▶ Control Valves
- ▶ Valves and Valve Stems
- ▶ Engine Components
- ▶ Firearm Components
- ▶ Reflective Optics

An Industry Leader in Metal Coatings Applied by Ion Plating

Flexbrite focuses on applying functional metal coatings to almost any surface. We've become an acknowledged leader in the ion plating (vacuum coating) application of single layer, multi-layer and alloyed metal coatings. **Our coatings provide a permanent solution in combating wear, friction, and galling, creating reflectivity and/or adding shielding.** Our patented coating processes are available for functional markets including oil tools, valves and valve stems, specialty automotive engine and drive train components, small engine components, motorcycle and other vehicle drive trains, flow meters, friction-bearing surfaces, firearm components and industrial reflective components in fiber optics systems.

Why You Should Choose Flexbrite

- **Our Patented Process - Thickfilm™**

Proven anti-friction, anti-galling, dry lubrication coatings. We have patented our own unique low energy coating process, **Thickfilm™**, that results in a more uniform metal coating for metal, plastic, ceramic, glass and paper materials.

- **No Environmental Impact**

Our processes use no toxic materials and produce no hazardous waste.

- **Expertise with a Large Variety of Materials and Coatings**

Our experienced technical staff applies numerous types of metal coatings, each expertly matched to your materials to provide the desired physical properties including **anti-galling, reduced friction, dry metal lubricity, longer part life, better sealing and enhanced smoothness. Additional properties can include reflectivity, conductivity and electromagnetic shielding.** The coating integrates with the topmost substrate layer to create an enhanced integrated surface that will not chip, crack, flake or peel.

- **No Special Dimensional Tolerance Changes Required**

While **Thickfilm™** enhances functional properties, its **thin coating does not affect machining tolerances or manufacturing specifications** keeping you from re-engineering parts and systems.

- **Ability to Process Large Sizes or Quantity of Pieces**

Our large vacuum chamber allows us to process objects up to 10 feet long with an aggregate weight as much as several hundred pounds. The large number of coating material evaporation sources within the chamber ensures a perfectly even coating every time and allows us to coat multiple layers on items without removing them from the chamber.

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Thickfilm TM

Apply our patented **ThickfilmTM** metal coating to your materials or equipment and **see an immediate reduction in friction and a greatly lowered chance of seizing**. We can also add other desired properties that metal coatings provide. No matter what your product is, if it encounters friction or can be enhanced by metal coating, we simply make it work better.

What is ThickfilmTM?

ThickfilmTM is our patented coating process which applies a thin-film, ion metallizing treatment to a variety of surfaces and substrates in a high vacuum environment with minimal heat exposure. Flexbrite's method allows us to build an overall metal layering, thicker than the typical thin-film, which adds to coating life. What makes **ThickfilmTM** distinctive is its ability to apply many different types of **metal combinations that adhere by embedding into the substrate and flex along with the substrate during radical temperature and pressure changes**.

Thickfilm'sTM Advantage

Unlike competing processes, **ThickfilmTM** creates an atomic bond during the metallizing treatment that implants 3-5 atoms deep into the substrate surface. **This allows the coating to flex and move with the substrate without separation**.

Metallizing treatments can vary in thickness and range from 1000 to 25,000+ Angstroms (25,000 Angstroms = .0001 inch). We find that 25,000 Angstroms per side to be a nominal thickness, therefore special machining tolerances to allow for coating thickness are not necessary. Each metallizing treatment follows the profile of the coated area with no excessive build-up around the corners, edges, peaks or fillet areas.

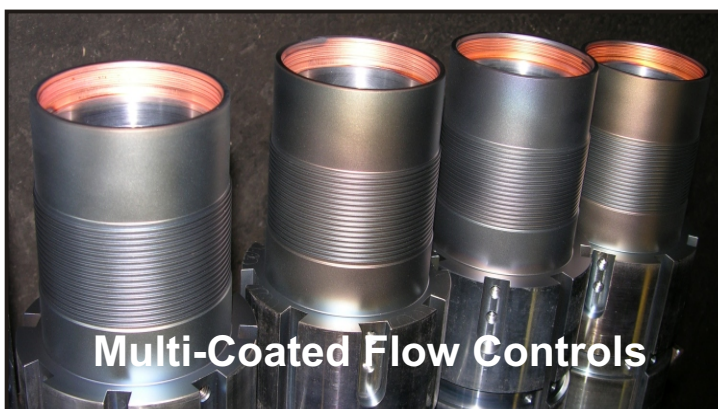
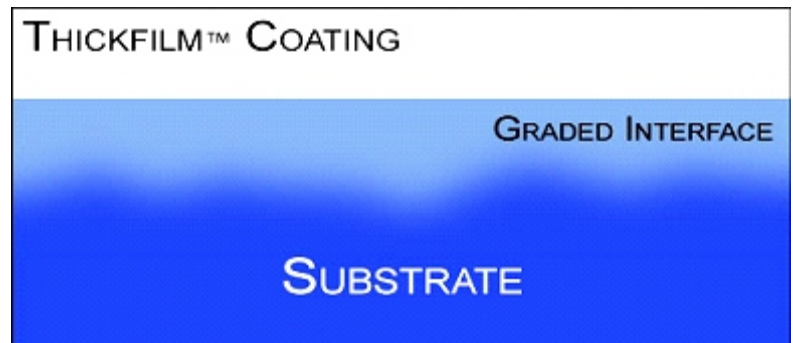
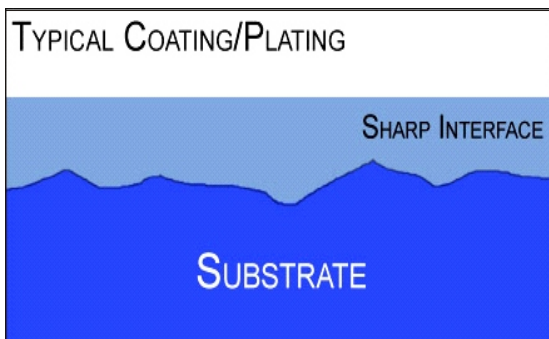
Our **Thickfilm™** low voltage, low amperage, low stress metal coating process provides exceptional results such as:

- Proven anti-galling and anti-friction results
- Maintained machining tolerances
- A smooth, uniform coated surface
- Outstanding adhesion due to a graded vs. sharp interface
- Minimal heat exposure and unaltered substrate hardness and porosity

Thickfilm™ is perfect for:

- Oil Tools/Flow Controls
- Engine Components
- Threaded Connections
- Industrial Valves

The diagrams below show the difference between typical coatings and **Thickfilm™** coatings:



Flow Control pieces with multi-material **Thickfilm™** coatings provide permanent anti-galling properties and reduced friction in the bore. This ensures excellent performance in critical production well applications.

FLEXBRITE, inc.

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Superior Coatings, Unsurpassed Results

BAKERTRON[®]

In addition to providing Baker Oil Tools with our **ThickfilmTM** process Flexbrite is the exclusive worldwide provider to coat selected products for Baker Oil Tools (Baker Hughes) using Baker's proprietary **BAKERTRON[®]** ion plating process. Since 1986 we have been coating various Baker Hughes components and have been acknowledged as a preferred vendor by them for our excellent performance, outstanding service and flawless quality.

"The threat of galling is further reduced by coating critical metallic components with proprietary surface treatments. This ensures that the sleeve will be redressable in the future, even when ordered in CRA materials. High nickel alloys are coated with Baker Oil Tools' BAKERTRON[®] ion plating process." [Excerpted from Baker Hughes web site: http://www.bakerhughes.com/bot/completions/flow_control/ch_cmq22.htm]. For more information about Baker's BAKERTRON[®] process and its completions solutions, visit <http://www.bakerhughes.com/bot/completions>.



Flow controls coated with one of several **BAKERTRON[®]** coatings applied by Flexbrite

BAKERTRON[®] is a registered trademark of Baker Hughes Incorporated