

3M Application Profile: Anodizing



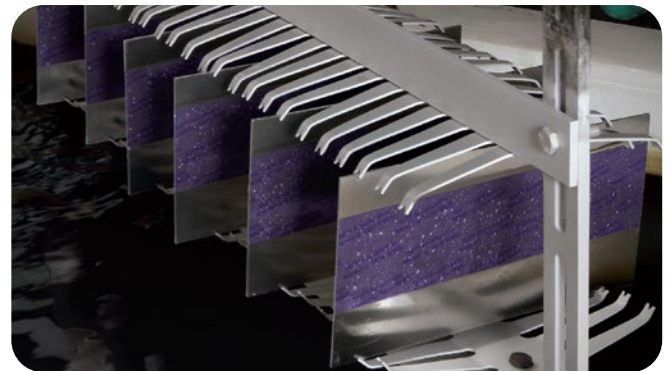
Metal parts are typically placed into racks then manually or, as seen here, automatically submerged into an acid bath.

Application Description:

Metal parts are immersed in a chemical bath and exposed to an electrical current. The process will alter the surface creating an anodic oxide finish. Duration time can vary, as can the acid used in the process.

Application Benefit(s):

- An anodic surface, created by anodizing, provides a durable, corrosion resistant and/or decorative finish
- Provides surface electrical insulation properties
- Prepares surface of a part for additional painting or plating processes



3M™ Anodizing Masking Tape 8985L shown protecting metal panels as they go through the anodizing process.

Key Application Requirements:

- The selected tape needs to hold reliably to a variety of surfaces, such as steel and aluminum
- The tape helps protect parts from acid immersion and must withstand electrical voltages
- After processing, the tape needs to remove cleanly and provide crisp lines

Engineered Industrial Tapes

For Metal Working, Aerospace
& General Industrial

Tape Benefits:

- **Increased throughput:** Eliminates wait time by avoiding the 24-hour cure time required by liquid maskants
- **Minimum rework:** Decreases rework and labor required
- **Fast, clean removal:** Reduces time required to remove and/or clean surface after use
- **Line definition:** Provides distinct, straight lines for aesthetics
- **Customizable (Lined product):** Creates part specific shapes or sizes quickly and easily

Products	
3M™ Lead Foil Tape 420/421	
3M™ Polyester Tape 8992/8992L	
3M™ Vinyl Tape 471/4712	
3M™ Anodizing Masking Tape 8985L	
3M™ Aluminum Foil Tape 425/427	
Additional Applications	
Aerospace	Landing gear
Automotive	Wheel covers
Electronics	Phone case
Construction	Architectural panels and stair railings



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