

Product Name: Personal Car Exhaust Tube

Lubricants in the Manufacturing of Exhaust Tubes

Introduction

The personal car exhaust tube is a key element of the vehicle's emission system, channeling exhaust gases efficiently while maintaining structural integrity, corrosion resistance, and acoustic performance.

At this company precision in exhaust tube manufacturing is achieved through advanced metal forming, bending, welding, and finishing operations. Each stage depends on specialized lubricants that reduce friction, protect tooling, and ensure high-quality, contamination-free surfaces ready for assembly and coating.

1. Role of Lubricants in Exhaust Tube Manufacturing

Efficient lubrication plays a vital role in the production of high-performance exhaust systems:

Reduces Friction & Tool Wear: Extends mandrel and die life during tube bending and forming.

Enables Precise Forming: Maintains dimensional accuracy and smooth metal flow, avoiding wrinkling or flattening.

Improves Weld Quality: Low-residue lubricants ensure clean weld seams and defect-free joints.

Prevents Surface Damage: Protects polished and aluminized tube surfaces from scratches or scoring.

Provides Corrosion Protection: Temporary rust preventives shield components before coating or assembly.

2. Types of Lubricants Used

Process Stage

Lubricant Type

Key Benefits

Tube Bending & Forming

Synthetic or polymer-based tube bending lubricants (IRMCO)

Excellent adhesion, reduced friction, clean bending on stainless/aluminized steel.

Cutting & Trimming

Water-miscible coolants / light cutting oils

Smooth edges, reduced burrs, extended tool life.

Welding & Assembly

Low-residue weld-compatible lubricants / anti-spatter fluids

Prevents weld contamination, ensures strong joints.

Surface Protection

Solvent-cutback rust preventives / dry-film coatings

Temporary corrosion protection before coating or painting.

Final Fitment Operations

Specialty greases for clamps & couplings

Anti-seize and anti-squeak performance under vibration.

3. Benefits to Manufacturers

Longer Tool Life: Mandrels, dies, and forming tools last longer with reduced wear.

Consistent Tube Quality: Controlled lubrication ensures accurate geometry and clean weld zones.

Lower Cleaning Costs: Water-based, low-residue lubricants minimize post-process cleaning.

Enhanced Safety & Sustainability: Modern low-VOC, non-chlorinated lubricants reduce environmental and operator hazards.

Improved Corrosion Protection: Ensures product integrity throughout handling and storage before final coating.

4. Latest Trends in Exhaust Tube Lubrication

Dry-Film Lubricants: Pre-coated tube surfaces eliminate the need for liquid lubrication and simplify cleaning.

Eco-Friendly Formulations: Biodegradable, synthetic-ester-based fluids meeting REACH and OEM sustainability standards.

Precision Spray Systems: Automated application minimizes consumption and ensures consistent lubrication.

personal car exhaust tube

Description:			
Product:	980-000	Company:	Faurecia 1
Industry:	Automotive Tier One	Material:	Stainless Steel
Thickness:	1.2	Concentration:	
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