



**MARKET LEADING SAFE
SOLVENT DEGREASER**

LOTOXANE®

Degreasing range



Setting the Standard in Cleaning & Maintenance



LOTOXANE® IS THE TRUSTED, SAFE SOLUTION FOR PROFESSIONAL DEGREASING

A non-flammable, near odourless alternative to the hazardous solvents used for all types of degreasing operations throughout industry.

Lotoxane® is the market leading safe solvent degreaser. Tested and approved by numerous OEMs it is in daily use worldwide for the removal of lubricants, protective coatings, cutting oils and hydraulic oils from metals, plastics, composites and painted surfaces.

Extremely versatile, it can be applied by spray, brush, dip tank or ultrasonic bath. The acute risk of flammability when using traditional degreasers is eliminated. The very low odour dramatically improves the environment for the worker and often means the same task can be carried out safely with less PPE. Furthermore, the controlled evaporation and high contaminant loading of Lotoxane® both lowers cost and reduces VOC emissions.

For when faster drying times are required, Lotoxane® Fast, Lotoxane® XF and Lotoxane® Triple F provide progressively quicker evaporation while retaining significant cost and safety benefits. Where the challenge is to remove heavier grease and oil deposits, Lotoxane® HD delivers increased degreasing performance with all the same characteristics as standard Lotoxane®.

Lotoxane® is widely approved by the world's leading industrial companies including Rolls Royce, Airbus, Saudi Aramco, Caterpillar, General Electric, AVIC, Siemens, SABIC, Gaz Group, Cummins, Kuwait Oil Company and BAE Systems among many others.

LOTOXANE®

A415 C043



LOTOXANE® RANGE



LOTOXANE® FAST

C044

3x faster evaporation.



LOTOXANE® XF

A416 C044

6x faster evaporation.



LOTOXANE® TRIPLE F

C054

15x faster evaporation.



LOTOXANE® HD

C048

Heavy duty degreasing.

A Aerosol product code

C Liquid product code

APPLICATIONS

Lotoxane® provides a safe alternative to the hazardous solvents used for industrial degreasing and can be used in a wide variety of applications. It is compatible with almost every surface and will not damage sensitive metals, plastics, composites or coatings.

ELECTRICAL MAINTENANCE

Degreasing of motors, switchgear and wiring assemblies.



PROTECTIVE COATINGS

Removal of transport or storage coatings.



NDT

Stage 1 cleaning.



COMPONENT PREPARATION

Removal of cutting oils and general contamination before assembly or further processing.



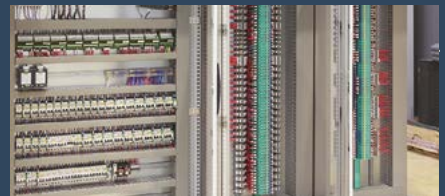
DEWATERING

Displacement of water from complex forms and blind holes.



ELECTRONICS

Contact cleaning.



FINAL CLEANING

Removal of fingerprints, adhesive and other marks on finished goods before delivery.



MAINTENANCE INSPECTION

Removal of lubricants and other contamination.



SURFACE PREPARATION

Cleaning before coating, bonding or welding operations.



AEROSPACE MRO CASE STUDY

THE CHALLENGE

A large aerospace MRO facility had recently won substantial new contracts and identified a need to ensure that it had access to the correct chemical cleaning materials that would allow it to maintain the various aircraft types it was now faced with. It was also preparing to undertake new maintenance procedures for the first time. Previously the MRO facility had procured a number of different solvent cleaners from a range of suppliers, often from the internet at significant cost. They knew that it was now imperative to secure cost effective supply to meet their needs.

LOTOXANE® SOLUTION

Through consultation with Arrow Solutions the MRO facility established that Lotoxane® and Lotoxane® Fast would be able to meet the majority of their requirements. The products carried almost all the OEM approvals demanded and could be used in a very wide number of applications. Lotoxane® is used for component cleaning, pre-inspection cleaning and electrical maintenance, whereas the faster drying time of Lotoxane® Fast proved to be perfect for pre-painting surface preparation.

The compatibility of Lotoxane® with different types of plastics also solved a problem that they had been having with damage to certain surfaces, caused by the use of MEK. The customer was able to replace the more hazardous products they had been using as well as reducing total consumption and cost per aircraft, due to the higher cleaning efficiency of Lotoxane®.

ENGINE MANUFACTURER CASE STUDY

THE CHALLENGE

A major international diesel engine manufacturer faced problems with machining lubricant residues remaining in interior sections of newly manufactured large engine blocks. The blocks are required to be completely free of contaminants before they proceed to the assembly stage.

Primary cleaning is provided by passing through hot aqueous spraywash equipment but this cannot thoroughly remove all deposits from the deep holes drilled within the blocks, so a secondary manual clean is undertaken. The manufacturer initially used acetone for this purpose but found it did not comply with company health and safety policy. They also identified a particular risk of flammability as the blocks were still warm following the spraywash cleaning.

LOTOXANE® SOLUTION

Working closely with Arrow Solutions, the customer established a simple process of passing thin long handled brushes, dipped in Lotoxane®, through the drill holes in the blocks where lubricant remains. The Lotoxane® removes all oily contamination and the brush pushes out any machined particles that may still be present. At the same time, the Lotoxane® displaces any build-up of moisture and prevents the risk of flash rusting.

Rather than waiting for the blocks to cool, Lotoxane® allows this operation to be carried out at any time which is most cost effective for the manufacturer. There has been a significant reduction in the consumption of Lotoxane® compared to acetone previously, and an equivalent reduction in VOC emissions. Lastly, where workers were once obliged to wear respiratory protection, they are now able to safely carry out the task without any type of face mask.

COMPARISON OF LOTOXANE® WITH COMMON ALTERNATIVES

| | Flammable | Vapour Toxicity Classification | Carcinogenic* |
|--------------------------|-----------|--|---------------|
| Acetone | ✓ | Causes drowsiness and dizziness, narcotic | ✗ |
| Trichloroethylene | ✗ | Causes genetic defects, drowsiness and dizziness, narcotic | ✓ |
| Perchloroethylene | ✗ | Causes drowsiness and dizziness, narcotic | ✓ |
| Methl Ethyl Ketone (MEK) | ✓ | Causes drowsiness and dizziness, narcotic | ✗ |
| Isopropyl Alcohol (IPA) | ✓ | Causes drowsiness and dizziness, narcotic | ✗ |
| Lotoxane® | ✗ | Not classified | ✗ |

*Carcinogenic = causes cancer



EVAPORATION SPEEDOMETER

Rates shown equal **x** times faster drying than Lotoxane®.
As a guide, Lotoxane® will dry at twice the speed of water.
Drying time can be decreased by air flow, heat or surface wiping.

Please speak to an Arrow technical representative who will be happy to provide further advice.

EVAPORATING

Fastest drying time first

| Product | Flash point | Applications | | |
|--------------------------|-------------|--------------|----------|--------|
| | | Ultrasonic | Dip Tank | Manual |
| Lotoxane® Triple F | 7°C | | | ✓ |
| Lotoxane® XF | 27°C | | | ✓ |
| Lotoxane® Fast | 40°C | | ✓ | ✓ |
| Lotoxane® / Lotoxane® HD | 62°C | ✓ | ✓ | ✓ |

INNOVATION

Continuous improvement is very important to us at Arrow Solutions, and our R&D department are constantly developing new technologies and methods to improve our products for the user, whilst reducing environmental impact.

Lotoxane® aerosols use Arrow's award winning pbca propellant technology, allowing for the use of compressed air, which is not only environmentally friendly, but also offers a reduction in hazard compared to traditional aerosols propelled by flammable gas.



KEY PRODUCTS FOR USE ALONGSIDE LOTOXANE® DEGREASERS



SHIELD

A056 C284

High quality corrosion preventative for storage or transportation of components and equipment.



WATER BASED ANTI-SPATTER

C830

Solvent free weld anti-spatter.



SUPERSOLVE AS

C145

Very fast evaporating electronic contact cleaner, safe on all surfaces.



WORKSHOP WIPES

C842

For quick and effective removal of semi-cured adhesives & sealants, lacquers, resins and inks.

A Aerosol product code **C** Liquid product code



ABOUT ARROW SOLUTIONS

Arrow Solutions is a leading manufacturer of professional industrial cleaning and maintenance chemical products.

With a worldwide customer base, our high quality aerosols and liquids are solving problems for thousands of companies every day, and our reputation for innovation and manufacturing excellence is recognised through numerous awards, accreditations and OEM approvals.

Our focus on supplying exceptional products and a commitment to outstanding service ensure that we find the right solution for even the most complex challenges.

In response to the challenge of achieving consistently high performance against a background of ever tighter regulation, more professionals trust Arrow to deliver on our promise to set the standard in cleaning and maintenance.

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