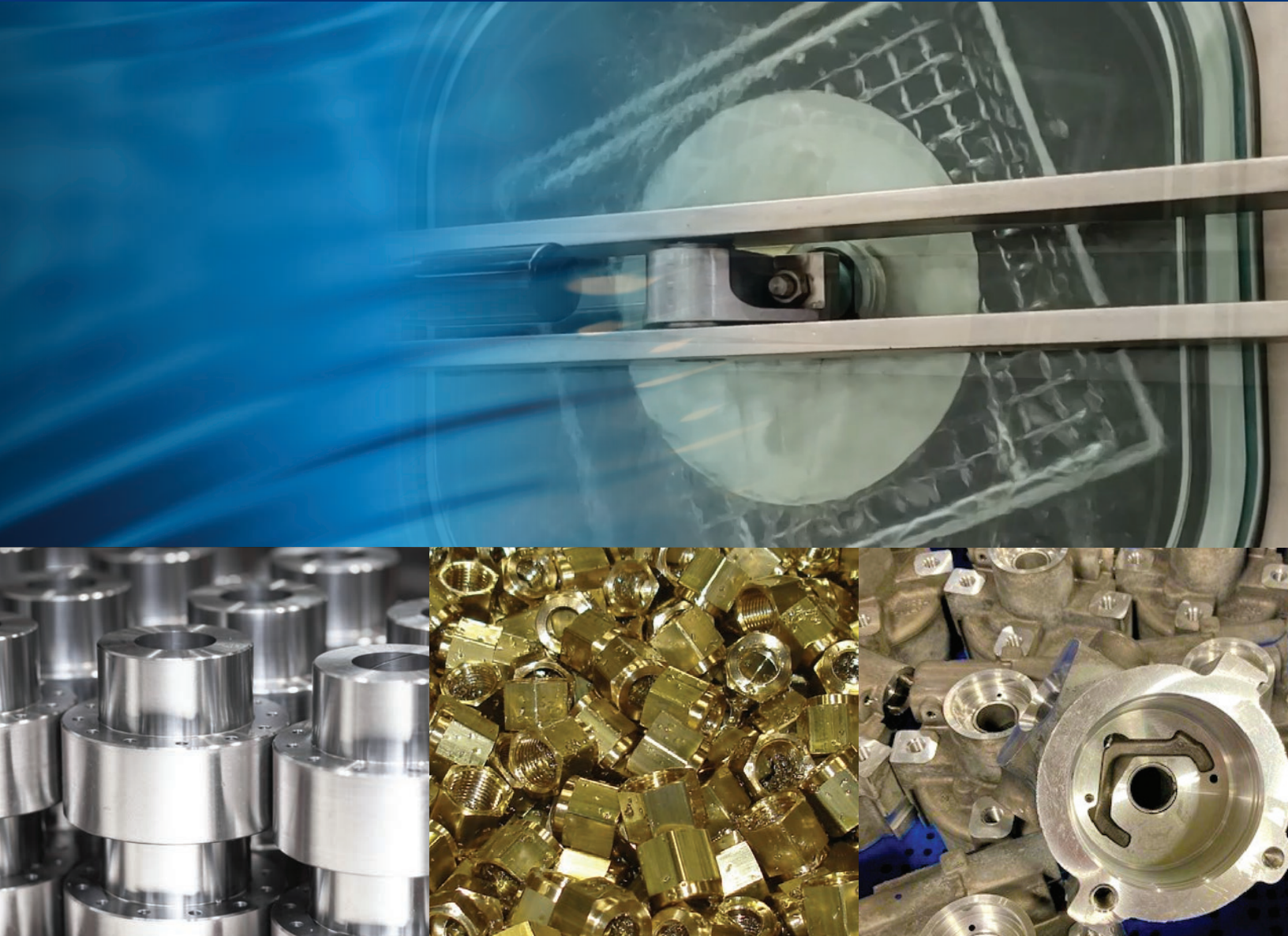


BENEFITS OF VACUUM DEGREASING

SAFE, EFFECTIVE, WATER-FREE PARTS CLEANING



BENEFITS OF KYZEN VACUUM DEGREASING

- ✓ Excellent cleaning for both polar and non-polar soils

✓ Low-cost process

✓ Able to meet wide range of cleanliness specs

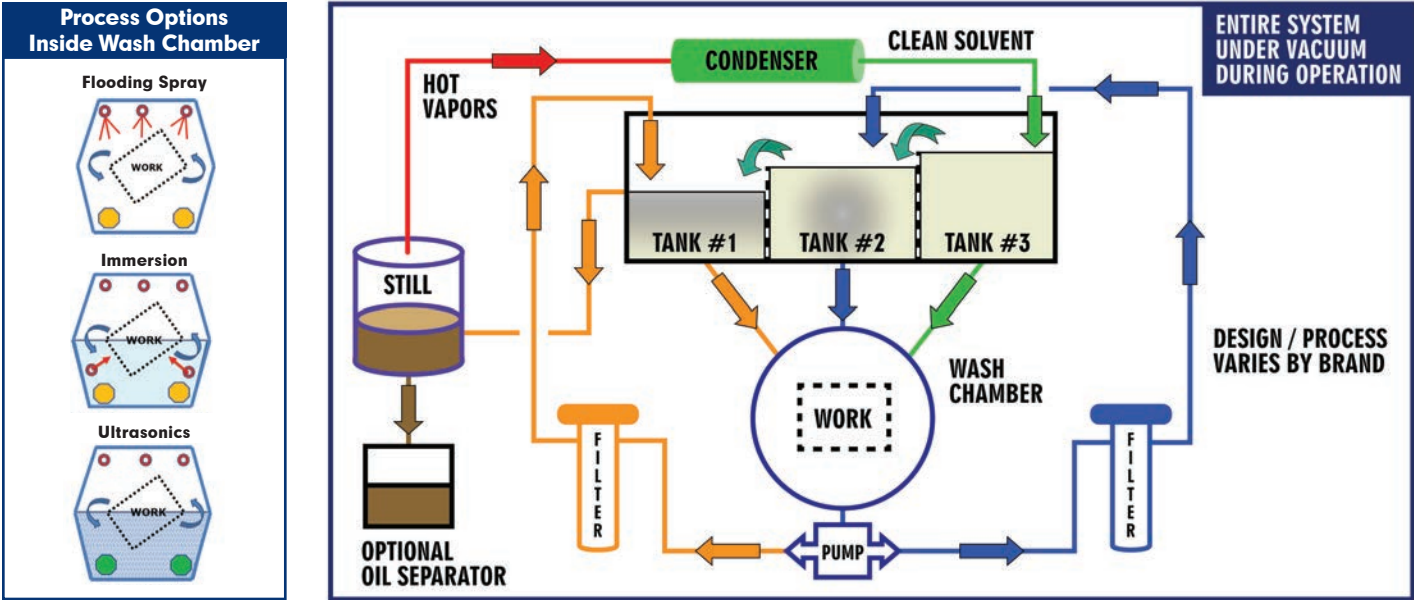
✓ No water required
- ✓ Non-HAP solvents

✓ Low VOC emission process

✓ Excellent rust prevention and protection

✓ Efficient use/recycle of solvent

VACUUM DEGREASING PROCESS OVERVIEW



NON-POLAR SOILS	POLAR SOILS
<ul style="list-style-type: none">Hydrocarbons/Straight OilsLithium GreaseParaffin OilsVanishing OilsDeep Draw Oils	<ul style="list-style-type: none">Water-Soluble CoolantsAnimal Fat OilsVegetable OilsSynthetic OilsFingerprints

KYZEN OFFERS ADVANCED SOLVENTS FOR VACUUM DEGREASERS

- METALNOX® M6386**

(Modified Alcohol Solvent for **Non-Polar and Polar Contaminants**)

METALNOX M6386 is a modified alcohol-based solvent designed for use in automated vacuum degreasing parts cleaning machines. M6386 is highly effective on commonly used paraffinic and/or water-based oils, cutting fluids, and milling fluids. This solvent is ideal for precision cleaning of machined parts as well as bulk items.
- METALNOX® M6381**

(Hydrocarbon Solvent for **Non-Polar Contaminants**)

METALNOX M6381 is a hydrocarbon solvent cleaner formulated for use in vacuum degreasing equipment featuring continuously regenerated solvent that enhances the cleaning process. This solvent is designed for heavy-duty cleaning of parts supplied to the automotive, aerospace, remanufacturing, and other high-tech industries.

THE KYZEN "EDGE"

ASTM TEST SPECIFICATION COMPLIANCE



METALNOX M6386 complies with ASTM aerospace specifications for manufacturing new parts as well as MRO (Maintenance & Repair operations). The following is a list of additional ASTM compliant specifications.

- | | |
|---------------|--|
| • ASTM F 483 | Total Immersion Corrosion Test |
| • ASTM F 2111 | Measuring Intergranular Attack |
| • ASTM F 519 | Mechanical Hydrogen Embrittlement Evaluation |
| • ASTM F 945 | Stress-Corrosion of Titanium Alloys (Method A) |
| • ASTM F 1110 | Test Method for Sandwich Corrosion Test |
| • ASTM F 1111 | Corrosion of Low-Embrittling Cadmium Plate by Aircraft Maintenance Chemicals |

Additionally, stainless steel and titanium medical components treated with M6386 passed all biocompatibility tests per STP0032 Rev 10 (ISO 10993-5), for Cytotoxicity.

VACUUM DEGREASERS WORK WITH WIDE RANGE OF APPLICATIONS AND CONTAMINANTS



CUTTING OILS



COOLANTS



LASER DUST/FINES

APPLICATION LAB SERVICES

The KYZEN technical team is composed of seasoned, professional cleaning experts. Our unmatched technical resources are used by and available to our customers and partners to identify and/or verify required cleaning processes for their individual needs. This ensures that the results meet expectations without interrupting your production lines. Our goal is to make your process the best it can be!



WHAT WE OFFER

The KYZEN Line of Process Enhancement products are auxiliary products developed to enhance and support the superior performance of all KYZEN Cleaning Chemistries used in Metal Finishing, Aerospace, Medical, and Automotive industries. If you have any questions, please don't hesitate to reach out.

AUXILIARY PRODUCTS

KYZEN® CP86

KYZEN CP86 is a heavy duty blend of organic inhibitors specifically designed to be used with METALNOX M6386 or other modified alcohol solvents. CP86 leaves an invisible dry film which provides short-term and long-term protection on a variety of metal parts for plant/warehouse storage.

KYZEN® CP81

KYZEN CP81 is a heavy duty blend of organic inhibitors specifically designed to be used with METALNOX M6381 or other hydrocarbon solvents. CP81 leaves an invisible dry film which provides short-term and long-term protection on a variety of metal parts for indoor storage.

KYZEN® BOOSTER 86

KYZEN'S Booster 86 is an additive designed to stop the formation of, and neutralize, acidic materials that may form in degreasing systems while removing chlorine containing oils. Booster 86 is designed to be added to METALNOX M6386 as needed based on acid acceptance values measured via the KYZEN Acid Stabilizer Kit 86.

KYZEN® BOOSTER 81

KYZEN'S Booster 81 is an additive designed to stop the formation of, and neutralize, acidic materials that may form in degreasing systems while removing chlorine containing oils. Booster 81 is designed to be added to METALNOX M6381 as needed based on acid acceptance values measured via the KYZEN Acid Stabilizer Kit 81.

ADDITIONAL PRODUCTS FOR CONSIDERATION



KYZEN® ACID STABILIZER KIT 86

KYZEN's Acid Stabilizer Kit (ASK) 86 is a specific process kit designed to monitor your METALNOX M6386 solvent for acid formation. The test takes roughly 15 minutes to complete. Time intervals between ASK 86 tests will vary based on your production hours and soil loading.

KYZEN® ACID STABILIZER KIT 81

KYZEN's Acid Stabilizer Kit (ASK) 81 is a specific process kit designed to monitor your METALNOX M6381 solvent for acid formation. The test takes roughly 15 minutes to complete. Time intervals between ASK 81 tests will vary based on your production hours and soil loading.

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