

GUIDE

LIQUID OR ULTRASONIC CLEANING?

Which is the best method to clean aniloxes?

TWO TYPES OF CLEANING ...

This guide focus on **two different ways** of cleaning your delicate and expensive aniloxes:

Cleaning with liquid
& high pressure water

Cleaning with ultra-
sound and liquid

Both technologies clean effectively, but with very different methods, and will reduce your downtime and expenses from printing with dirty aniloxes. But which is the best for you and your needs?

In the following pages you will find the questions you need to ask yourself when considering the best cleaning method for your business.

The guide will help you answer these questions:

How do the cleaning methods work?

3

What are the pros and cons of each system?

4

What to consider?

5

What are my specific needs?

6

TECHNICAL INTRODUCTION

THE ULTRASOUND CLEANING PRINCIPLE

Ultrasonic cleaning is a process that uses ultrasound (usually from 20–40 kHz) to agitate a fluid. This creates millions of vacuum chambers that rise up into the tank before imploding.

They implode near to or against the submerged component (ink residue), then contamination is sucked away by the implosion, resulting in cleaning. Before use, the component must be rinsed and dried manually.

The ultrasonic pressure waves interact with fluid creating "micro cavitation" implosions. Which in turn creates a "shock wave" loosening the ink.

The anilox rotates while heated liquid is sprayed onto the surface and enables easy removal of the ink from the anilox cells.

THE LIQUID CLEANING PRINCIPLE

Liquid cleaning is a process where you use an alkaline water-based soap solution, which is heated and sprayed onto the dirty anilox. The anilox cleaning liquid reacts with the ink in the anilox cells, the ink shrinks and is released from the cell walls.

The ink residue is removed from the cells by means of high-pressure water, which rinses off the remaining cleaning liquid and ink particles from the anilox then drying and ready to use it is then dried and ready to use.

PROS

- ⦿ Daily deep cleaning
- ⦿ No wear and tear on aniloxes
- ⦿ Easy to operate
- ⦿ Well proven technology

LIQUID CLEANING

CONS

- ⦿ Ongoing consumables cost
- ⦿ Waste and liquid handling
- ⦿ Difficulties with some 2K inks

LIQUID VS. ULTRASONIC ANILOX CLEANING

PROS

- ⦿ Smaller machines
- ⦿ Low investment product
- ⦿ Able to adjust the frequency (intensity) to suit anilox condition
- ⦿ Well proven technology

ULTRASONIC CLEANING

CONS

- ⦿ Manual rinse and drying required
- ⦿ Dents from handling or wear can devolope into surface damage
- ⦿ Implosion energy can detoriate thin cell walls

WHAT TO CONSIDER?

How do you choose between the two solutions?

You need to consider which solution makes sense to you by asking yourself **a few questions:**

How much time do I have for cleaning aniloxes?

How large is my anilox inventory?

How many aniloxes do I need to clean per cycle?

Where would I like to place the anilox cleaner?

What are my budgets for investing in cleaning equipment and running costs?

CHOOSE YOUR MOST IMPORTANT QUALITIES

LIQUID CLEANING

- ☐ Tight production schedule with multiple change-overs per day
- ☐ Need for an automated daily deep cleaning proces
- ☐ Cleaning of multiple aniloxes in 10-20 minutes
- ☐ Need for cleaning multiple aniloxes at a time

ULTRASONIC CLEANING

- ☐ Time for longer cleaning cycle
- ☐ Location flexibility
- ☐ Low budget for cleaning and running costs
- ☐ No need for an fullyautomated daily cleaning proces

**CLEAN
IS CLEAN**
YOU DECIDE HOW!

We are always ready to
help and guide you to the right solution!

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