

# Anilox maintenance & care guide



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# **Anilox Cleaning**

Anilox cleanliness is critical because dirty or clogged cells can degrade performance by reducing cell volume and causing uneven appearance or random patterns in the print or coating.

In order to ensure reproducible results, regular cleaning is paramount. Adequate cleaning and maintenance will preserve the original characteristics of your Anilox rollers and prolong their life.

Please follow our recommended care guidelines below to ensure you get the longest life possible out of your new or refurbished Anilox.

# **How to Clean Your Roll**

# Materials required

- · Cheshire Anilox Technology "Q-clean" Anilox cleaner
- Anilox roll cleaning brush with stainless steel 0.003" (75microns) bristles (available from Cheshire Anilox Technology)
- Chemical resistant gloves to protect your hands (like Sol-Vex 37-675 or similar)
- Safety glasses
- Warm water
- · Lint-free cloth

# Cleaning method

Cheshire Anilox Technology recommends performing the following maintenance regularly (weekly or as needed) in order to keep the Anilox roll clean:

- 1. Apply Q-clean onto the Anilox roll surface.
- Using the Anilox roll cleaning brush, provided by Cheshire Anilox Tech., start scrubbing in a circular motion while applying light pressure and rotating the roll.
- 3. Gently wipe the Anilox roll thoroughly with warm water. Repeat procedure on any unclean area.
- 4. When the Anilox surface is clean, dry it with a lint free cloth.
- 5. After cleaning, engravings should be viewed under high-power magnification to ensure they are clean.
- If rollers do not clean well after regular cleaning please see below and contact Cheshire Anilox Technology to learn more about our professional roll cleaning service.

# Off press cleaning

Any method used to clean the engraved coating must penetrate the depth of the microscopic cells in the hard ceramic coating to ensure correct cleaning. Always use Anilox compatible cleaners and follow manufacturer's instructions. If heated equipment is used do not go above 50°C to avoid thermal cracking.

# Special care of aluminium base Anilox rollers

Aluminium is more susceptible to corrosion from acidic and alkaline cleaning chemicals than steel. Many of the Anilox chemicals are developed for use on a steel bases and not on aluminium.

To avoid substrate corrosion the cleaner PH should not be higher than 11.8 or lower than 5.5. When cleaning aluminium rollers in heated equipment do not go above 50°C. Always follow the cleaners manufacturer's instructions and never exceed soaking times

# Special guidelines for Anilox sleeves

The sleeve construction is more fragile than rollers with journals and therefore more considerations for their care and maintenance are required:

- · Keep the inner and ends clean.
- Keep the press mandrels clean and in good condition (free from rust, dried ink etc.)
- Keep the ink sling guards clean and free of ink. Do not allow the sling guards to fill with ink and rub on the ceramic or sleeve end
- A sleeve should be loaded in a straight horizontal line, without forcing the sleeve up and down.
- Caustic cleaning chemicals and/or high pH inks can corrode a sleeve's aluminium cladding and/or end rings, causing ceramic blistering. The pH of chemical cleaners should never be below 5.5 or above 11.8
- Do not submerge an anilox sleeve.

- All chemical cleaners should be rinsed off the surface properly and the chemical neutralised. The sleeve should be dried thoroughly before covering.
- When storing sleeves vertically, it is important to place them
  on cushioned padding and use end caps. If storing horizontally,
  sleeves should be properly stored on a rack, or on a mandrel to
  prevent hanging or drooping.

# Professional roll cleaning service



If your roll becomes plugged and you can't clean it yourself, send it to us for professional cleaning. If we find the roll damaged or plugged beyond what a professional cleaning can correct, we can easily refurbish the roll internally and will credit 50% of the cleaning cost towards a refurbishment. In most

cases, worn or plugged rolls can be stripped and re-engraved using the original base material, saving the customer the cost of buying a new roll.

Rolls will be cleaned using the most advance ultrasonic equipment which uses the latest ultrasonic technology with a high frequency output to safely remove the most difficult inks and coatings from ceramic and chrome surfaces. Anilox rollers are cleaned and cells are restored to their like-new condition within one to two working days depending on the condition of the roll.

#### Lubrication

The key to wear prevention is lubrication: Always pump enough ink/ varnish through an ink system to keep both the top and bottom blades "wet," or lubricated. Running Anilox rolls dry will destroy them.

#### Correct use of doctor blades

Use high quality doctor blades made of high tensile steel that will reduce prompt wear of the blades which will help to prevent scoring of the Anilox. Please ensure blades are correctly mounted and aligned as this is critical to prevent scoring of Anilox surface. Avoid over-pressure of the blade to the face of the Anilox as this will extend the life of the Anilox and its overall performance.

# Proper handling and storing



Anilox covers provide resistance to impact damage and offer an inexpensive means of extending roll life. Covers should be used when rolls are handled or stored.

Incidental damage can occur from many sources including crane hooks, the ink pan, contact with

other rolls, or nails and debris in the crate. Just by wrapping the Anilox in a protective cover this can be avoided. Cheshire Anilox Technology provides a range of Vinyl Protective Anilox covers that are available in various sizes up to 5000mm.

### Storage



Before storing a roll, the face and journals should be cleaned. The face should be dry and some form of protective cover should be applied. Anilox covers will be the most adequate means to provide great impact resistance while the Anilox is stored. After the face is covered, a lightweight lubricant such as WD 40 should be applied with a rag to the journals. This will reduce rusting and corrosion.

# **Anilox diagnostic test**



If you are unsure of the condition of one or various of your Anilox rollers and cannot afford to send the anilox off site for a full inspection, you can request Cheshire Anilox Technology to send you a self-diagnostic screen test kit.

Once the test is performed on the Anilox roll or rollers, it is then mailed to Cheshire Anilox Technology for a complete, free diagnostic roll report. An in-depth analysis on the overall condition and cleanliness of the roll with recommendations will be provided to the customer.

Recommendations may include Anilox cleaning or refurbishment.

Request an Anilox screen inspection kit from you're your local Cheshire Anilox technology sales representative, or call +44 (0) 161 344 5558 and a kit will be promptly posted to you. Please be sure to mention the number of rollers to test so we send you sufficient Anilox inspection strips.

#### **Customer service**

Please contact us now for a free consultation and assessment on Anilox care or any other aspect of your new Anilox roller on +44 (0) 161 344 5558.

# **Anilox cleaning products**

#### **Anilox Protective Cover**

Designed to protect the edge and face of the Anilox roll from impact damage that occurs during handling and storage. The jackets are equipped with a Velcro fastening for easy and fast installation. Each jacket has a clear label pocket to insert the roller specifications for easy identification. Available colours: Red. Green. Blue and Black.



Price: from £40 / €52

# **Q-clean Anilox Cleaning Gel**

Powerful cleaning gel specially formulated to break down hardened ink within the Anilox cell. Engineered to clean the most difficult ink or coatings from ceramic or chrome surfaces. Compatible with UV, water and solvent based inks. Prolongs Anilox life.

Price: £45 / €59 per litre bottle £42 / €55 per 5 litres order



# Ceramic Safe Anilox Cleaning Brush

Stainless Steel Cleaning Brush. The most cost effective tool to care and maintain clean your Anilox rollers. To be used with Q-clean Anilox cleaner. Each bristle is 0.002" thick so it can efficiently remove the dried ink or coating from the bottom of the Anilox cells.



Price: £26 / €33 each

# (reduce the time for ultrasonic cleaning by half)

Powerful caustic based Ultrasonic cleaning solution that effectively removes the most difficult inks and coatings from ceramic and chrome surfaces. Suitable for all type of inks and coatings.

*Price: 5-litre bottle: £25 / €33*25-litre drum: £105 / €137



To place an order please call +44 (0) 161 344 5558.

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