

Inauvate
WORK SOLUTIONS

RULAND
Quality Machine Tools and Supplies

Ruland Manufacturing Co.
6 Hayes Memorial Drive
Marlborough, MA 01752

*Special Introductory
Offer Inside*

Inauvate
●●● WORK SOLUTIONS

ASF 100

The UV sterilization solution to extend the life of water-based process fluids



EXTEND THE LIFE

of MACHINE TOOL COOLANT

Special Introductory Offer Inside

www.inauvate.com

ASF 100 Explained

The ASF 100 from Inauvate controls the spread of bacteria, mold, and fungi that spoil water-based industrial fluids, such as metal-cutting coolant, by sterilizing living cells and limiting the growth of future colonies. Based on ultraviolet (UV) light technology, the ASF 100 prolongs fluid life - leading to fewer change outs per year, reduced machine downtime, lower disposal costs, and more time for maintenance personnel to perform other tasks. Green benefits of the ASF 100 include reduced waste, minimal energy costs, a cleaner/healthier work environment, and less need for traditional harsh chemical additives.

Compact, easy to install, and designed specifically for the manufacturing industry, the ASF 100 utilizes a multi-pass recirculating configuration and a directed flow through the filter unit to maximize UV exposure. It is available in two different sump sizes, with normal bulb output models designed for transparent fluids commonly found in aqueous parts washers, and high bulb output models designed for opaque fluids commonly found in metal-cutting applications. The filter element helps remove small chips from the coolant stream that can lead to premature tool wear and protect the light surface from exposure to contaminants that can scratch its surface degrading performance of the UV system. Built-in electronics allow for a variety of operating modes, including: stand-alone operation, time-based scheduling, and external controls (for example, M-code relays on CNC machines).



Inauvate's ASF 100 is a chemical free UV system that fits most machine tools and sterilizes bacteria that cause Monday Morning Stink.

Why the ASF 100?

- Prolongs the life of water-based process fluids by sterilizing bacteria, reducing the need for costly change outs.
- Lower bacteria count promotes a cleaner and healthier working environment and eliminates Monday Morning Stink caused by spoiled fluid.
- Pays for itself in months not years.
- Chemical-free UV sterilization system reduces environmental waste.
- Designed with a low profile specifically for the manufacturing industry.
- Available with normal bulb outputs for clear fluids and high bulb outputs for opaque fluids.
- Offered in 10" sumps for compact spaces and easier maintenance, and 20" sumps for maximum light exposure and effectiveness.
- Installation is quick and simple with options for permanent installation or portability.
- Utilizes a multi-pass recirculating configuration and directed flow through the filter to maximize UV exposure.
- Built-in electronics allow for stand-alone use, external control (such as M-code relays) or time-based scheduling.



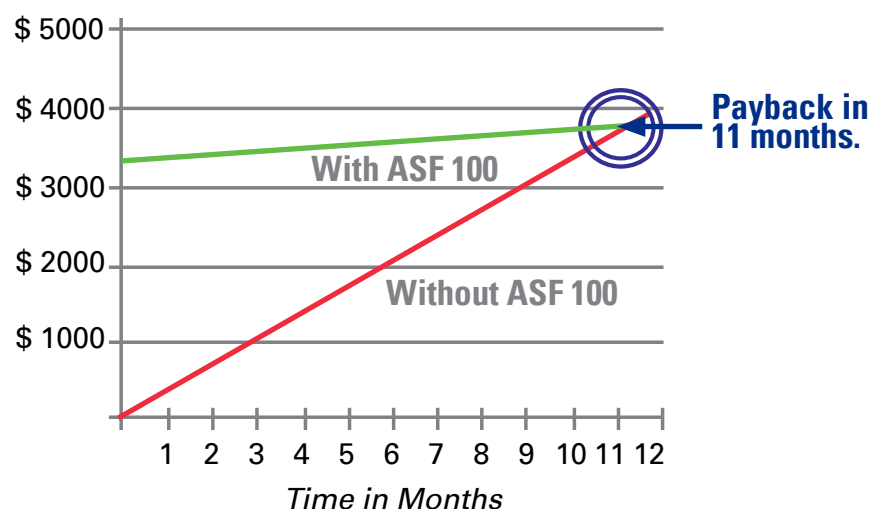
The ASF 100 UV sterilization system is compact and designed for the manufacturing industry.

The **ASF 100** pays for itself in months not years¹

Coolant Cost	7% of 480 gal, 33.6 gal at \$25. ⁰⁰ /gal	\$840/yr
Coolant Disposal	480 gal at \$2. ⁰⁰ /gal	\$960/yr
Machine Downtime	16 hrs at \$100/hr	\$1,600/yr
Maintenance Labor	16 hrs at \$25/hr	\$400/yr
Total savings per machine per year		\$3,800/yr*
MSRP of ASF100-20H		\$3,595
Payback Period	11 months	

¹ Cost savings are calculated for a single machine with a 120 gallon sump. The ASF 100 eliminates four out of five change outs per year saving 480 gallons of coolant plus additional disposal costs. The concentration of coolant is assumed to be 7% and machine downtime and labor is estimated to be 4 hours per occurrence.

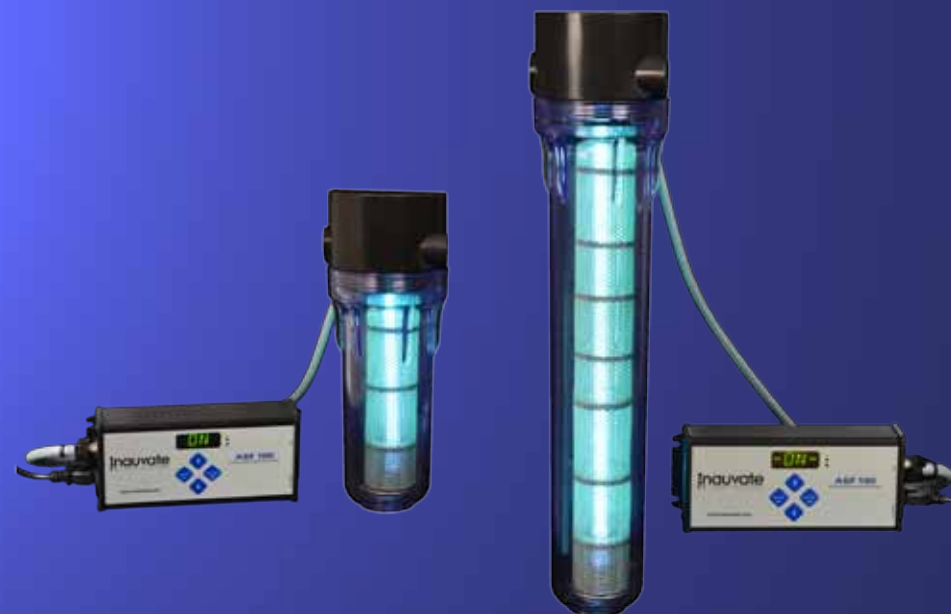
*Note – Costs and payback period will vary based on the user's actual costs and operating environment. To use our payback calculator please visit inauvate.com/payback.



ASF 100 Special Introductory Offer

- Receive 10% off your first order
- 6 month money back guarantee*
- Free shipping

* If within 6 months of receipt you are not satisfied with the performance of the ASF 100 the unit may be returned for a full refund.



The ASF 100 is available in 10" sump size for compact installations and 20" sump size for maximum UV exposure and effectiveness. See page 6 for product comparison and pricing.

Product Comparison



ASF100-10N
ENTRY LEVEL VALUE

ASF100-10H
HIGH POWER IN A
SMALL PACKAGE

ASF100-20N
EXTENDED
PERFORMANCE

ASF100-20H
TOP OF THE LINE

	ASF100-10N ENTRY LEVEL VALUE	ASF100-10H HIGH POWER IN A SMALL PACKAGE	ASF100-20N EXTENDED PERFORMANCE	ASF100-20H TOP OF THE LINE
Recommended Fluid	Clear	Clear/Translucent	Translucent/ Opaque	Opaque
Exposure to UV Light	Good	Better	Better	Maximum
Light Wavelength	UV-C	UV-C	UV-C	UV-C
Light Wattage	14W	29W	26W	54W
Light Intensity	4000 $\mu\text{W}/\text{cm}^2$	8000 $\mu\text{W}/\text{cm}^2$	8400 $\mu\text{W}/\text{cm}^2$	14,000 $\mu\text{W}/\text{cm}^2$
Filter Dimension	10" x 2.5"	10" x 2.5"	20" x 2.5"	20" x 2.5"
Max Pressure	50 psi	50 psi	50 psi	50 psi
Max Flow Rate	20 US gal/min	20 US gal/min	20 US gal/min	20 US gal/min
Max Tank Volume	120 US gal	120 US gal	120 US gal	120 US gal
Max Temperature	125°F	125°F	125°F	125°F
Bulb Life Monitor	Yes	Yes	Yes	Yes
Bulb Failure Monitor	No	Yes	No	Yes
Shipping Weight	13 lbs	13 lbs	14 lbs	14 lbs
Sump Dimension	13.75" x 5.88" x 5.25"	13.75" x 5.88" x 5.25"	23.75" x 5.88" x 5.25"	23.75" x 5.88" x 5.25"
Control Box Dimension	6.25" x 4.25" x 1.75"	6.25" x 4.25" x 1.75"	6.25" x 4.25" x 1.75"	6.25" x 4.25" x 1.75"
MSRP	\$2,495	\$2,795	\$3,295	\$3,595

About Inauvate

Inauvate Work Solutions offers tools for manufacturers that reduce costs, increase productivity, and contribute to a better environment. A brainchild of Ruland Manufacturing Co., Inc., Inauvate was founded to share products developed to improve operations on the Ruland factory floor. We have found that a common sense approach to workplace organization and reduced waste contribute as much to profitability, product quality, and the environment as does more costly investments. This has helped Ruland to thrive while continuing to manufacture all of its products in a "high cost" location with strict environmental standards.

Ruland Manufacturing Co., Inc. was established in 1937 as a manufacturer of precision components. Ruland's focus for the past 40 years has been on high performing shaft collars and couplings. All Ruland products are carefully manufactured in Ruland's Marlborough, MA, USA factory, under strict controls using proprietary processes. The complete product line includes shaft collars and rigid couplings, and a full assortment of motion control couplings.