

# Washing Equipment



**LAB  
LEGEND**.cc

Reg No: CK 94/17478/23

P.O. Box 462, Paardekraal,  
South Africa, 1752  
+27 11 664 6370  
+27 11 664 6377  
beadsint@icon.co.za

Agents for Africa  
[www.lablegend.co.za](http://www.lablegend.co.za)



**Italia Sistemi  
Tecnologici** S.p.A.

Ecotecnologia innovativa - Innovative ecotechnology





## THE COMPANY

Founded in 1987, IST began to design, manufacture and supply **Solvent Reclaimers and Washing Systems**.

**Security, Sustainability, Ecology and Economics:** widespread concepts nowadays, they were targets since our inception; this long-term vision has allowed IST to get a positive feedback from the market placing the company as a sole partner and supplier of many customers worldwide.

IST's product range is now one of the largest on the market, and is able to satisfy all possible customers' needs.

The experience gained over the years in sectors such as **GRAPHICS, CHEMISTRY, AUTOMOTIVE, AEROSPACE, HOSPITALS, FIBERGLASS, PAINT** and **INKS**, has made IST the supplier of choice, with more than **27.000 installations worldwide**.

Our certifications, together with the strong synergies amongst our **SALES, TECHNICAL** and **PRODUCTION** departments allow IST to understand the customer's needs and make them central to our products, providing secure and concrete solutions today that are suitable for tomorrow.

On the strength of positive experiences in foreign markets, in 1990 IST established the company **SET - Sistemas Europeos de Tecnologia S.L.**, based in Vigo (Spain), mostly dedicated to follow up the local and the South American markets.

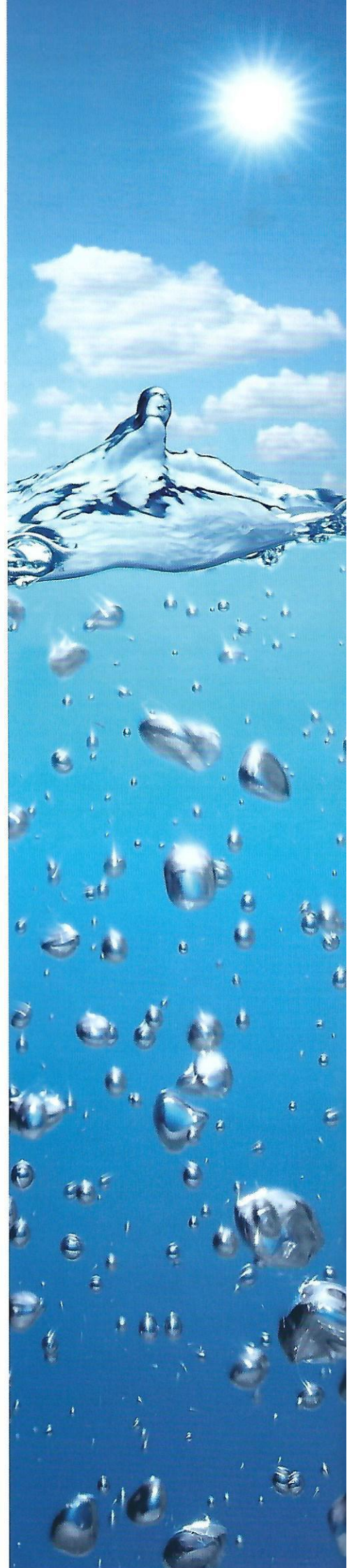
## PRODUCTION

IST's product range is now one of the largest on the market and includes:

- ✓ RECLAIMERS FOR WASTE SOLVENT AND WASTE WATER
- ✓ CONTINUOUS CYCLE DISTILLATION SYSTEMS INTEGRATED IN LINE WITH PRODUCTION PROCESSES
- ✓ SOLVENT AND WATER BASED WASHING UNITS
- ✓ ULTRASONIC WASHING UNITS FOR PARTS AND ANILOX CYLINDERS/SLEEVES
- ✓ AUTOMATIC PLATE WASHERS
- ✓ PNEUMATIC AND ELECTRIC VACUUM GENERATORS



Venticinque anni di  
tecnologia per l'ecologia  
*Twentyfive years of  
technology for ecology*





# WASHING UNITS

IST washing units offer the ideal solution to the problem of cleaning different items, in numerous industries.

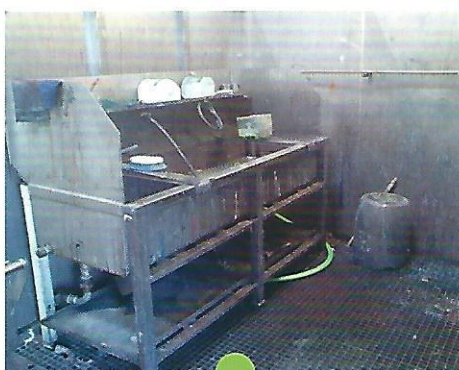
A wide range of products is available to fulfill any need, both for the small user and the large enterprise, in accordance with the requirements of the customer.

The manual cleaning operation of parts is first of all unhealthy for the operator (besides the adoption of gloves and masks), it's a waste of labor time, cleaning agents (solvent and detergents), and consequently a waste of money for companies all around the world.

IST washing units are safe, economic (limited investment and running costs) and effective. The operator just loads the parts and starts the unit, then he can use his time for more profitable tasks. Meanwhile the unit will accurately wash the parts.

Our Washing Units provide a solution to optimize and reduce the time of washing, suitable for:

- ✓ Flexo and Roto printing
- ✓ Coating
- ✓ Furniture and wood
- ✓ Inks
- ✓ Machine and bicycles builders
- ✓ Aerospace and Naval
- ✓ Fiberglass industry
- ✓ Footwear
- ✓ Labels
- ✓ And many others





These solvent-based washing systems are designed for different industries. Appreciated especially by printing houses, coaters and metal workers, they offer different cleaning solutions, ideal for machine parts from flexo, gravure and offset printing: gravure cylinders, doctor blades, circulation ink tanks, guards and equipment. The operation is simple and safe, combining the efficiency of the washing machine (in terms of time saving and cleaning quality) with the protection of the operator's health, avoiding direct contact with hazardous substances.

Machine functioning is completely pneumatic, with the purpose of working in complete safety when dealing with flammable products. The washing solvent is stored in the service tank, avoiding evaporative loss and consequent air pollution. The emptying of the service tank, as well as the rinsing with recovered solvent, can be operated either manually or automatically. It is also possible to combine any washing unit with recyclers for solvent recovery, allowing the user to minimize the consumption of solvent.

## Standard Equipment

- Suitable to work with flammable solvents
- Completely made of stainless steel Aisi 304
- Pneumatically operated only
- Start/Stop functioning
- Lid with soft release pistons
- Completely removable storage tank
- Safety sensor for lid close
- Dedicated emptying pump
- Adjustable and removable pipelines
- Support grid

## Upon Request

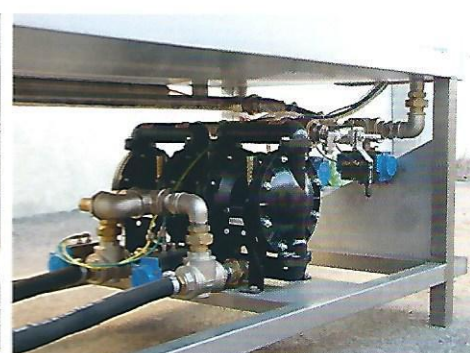
- Timed cycle
- Rinsing with automatic liquid-leveling
- Lance equipped with brush for manual cleaning of difficult parts
- Additional pipelines
- Rotating heads for can washing
- Motorized support for gravure cylinders
- Internal suction of vapors
- Outside suction system
- Customized support grid
- Oscillating grid
- Higher lid to increase useful space
- Soundproofing
- Motorized support for narrow web anilox



Model	L (mm)	W (mm)	H (mm)
PN 1000 C	900	500	300
PN 1500 C/S*	1400	500	300/500*
PN 2000 C/S*	1900	500	300/500*
PN2500 S	2400	500	500
PN 3000 S	2900	500	500
PN 1500 PLUS	1400	650	500
PN 2000 S PLUS	1900	650	500
PN 2500 S PLUS	2400	650	500
PN 3000 S PLUS	2900	650	500

## APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Cans and buckets - Gravure cylinders - Various parts





Washing machine for printing press parts, designed especially for ink trays, tanks, doctor blades and vessels. Especially valued by rotogravure and flexo printers with numerous presses and job changes per shift.

It's equipped with a trolley, to load the parts to be washed in the different areas of the factory and easily bring them in front of the machine. The operator will simply slide-in the grid and start the washing cycle.

All XTR series come with PLC control panel set with different washing and rinsing programs.

XTR M is equipped with oscillating solvent pipelines, with the mechanism placed outside the washing compartment, for total absence of moving parts during the cycle and reduced maintenance.

## Standard Equipment

- Electrically and Pneumatically operated
- On-Board ATEX control panel
- Panel with Touch Screen and dedicated PLC
- Customizable washing cycles
- Record of operating parameters and visualization of data during the cycle
- Messages for scheduled maintenance
- Alerts notification in case of malfunction
- Trolley for parts loading
- Door with vertical opening
- Completely removable storage tank
- Easy access lid with gasket and safety closure
- Powerful electric pumps
- Filtration and pre-filtration
- Overpressure safety system
- Cycles selection
- Partial washing
- Rinsing with automatic liquid-leveling
- Adjustable and removable pipelines
- Dedicated pneumatic pump for tank emptying
- Dedicated pump for rinsing
- Cooling of the solvent to limit evaporation

## Upon Request

- Oscillating pipelines with low number of nozzles, for higher pressure
- Customized trolley
- Integration with distillation unit



Model	L (mm)	W (mm)	H (mm)
XTR M 1000	1900	1000	600
XTR M 2000	1900	2000 (1000+1000)	600
XTR M 3000	1900	3000 (1500+1500)	600

## APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Various parts





These water-based washing systems are designed for different industries. Appreciated especially by printing houses, coaters and metal workers, they offer different cleaning solutions, ideal for machine parts from flexo, gravure and offset printing: gravure cylinders, doctor blades, circulation ink tanks, guards and equipment.

The operation is simple and efficient. The emptying of the service tank, as well as the rinsing with recovered solvent, can be operated manually or automatically.

All phases of the cycle are managed by a programmable microprocessor, equipped with TOUCH SCREEN digital display, showing the washing cycle data, possible anomalies (errors diagnostic) and periodic recommended maintenance.

Made of AISI 304 stainless steel, and electrically powered with automatic control, these washing units are suitable for cleaning medium to large parts with water and detergent.

### Standard Equipment

- Suitable to work with aggressive detergents
- Completely made of stainless steel Aisi 304
- Electrically and Pneumatically operated
- Timed cycle
- Panel with Touch Screen and dedicated PLC
- Customizable washing cycles
- Record of operating parameters and visualization of data during the cycle
- Messages for scheduled maintenance
- Alerts notification in case of malfunction
- Powerful electric pump
- Heating of the washing liquid
- Lid with soft release pistons
- Safety sensor for lid close
- Dedicated emptying pump
- Adjustable and removable pipelines
- Support grid

### Upon Request

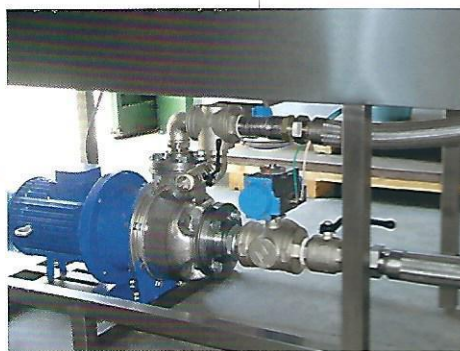
- Rinsing with automatic liquid-leveling
- Separate rinsing outlet
- Rotating heads for can washing
- Customized support grid
- Oscillating grid
- Weekly Programmer



Model	L (mm)	W (mm)	H (mm)
EL 1500	1400	600	350
EL 2000	1900	600	470
EL 2500	2400	600	600

### APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Cans and buckets - Various parts





These water-based washing systems are designed for different industries. Appreciated especially by printing houses, coaters and metal workers, they offer different cleaning solutions, ideal for machine parts from flexo, gravure and offset printing: gravure cylinders, doctor blades, circulation ink tanks, guards and equipment. All phases of the cycle are managed by a programmable microprocessor, equipped with TOUCH SCREEN digital display, showing the washing cycle data, possible anomalies (errors diagnostic) and periodic recommended maintenance.

Made of AISI 304 stainless steel, and electrically powered with automatic control, these washing units are suitable for cleaning medium to large parts with water and detergent.

In addition to the features of the EL model, these units are also equipped with an automatic lid (moved by pistons), and allow the use of trolley with sliding grids for the loading of parts.

### Standard Equipment

- Suitable to work with aggressive detergents
- Completely made of stainless steel Aisi 304
- Electrically and Pneumatically operated
- Timed cycle
- Panel with Touch Screen and dedicated PLC
- Customizable washing cycles
- Record of operating parameters and visualization of data during the cycle
- Messages for scheduled maintenance
- Alerts notification in case of malfunction
- Powerful electric pump
- Heating of the washing liquid
- Automatic lid opening with pneumatic pistons
- Safety sensor for lid close
- Dedicated emptying pump
- Adjustable and removable pipelines
- Support grid

### Upon Request

- Rinsing with automatic liquid-leveling
- Separate rinsing outlet
- Additional pipelines
- Rotating heads for can washing
- Customized support grid
- Oscillating grid
- Trolley with slide-in grid
- Weekly Programmer



Model	L (mm)	W (mm)	H (mm)
EXL 2000	1900	1000	550
EXL 2500	2400	1000	550

### APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Cans and buckets - Various parts





These ultrasonic washing systems are designed for different industries. Appreciated especially by printing houses, coaters and metal workers, they offer different cleaning solutions, ideal for machine parts from flexo, gravure and offset printing: doctor blades, circulation ink tanks, guards and equipment. They are also very efficient in metal industries (degreasing) and are often used to accurately wash parts before being coated.

Thanks to the ultrasounds technology it is possible to ensure a deep and extremely economical cleaning.

Ultrasonic is the only cleaning method able to wash also complex-shaped parts.

The operation is simple and safe, managed by a programmable microprocessor equipped with TOUCH SCREEN digital display, showing the washing cycle data, possible anomalies and periodic recommended maintenance.

The piezoelectric transducers have an efficiency of above 90% and provide a uniform and constant propagation of the ultrasonic waves into the washing liquid.

### Standard Equipment

- Suitable to work with aggressive detergents
- Electrically and Pneumatically operated
- Timed cycle
- Panel with Touch Screen and dedicated PLC
- Customizable washing cycles
- Record of operating parameters and visualization of data during the cycle
- Messages for scheduled maintenance
- Alerts notification in case of malfunction
- Heating of the washing liquid
- Automatic lid opening
- Automatic lifting of the basket
- Safety sensor for lid close
- Dedicated emptying pump

### Upon Request

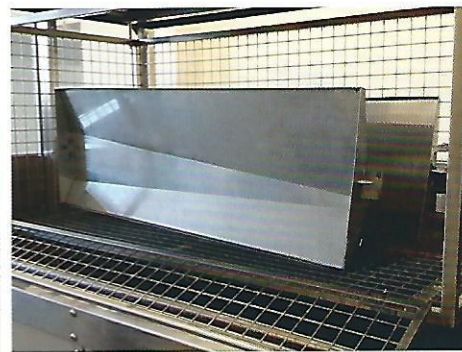
- Customized support grid
- Trolley with slide-in grid
- Weekly Programmer
- Separate filtration system



Model	L (mm)	W (mm)	H (mm)
VU 140 S	1400	800	800
VU 180 S	1800	800	800
VU 260 S	2600	800	800

### APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Cans and buckets - Various parts





These ultrasonic washing systems are designed for different industries. Appreciated especially by printing houses, coaters and metal workers, they offer different cleaning solutions, ideal for machine parts from flexo, gravure and offset printing: doctor blades, circulation ink tanks, guards and equipment. They are also very efficient in metal industries (degreasing) and are often used to accurately wash parts before being coated.

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The operation is simple and safe, managed by a programmable microprocessor equipped with TOUCH SCREEN digital display, showing the washing cycle data, possible anomalies and periodic recommended maintenance.

The piezoelectric transducers have an efficiency of above 90% and provide a uniform and constant propagation of the ultrasonic waves into the washing liquid.

In addition to the features of VU S, the VU L model also includes a trolley with a customized slide-in grid for parts load, an automatic rinsing of the parts after washing, and a final drying/ventilation.

### Standard Equipment

- Suitable to work with aggressive detergents
- Electrically and Pneumatically operated
- Timed cycle
- Panel with Touch Screen and dedicated PLC
- Customizable washing cycles
- Record of operating parameters and visualization of data during the cycle
- Messages for scheduled maintenance
- Alerts notification in case of malfunction
- Heating of the washing liquid
- Automatic lid opening with pneumatic pistons
- Automatic lifting of the basket
- Safety sensor for lid close
- Dedicated emptying pump
- Customized support grid
- Trolley with slide-in grid
- Weekly Programmer
- Separate filtration system
- Rinsing
- Drying



Model	L (mm)	W (mm)	H (mm)
VU 140 L	1400	800	800
VU 180 L	1800	800	800
VU 260 L	2600	800	800

### APPLICATION

Doctor blades - Hollow blades - Ink pans - Flexo and Gravure press parts - Ink circulating tanks - Cans and buckets - Various parts





The new ultrasonic washing units series LRC are engineered for flexographic, rotogravure and offset industries, for they allow an easy and economical cleaning of cylinders and sleeves. The ink left in the cylinders or sleeves during the printing process is removed thanks to the mechanical action caused by the ultrasonic cavitation in a solution of water and detergent.

LRC washing units have ultrasonic transducers with over 90% efficiency, complete with quartz static generators. The transducers are the piezoelectric type, and grant an efficient anilox cell cleaning. The tank is built totally in stainless steel.

The working cycle is controlled by a digital microprocessor with a Touch-Screen. The washing solution is heated by electric heating elements, controlled by a thermostat equipped with safety switch. The LRC models optimize the cleaning purpose with major safety.

For instance, if there is not enough washing solution, the machine automatically stops the ultrasonic generator and the heating elements, until the minimum level needed for the washing cycle is restored.

The ultrasonic generator is designed with intelligent embedded control and high power IGBTs (Insulated Gate Bipolar Transistor). The automatic control functions are managed by a microprocessor, to ensure the best performance of the washing systems.

### Standard Equipment

- Digital ultrasonic generator
- Frequency sweep
- Software frequency tracking
- Step mode
- Real time wave power control
- Automatic control
- Completely customizable working program
- Variable length
- Rinsing area
- Minimum level control for transducers protection
- Washing liquid heating system
- Safety sensor for lid close

### Upon request

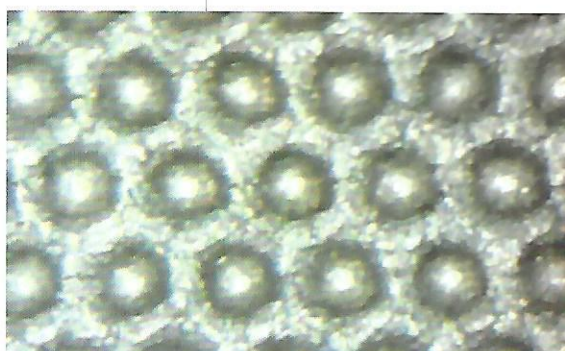
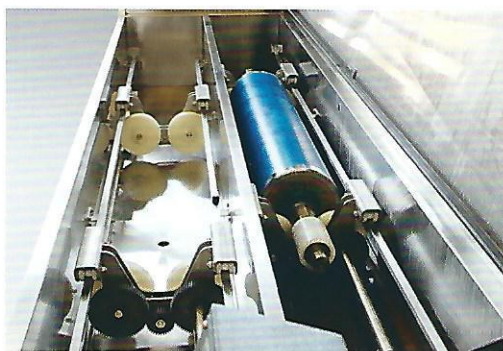
- Flange kit for sleeves
- Independent filtration system
- Spraying bar for rinsing
- Storage tank for rinse water
- Weekly programmer
- Brushes kit



Model	L (mm)	Ø (mm)
LRC 20 / PLUS*	1900 - 1500	210 - 320*
LRC 25 / PLUS*	2400 - 1800	210 - 320*
LRC 30 / PLUS*	2900 - 2200	210 - 320*
LRC 35 / PLUS*	3400 - 2700	210 - 320*
LRC 40 / PLUS*	3900 - 3200	210 - 320*

### APPLICATION

Gravure cylinders - Anilox sleeves - Anilox rollers - Engraved sleeves - Various parts





The washing units of LCO series are designed for flexographic printing plates cleaning.

Thanks to the alternated and oscillating movement of two brushes, it is possible to ensure an extremely deep and economic cleaning. All operations are managed by a PLC, equipped with a digital display which allows to show and check the washing parameters. These modern cleaners are built to the highest standards, and incorporate all the latest features expected to meet the demands of today's market.

Brushes and filters are designed for an easy and rapid removal to facilitate the periodic cleaning. Opening panels grant an easy full service access to the inside part of the machine.

### Standard Equipment

- Automatic operation
- Auto START - with optical sensor
- Auto STOP - with encoder
- No. 2 fine brushes with independent adjustable speed
- Circulation tank with 2 filters for washing solution
- Rinsing with re-circulated water and dedicated pump
- Stainless steel lid
- Completely removable storage tank
- Safety sensor for lid close

### Upon Request

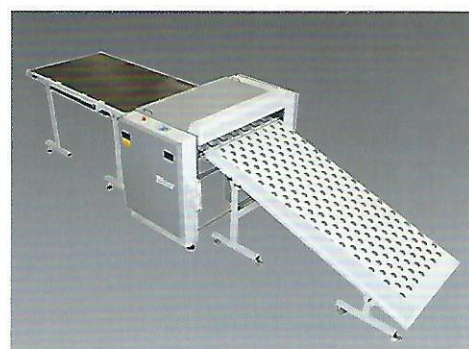
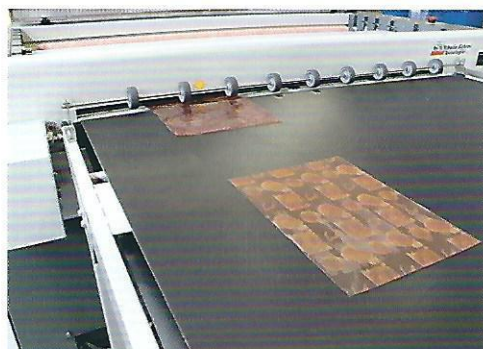
- Rinsing water filtration with dedicated tank
- Inlet conveyor
- Outlet table



Model	W (mm)
LCO 45	450
LCO 65	650
LCO 95	950
LCO 120	1200
LCO 140	1400

### APPLICATION

Flexo printing plates





Available in models for 1, 2 or 4 cylindrical frames, entirely made of stainless steel AISI 304, these units are pneumatically operated. The pump, activated by the operator through the control panel, allows the recirculation of the washing solvent from the storage tank to the injectors located both inside and outside of the frames. An area dedicated to small parts washing is also available. Thanks to the pneumatic motor, the frames rotate constantly, in order to obtain a complete and uniform cleaning. The washing solvent is stored in the service tank, avoiding evaporative loss and consequent air pollution. The emptying of the service tank, as well as rinsing with recovered solvent, can be operated either manually or automatically.

### Standard Equipment

- Suitable to work with flammable solvents
- Completely made of stainless steel Aisi 304
- Pneumatically operated
- Start/Stop functioning
- Lid with soft release pistons
- Completely removable storage tank
- Safety sensor for lid close
- Dedicated emptying pump
- Adjustable and removable pipelines
- Support grid

### Upon Request

- Timed cycle
- Rinsing with automatic liquid-leveling
- Lance equipped with brush for manual cleaning of difficult parts
- Additional pipelines
- Internal suction of vapors
- Outside suction system
- Customized support grid



Model	L (mm)	W (mm)	H (mm)	Screen
SW	500	500	450	1 x Ø 150
SSW-2	350	550	600	2 x Ø 150
SSW-2 Plus	1550	600	600	2 x Ø 150
SSW-4	350	550	600	4 x Ø 150

### APPLICATION

Screen printing sleeves - Doctor blades - Ink pans - Guards  
- Rollers





The ultrasonic washing units series U 650 are engineered for the narrow web printing industries (labels). This washing unit allows easy and economical cleaning for the cylinders and sleeves. The ink left in the cylinders or sleeves during the printing process is removed thanks to the mechanical action caused by the ultrasonic cavitation in a solution of water and detergent.

Washing units model U 650 have ultrasonic transducers with over 90% efficiency, completed with quartz static generators. The transducers are piezoelectric type, and they grant an efficient anilox cell cleaning. The tank is totally built in stainless steel. Washing solution is heated by electric heating elements, which are controlled by a thermostat equipped with safety switch.

## Standard Equipment

- Variable length
- Minimum level control for transducers protection
- Washing liquid heating system

## Upon request

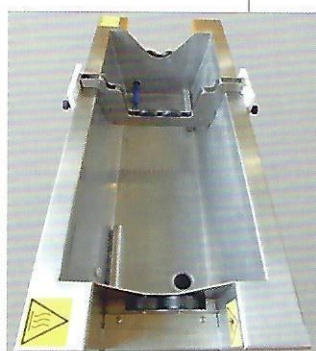
- Filtration system



Model	L (mm)	Ø (mm)
U 650	650	120
U 650 M 3	3 x 650 mm	120

## APPLICATION

Narrow Web printing cylinders





## BUCKET WASHER

Solvent

This is the ideal solution for washing various sizes of buckets (for ink, paint or similar), without directly exposing the operator to hazardous substances.

It offers an excellent solution to reduce the bucket disposal and the replacement costs. You can simply transform your hazardous waste (cans dirty with hazardous pollutant) into simple metal waste, much cheaper to be disposed and also possible to be reused.

The pneumatic pump, activated by the operator through a timer, allows the recirculation of the washing solvent from the storage tank to a special rotating head (internal washing) and to the injectors (external washing), obtaining a rapid and economical cleaning of the drum.

### Standard Equipment

- Suitable to work with flammable solvents
- Completely made of stainless steel Aisi 304
- Pneumatically operated only
- Timed cycle
- Safety sensor for lid close
- Rotating heads for deep inside cleaning



Model	L (mm)	W (mm)	H (mm)
BW	350	350	500

## EASY WASH

Solvent

It's a tools washer, available in models EW600 and EW90. It's ideal for the manual cleaning of small parts because avoids direct exposure of the operator to hazardous substances. It is made entirely of AISI 304 stainless steel and operated exclusively by pneumatics.

The pneumatic pump, activated by the operator through a pedal, allows the recirculation of the washing liquid from the tank to the brush used for parts cleaning. The washing takes place under the protection of a sealed glass cover, and the operator's hands are protected by integrated solvent-proof gloves.

### Standard Equipment

- Suitable to work with flammable solvents
- Completely made of stainless steel Aisi 304
- Pneumatically operated only
- Start/Stop functioning controlled by pedal
- Safety sensor for lid close

### Upon Request

- Compressed air spray gun



Model	L (mm)	W (mm)	H (mm)
EW600	670	530	400
EW 900	870	530	400





## INSTALLATION AND SERVICE

Demands for top-quality, short delivery times and small order sizes require a high level of production scheduling, along with the best trained personnel. To do this, IST offers its customers not only innovative and powerful machinery and equipment, but also service that goes well beyond simple repair work. Service, spare parts, diagnostics, express parts delivery, and training for machine operators and maintenance personnel have long been the key words for IST Service.

In today's market, reacting quickly is no longer enough. In order to ensure long-term productivity, the IST range of services also includes retrofit/upgrade packages, inspection/audit contracts for preventive maintenance, recommended spare parts lists, and even consulting services ranging from quality improvement to the optimization of the production environment.

To make sure help gets to our customers quickly, our company has affiliates all around the globe, making us a powerful and reliable partner.

### Field Service

A high level of machine availability is of vital importance to the commercial efficiency of any production. This means that mistakes, errors and machine defects must be identified and cleared as quickly as possible. It is not always necessary to wait for a technician to arrive and fix the problem on site. In many cases customers can rely on our specialized Technical Team to assist in troubleshooting either by phone or by email, at no cost for the customer.

### Preventive Maintenance

IST Service offers inspection contracts for preventive maintenance, which is the basis for a high level of availability of your machines.

### Upgrade and Retrofit

If your machine or equipment is getting on in years and you would like to avoid downtime or simply wish to increase productivity, call us to discuss your situation.

### Well trained staff - a requirement for increased productivity

Economy and profitability in all kind of production are influenced by a number of different factors. One important aspect, though frequently neglected, is the constant qualification of operators and maintenance staff, since they are the key to enhanced performance of the equipment as well as superior quality of production.

This is the reason why IST always suggest to customers to do an insight training with our skilled technicians. Experience has shown that well-trained staff is, by the same token, motivated staff, and the advantages of training do obviously speak for themselves:

- Better knowledge of the equipment and associated technology
- Reaching full production performance faster
- Increased skill of the operating staff
- Higher effective up time of the equipment
- Better quality of product
- Less scrap production

General info and spare parts: [info@ist.it](mailto:info@ist.it)  
After-sale and technical support: [service@ist.it](mailto:service@ist.it)