



INDUSTRIAL  
CLEANING  
SYSTEM



## UNION spa DEGREASING DIVISION.

This division manufactures specialised cleaning equipment for the mechanical industry and for the industrial cleaning of technical parts in full compliance with growing requirements in the environmental field.

Union is currently capable of producing a wide range of modern hermetically sealed eco-compatible hi-tech solvent cleaning systems, which are reliable and economic, capable of meeting all cleaning requirements.

The wide range of systems currently produced by Union, either multi-drum or single-drum for larger pieces, are able to resolve all surface cleaning problems, using either chlorinated solvents or other alternatives such as hydrocarbon solvents. This enables the correct choice of the system size based on the requirements of the customer in order to obtain both an effective and economically viable cleaning process.

The high quality of the materials used in manufacture (all the main components are made of stainless steel), the outstanding reliability of the applied electronics, the facility of system operation via the Dialog 700 computer supplied on the machine all guarantee maximum and lasting reliability.

Cycles can be either pre-set or programmed by the operator meaning a choice of: hot cleaning baths, cold baths, with or without immersion, with solvent vapours only, with or without the use of ultrasound, capable of strengthening the mechanical action. Special version equipment with swinging drums also guarantee that the cleaning cycle is carried out protecting delicate pieces from potentially damaging impact.

The drying phase with the forced re-circulation of air in a closed circuit or under vacuum depending on the various models, means that the items are dried perfectly with low emissions into the atmosphere, even lower than the limits imposed by the strictest international standards.

The solvent filtration and continuous distillation processes used guarantee constant cleaning quality whatever the type of dirt to be removed. The filtration system can also be further strengthened to reach even higher filtration levels.

The machines can also be equipped with a special system that enables a final protective wash of certain items which can then be stored without risk of rusting or oxidation.

All Union produced systems represent the latest developments in the industrial cleaning field, thanks to their full compliance with the most recent environmental standards.

All systems are supplied complete with:

- Safety tank at the base of the working system
- Integral panelling with safety locks
- Self-regenerating activated charcoal filter for pre-treating the air let into the flue.





Union can also design and produce special cleaning systems, customised according to the specific requirements of the final customer.

Union can also provide:

- Advice on the integration of the systems in the production process.
- Advice on how to periodically check the solvent stability.
- Closed circuit cooling systems for the cooling water.
- Steam generators.
- Hydraulic lifting surfaces.
- Customised and automatic loading and unloading systems.

**The MDM series**, is designed especially to clean small pieces within normal metal drums and offers a wide range of models. Each model can also be customised to enable the use of a wide range of drums with various types of perforations based on the chips involved and with fixed or adjustable covers and cylindrical drums or split-drums.

The systems can also be interfaced with automatic drum loading-unloading systems, which are designed on the specific logistic requirements of the customer.

**The MDMV series**, has the same characteristics as the MDM series but include a system for drying under vacuum. These machines are specifically designed for those mechanical parts with a more complex structure, such as small closed holes.



**The MDMV HC series**, is designed for using hydrocarbon solvents of All class in total safety.

A wide range of models is also available.

These systems feature a drying cycle under vacuum in a controlled atmosphere and special solvent distillation technology under vacuum, enabling fractioned distillation.

	MDM (PERCHLOROETHYLENE)								MDMV (PERCHLOROETHYLENE)								MDMV HC (HIDROCARBON & DOWCLENE)					
	MDM 1	MDM 2	MDM 3	MDM 22	MDM 4	MDM 6	MDM 8	MDMV 1	MDMV 2	MDMV 3	MDMV 22	MDMV 4	MDMV 6	MDMV 8	MDMV HC 1	MDMV HC 2	MDMV HC 3	MDMV HC 4	MDMV HC 6	MDMV HC 8		
<b>BASKET HOLDER</b>																						
WIDTH	mm	300	450	450	450	450	600	600	300	450	450	450	600	600	600	300	450	450	600	600	600	
DEPTH	mm	520	600	900	600	1200	1.000	1.500	520	600	900	600	650	1.000	1.500	520	600	900	650	1.000	1.500	
HEIGHT	mm	200	200	200	450	200	600	600	200	200	200	450	600	600	600	200	200	200	600	600	600	
NO. BASKETS	N°	1	2	3	4	4	6	8	1	2	3	4	4	6	8	1	2	3	4	6	8	
VOLUME	Lt.	30	54	81	108	108	162	216	30	54	81	108	108	162	216	30	54	81	108	162	216	
MAXIMUM CAPACITY	kg	50	100	150	200	200	300	400	50	100	150	200	200	300	400	50	100	150	200	300	400	
<b>TANK VOLUME</b>																						
TANK 1	Lt	75	90	90	90	400	400	600	75	90	90	90	400	400	600	75	90	90	400	400	600	
TANK 2	Lt	150	320	320	320	100	100	180	150	320	320	320	100	100	180	150	320	320	100	100	180	
TANK 3	Lt	ND	400*	400*	400*	1.000*	1.300*	1.400*	ND	400*	400*	400*	1.000*	1.300*	1.400*	ND	400*	400*	1.000*	1.300*	1.400*	
<b>STILL</b>																						
VOLUME	Lt	105	105	105	105	440	440	440	105	105	105	105	440	440	440	105	105	105	440	440	440	
<b>POWER</b>																						
MOTOR ROTATION	kW	0,18	0,18	0,37	0,37	0,37	0,5	0,5	0,18	0,18	0,37	0,37	0,37	0,5	0,5	0,18	0,18	0,37	0,37	0,5	0,5	
SOLVENT PUMP	kW	0,75	1,1	1,5	1,5	2,2	2,2	2,2	1,5	1,5	2,2	2,2	2,2	2,2	2,2	1,5	1,5	2,2	2,2	2,2	2,2	
SAFETEINER PUMP	kW	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	ND	ND	ND	ND	ND	ND	
VACUUM DRYING PUMP	kW	1,5*	1,5*	1,5*	2,2*	2,2*	2,2*	3*	1,5	1,5	2,2	3	5,5	5,5	5,5	1,5	1,5	2,2	5,5	5,5	5,5	
FRIDGE COMPRESSOR	kW	2,5	2,5	2,5	2,5	3	3	3	2,5	2,5	3,75	3,75	3,75	4,85	4,85	2,5	2,5	3,75	3,75	4,85	4,85	
DRYING FAN	kW	0,75	1,0	1,0	1,0	2,2	2,2	2,2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
RECUPER FAN	kW	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	0,75	1,5	1,5	ND	ND	ND	ND	ND	ND	
DISTILLATION VACUUM PUMP		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,5	1,5	1,5	2,2	2,2	2,2	
DISTILLATION BOILER	kW	12	12	12	12	ND	ND	ND	12+6	12+12	ND	12+12	ND	ND	ND	12+6	12+12	ND	ND	ND	ND	
DRYING BOILER	kW	6	12	12	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
INTERGRATED BOILER	KW	ND	30*	30*	42*	54	72	90	ND	30*	42*	42*	72	84	108	ND	30*	42*	72	84	108	
<b>CONSUMPTION</b>																						
ELECTRIC VERSION	kWh	20	26-36	30-45	48	60	82	108	24	26-36	30-45	52	80	96	120	26	28*	54	84	100	124	
STEAM VERSION	kWh	4	4	4	4	8,5	9	15	5	6	9	9	10	14	18	7	8	12	14	17	22	
STEAM (ONLY STEAM VERSION)	kg/h	30	40	50	50	65	85	120	40	50	70	70	100	120	140	40	55	70	100	120	140	
WATER (20°C)	l/h	250	350	400	400	500	500	700	300	350	550	550	700	800	1.000	300	350	550	700	800	1.000	
<b>DIMENSIONS</b>																						
WIDTH	mm	1.600	3.000	3.000	3.000	3.650	3.650	4.250	1.600	3.000	3.000	3.000	3.650	3.650	4.250	1.600	3.000	3.000	3.650	3.650	4.250	
DEPTH	mm	1.600	1.950	2.000	1.950	2.650	2.650	3120	1.600	1.950	2.000	1.950	2.650	2.650	3120	1.600	1.950	2.000	2.650	2.650	3120	
HEIGHT	mm	2.050	2.300	2.300	2.450	2.600	2.600	2.700	2.050	2.300	2.300	2.450	2.600	2.600	2.700	2.050	2.300	2.300	2.600	2.600	2.700	

\* OPTIONAL  
Specifications subject to change without notice



The impressively structured **MUM series** is designed for cleaning larger parts or any parts within large metal crates. It includes of a range of systems with the same characteristics but with different capacities. The loading drum can also be used as a carrying structure for smaller drums, which can be placed inside it so that different types of smaller pieces can also be cleaned if necessary.

**The MUMV series** has the same main characteristics but uses the vacuum technique both for drying the parts and allowing faster cleaning cycles. Designed specifically for mechanical parts with a more complex structure, or for static cleaning.

**The MDMV HC series** is designed for using hydrocarbon solvents of All class in total safety. A wide range of models is also available. These systems feature a drying cycle under vacuum in a controlled atmosphere and special solvent distillation technology under vacuum, enabling fractioned distillation.



	MUM (PERCHLOROETHYLENE)										MUMV (PERCHLOROETHYLENE)							MDMV HC (HIDROCARBON & DOWCLENE)										
	MUM 25	MUM 50	MUM 100	MUM 200	MUM 300	MUM 400	MUM 500	MUM 1000	MUM 2000	MUMV 25	MUMV 50	MUMV 100	MUMV 200	MUMV 300	MUMV 400	MUMV 500	MUMV 1000	MUMV 2000	MUMV 25 HC	MUMV 50 HC	MUMV 100 HC	MUMV 200 HC	MUMV 300 HC	MUMV 400 HC	MUMV 500 HC	MUMV 1000 HC	MUMV 2000 HC	
BASKET HOLDER																												
WIDTH	mm	450	450	600	600	600	600	600	950	950	450	450	600	600	600	600	950	950	450	450	600	600	600	600	600	950	950	
DEPTH	mm	600	600	650	1.000	1.500	2.000	2.500	1.200	2.000	600	600	650	1.000	1.500	2.000	2.500	1.200	2.000	600	600	650	1.000	1.500	2.000	2.500	1.200	2.000
HEIGHT	mm	200	450	600	600	600	600	600	950	950	200	450	600	600	600	600	950	950	200	450	600	600	600	600	600	950	950	
NO. BASKETS	N°	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
VOLUME	Lt	54	132	230	360	540	720	900	1.100	1.800	54	132	230	360	540	720	900	1.100	1.800	54	132	230	360	540	720	900	1.100	1.800
MAXIMUM CAPACITY	kg	100	200	220	300	400	400	400	500	800	100	200	220	300	400	400	500	800	100	200	220	300	400	400	400	500	800	
TANK VOLUME																												
TANK 1	Lt	90	90	400	400	600	600	880	500	500	90	90	400	400	600	600	880	500	500	90	90	400	400	600	600	880	500	500
TANK 2	Lt	320	320	100	100	180	180	220	150	150	320	320	100	100	180	180	220	150	150	320	320	100	100	180	180	220	150	150
TANK 3	Lt	400*	400*	1.000*	1.300*	1.400*	2.200*	2.200*	2.200*	2.200*	400*	400*	1.000*	1.300*	1.400*	2.200*	2.200*	2.200*	400*	400*	1.000*	1.300*	1.400*	2.200*	2.200*	2.200*	2.200*	
STILL																												
VOLUME	Lt	105	105	440	440	440	600	600	600	600	105	105	440	440	440	600	600	600	105	105	440	440	440	600	600	600	600	
POWER																												
MOTOR ROTATION	kW	0,18	0,37	0,37	0,5	0,5	0,5	0,75	0,37	1,5	0,18	0,37	0,37	0,5	0,5	0,5	0,75	0,37	1,5	0,18	0,37	0,37	0,5	0,5	0,5	0,75	1,5	
SOLVENT PUMP	kW	1,1	1,5	2,2	2,2	2,2	2,2	2,2	2,2	5,5	1,5	2,2	2,2	2,2	3	3	5,5	5,5	1,5	2,2	2,2	2,2	2,2	2,2	2,2	3	5,5	
SAFETINER PUMP	kW	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	0,55*	ND	ND	ND	ND	ND	ND	ND	ND	ND	
VACUUM DRYING PUMP	kW	1,5*	2,2*	2,2*	2,2*	3*	2,2*	3*	3*	3*	1,5	3	3	5,5	5,5	5,5	5,5	5,5	1,5	3	3	5,5	5,5	5,5	5,5	5,5	5,5	
FRIDGE COMPRESSOR	kW	2,5	2,5	3	3	3	3	4,85	3	5,5	2,5	3,75	3,75	4,85	4,85	4,85	5,5	5,5	2,5	3,75	3,75	4,85	4,85	4,85	5,5	5,5	5,5	
DRYING FAN	kW	1,0	1,0	2,2	2,2	2,2	2,2	2,2	2,2	2,2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
RECUPER FAN	kW	0,75	0,75	0,75	0,75	1,5	1,5	1,5	1,5	1,5	0,75	0,75	1,5	1,5	1,5	1,5	1,5	1,5	ND	ND	ND	ND	ND	ND	ND	ND	ND	
DISTILLATION VACUUM PUMP	kW	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,5	1,5	1,5	1,5	1,5	2,2	2,2	2,2	2,2	
DISTILLATION BOILER	kW	12	12	ND	ND	ND	ND	ND	ND	ND	12+12	12+12	ND	ND	ND	ND	ND	ND	12+12	12+12	ND	ND	ND	ND	ND	ND	ND	
DRYING BOILER	kW	12	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
INTERGRATED BOILER	KW	30*	42*	54	72	90	108	108	108	134	30*	42*	66	84	108	134	134	134	30*	42*	66	84	108	134	134	134	134	
CONSUMPTION																												
ELECTRIC VERSION	kwh	26-36	30-45	60	82	108	120	120	120	148	26-36	30-45	74	96	120	146	146	148	36	45	75	100	124	148	150	150	150	
STEAM VERSION	kwh	4	4	8,5	9	15	15	15	18	18	6	9	10	14	18	16	16	20	6	9	10	14	18	16	16	20	20	
STEAM (ONLY STEAM VERSION)	kg/h	40	50	65	100	120	120	140	140	165	50	70	100	120	140	170	170	170	50	70	100	120	140	170	170	170	170	
WATER (20°C)	l/h	350	400	500	500	700	800	800	1.400	1.400	350	550	700	800	1.000	1.500	1.500	1.600	350	550	700	800	1.000	1.500	1.500	1.600	1.600	
DIMENSIONS																												
WIDTH	mm	3.000	3.000	3.650	3.650	4.250	4.250	4.250	5.400	6.200	3.000	3.000	3.650	3.650	4.250	4.250	4.250	5.400	6.200	3.000	3.000	3.650	3.650	4.250	4.250	5.400	6.200	
DEPTH	mm	1.950	1.950	2.650	2.650	3.120	3.600	3.950	2.950	4.200	1.950	1.950	2.650	2.650	3.120	3.600	3.950	2.950	4.200	1.950	1.950	2.650	2.650	3.120	3.600	3.950	4.200	
HEIGHT	mm	2.300	2.450	2.600	2.600	2.700	2.700	2.700	3.050	3.050	2.300	2.450	2.600	2.600	2.700	2.700	2.700	3.050	3.050	2.300	2.450	2.600	2.600	2.700	2.700	2.700	3.050	3.050

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**THE IDEAL PARTNERSHIP**

**EXCELLENCE IN  
CUSTOMER TECHNICAL SUPPORT**

**FAST, SMART, CLEAN.**

**HISTORY  
QUALITY  
TECHNOLOGY  
RESEARCH  
INNOVATION  
SAFETY**



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**UNION spa**

Via Labriola 4/D  
40010 Sala Bolognese (Bo) Italy  
Tel. +39.051.6814996  
Fax +39.051.6814660  
union@uniondcm.com  
www.uniondcm.com