

**CITY OF NEW YORK
DEPARTMENT OF BUILDINGS**

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Material and Equipment Acceptance (MEA) Division.

Patricia J. Lancaster, A.I.A., Commissioner

**MEA 163-02-E
Report of Material and Equipment Acceptance Division**

Manufacturer - Union SPA, Via Labriola 4/D, Bologna, Italy 40010.

Trade Names - Union Drycleaning Products USA, Suite 100, 10 Southwoods Parkway, Hapeville, Georgia 30354 .

Product - Dry cleaning machine using perchlorethylene (Class IV non-flammable) cleaning solvent.

Pertinent Code Section (s) - 27-4087 and Article 6 Section 27-426.

**Test(s) - 1) Commercial Drycleaning Equipment (ANSI/UL 664, 4th Ed.)
2) Commercial Laundry and Drycleaning Operations (ANSI Z8.1, 1996 Ed.)
3) General requirements - Canadian Electrical Code, Part II, (CAN/CSA C22.2 No. 0-M91) .**

Laboratory - Intertek Testing Services.

Test Report(s) - Report J98*13508-001 dated February 19, 2002, and Report J98*33277-001 dated July 25, 2000.

Description - The dry cleaning machines, using perchlorethylene solvent, are dry to dry, front door loaded, closed, belt driven baskets assemblies. They contain heat pump, wash extraction pump and fan motors, solvent recovery systems, disk type filter assembly and control panel. These machines operate on supply voltages of 220/240 VAC, 3 phase, 60 Hz. The solvent used in the cleaning process is a Class IV (perchlorethylene) solvent. The machines have a refrigeration unit used for the drying and cooling down cycles. There is no venting of Class IV (perchlorethylene) solvent vapor to the outside.

The dry cleaning machines differ in load size, solvent recovery, maximum solvent amount in system, and number of tanks as follows:

Model No.	Load Size	Solvent Recovery Capacity (gal./hr)	Max Solvent Amount in system	No. of tanks
L – 728-X U2000	28	38	102.9	3
L – 735-X U2000	35	38	113.4	3
L – 740 U2000	40	50	154	3
L – 750 / 755 U2000	50/55	68	198	3
L – 760 U2000	60	68	210	3
L – 780 U2000	80	98	280	3
L – 790 U2000	90	98	280	3
L – 840 U2000	40	50	153.2	3
L – 850 U2000	50	68	190.2	3
L – 860 U2000	60	68	190.2	3
L – 880 U2000	80	95	279.2	3
L – 890 U2000	90	95	279.2	3
P – 728 U2000	28	38	66.6	2
P – 735 U2000	35	39	73	2
P – 740 U2000	40	43	83	2
P – 840 U2000	40	42	83	2
P – 850 U2000	50	45	91	2

Where X indicates number of tanks.

The still, recovery section, condenser, wash wheel, water separator, disk filter are made from stainless steel. The front cover is made from galvanized cold rolled steel.

The operation of the dry cleaning machines is as follows:

Garments are placed in the wash wheel and the machine is started. Solvent is pumped from the integral base tank into the wash wheel. When pre-determined liquid level is reached, solvent is circulated from the wash wheel through the filtering system for purification purposes. At the end of the pre-determined cleaning cycle, the solvent is drained back to the integral base tank or the dirt tank (still). The liquid from the garment is then extracted for one minute at speeds up to 300 RPM depending upon the model.

After the last bath, the machine starts spinning up to 300 RPM. After the spin cycle, the drying cycle begins. The automatic drying system is designed to control the heating temperature measuring both the inlet and outlet temperatures during the complete drying and cooling process.

After the drying and cool-down process, the vapor inside the drum is circulated through a 66 or 132 lb. (depending on material) activated carbon bed to reduce the perc emissions below 290 ppm before the loading door is opened. This process takes approximately five minutes to complete and after this time, the operator can remove the garments from the machine.

Recommendation – That the above non-coin operated dry cleaning machines using perchlorethylene be accepted on condition that all uses, locations and installations comply with all applicable laws, rules and regulations, and the manufacturer's instructions.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided in Section 27-131 of the Building Code.

Final Acceptance August 7, 2002
Examined by Mark J. Kelly