

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 Materials and Equipment Acceptance (MEA) Division.

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

MEA 15-03-E  
Report of Material and Equipment Acceptance Division

Manufacturer – Bergparma, SRL, Via Benedetta 61A, Parma, Italy, 43100.

Trade Name(s) – Forenta Dry cleaning machines, c/o Forenta, Inc., 2300 West Andrew Johnson Highway, Morristown, TN 37814.

Product – Commercial dry cleaning machines, non coin-operated for use with perchlorethylene Factory Mutual Class IV dry cleaning solvent (non-flammable).

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

Test(s) –

Title	Author/Number	Date
Electrical Utilization Equipment	FM-Class 3820	1979
Safety Requirements for Commercial Laundry and Dry-cleaning Equipment and Operations	ANSI Z8.1	1972
Safety Standard for Mechanical Power Transmission Apparatus	ANSI/ASME B15.1	1986
Dry-cleaning Plants	ANSI/NFPA-32	1985
Electrical Standard for Industrial Machinery	ANSI/NFPA-79	1985
Commercial Dry-cleaning Machines (Type IV)	UL 664	1986
Industrial and Commercial Dry Cleaning Equipment	FM-Class 8000	1989
National Electric Code	ANSI/NFPA-70	1987

Laboratory – Factory Mutual Research Corporation.

Test Report(s) – Factory Mutual Report No. OX9A3.AE, dated March 2, 1994.

Description – The various parts of the machine are assembled as a single unit on formed steel base, which may incorporate the solvent tanks. Operations of the machines may be automatic or manual. All operations are performed in a single cylindrical drum and may include washing, extracting, rinsing, or similar operation, and drying. The dry cleaning machines are dry to dry, front door loaded, closed systems with manually set automatic programming with manual override. These machines are available for operation for supply voltage 208 to 220 Vac, 3 phase, 60 Hz. The control is 24 Vac. 60 Hz.



The solvent used in the cleaning process is perchlorethylene, which is non-flammable. The machines have a refrigeration unit for the drying and cool down cycles. There is no venting of perchlorethylene vapor to the outside. The machines are classified as "Fourth Generation" under NYS DEC 6NYCRR Part 232, "Perchlorethylene Dry Cleaning Facilities".

These models have a two-speed motor as the drive motor for the drum. The low speed is used during the wash cycle and the high-speed drum is used during the solvent extract cycle. They also have a pump motor for the solvent and fan motors for drying. The wash cycle is provided with reversing action during which time the basket stops rotating and reverses direction.

Main power is connected to the isolation switch in the main control enclosure to the motor starters and microprocessor-based control or card reader. All power conductors from the enclosure are enclosed in non-metallic, liquid tight, flexible conduit. All controls input and outputs are low voltage (24 Vac.) and are dressed into wiring harnesses.

The machines are provided with the filters through which the cleaning fluid is filtered during a normal cycle, and a still, which is periodically used to reclaim the solvent. Drying is accomplished by means of steam heating and many of the mechanical operations are performed by air-operated valves and cylinders. A positive in-draft is provided (fan motor energized when door is open).

Model Number	Rated Capacity (lbs.)
D-235	35
D-335	35
D-345	45
D-355	55
D-370	70
P-30	30
P-45	45

Recommendation - That the above non-coin operated dry cleaning machines be accepted on condition that all used locations and installations comply with New York City Building Code, specifically Section 27-4037 and Article 6, Rules of the City of New York, Chapter 5- Dry Cleaning Establishments, the New York City Electrical Code, Fire Code, the Department of Environmental Protection Rules, Factory Mutual listing 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 for in Section 27-131 of the Building Code.

Final Acceptance MARCH 12, 2003

Examined by 