

THOMPSON DUKE INDUSTRIAL IZRC

The Thompson Duke Industrial IZRC is an industrial filling machine able to accommodate manufacturer packaging directly out of the box.* The IZRC includes an enhanced fill table size for tray arrays of up to 252 carts, a large 500ml reservoir and additional improvements dedicated to improving large scale cartridge filling and capping operations.

Enhanced Versatility

Automatically fill cartridges, pods, capsules, syringes and jars directly in manufacturer packaging.* Featuring a large tray table able to accommodate up to 252 cartridges. Refill the large 500ml heated glass oil reservoir during operation. Adjust the large 1.420 mL dispense capacity precisely with a simplified, knob-based dispense volume adjustment. Optional accessories for dispensing from .05mL to 5.0mL. Quickly configure tray arrays for new devices introduced into the market with custom designed trays available for non-standard devices.

Dispense High and Low Viscosity Oils

The 500ml glass reservoir uses a patented heated oil dispense system that regulates oil viscosity in Fahrenheit or Celsius. Fill high viscosity oils with extreme accuracy, precision and repeatability. Fine tune dispense speed and force for lower viscosity oils.

Rapid Oil Formula Changes and System Cleaning

Replace the food-safe, laboratory grade dispense system components in less than one minute to switch oil formulas. Rapidly clean the dispense components with minimal loss. A large gantry and double-bearing size make height adjustments smooth and precise.

Optimized Touch Screen Control System

Easily control the filling operation using the simple and intuitive seven inch color touch screen. Updated with a new and improved serpentine filling pattern and the ability to control table speed to increase throughput. Adjust temperature and fill speed on the fly. Monitor operating parameters including cartridge tray fill status, real time diagnostics and alarms with complete alarm history. Select from six languages on the HMI. English, French, Spanish, Deutsch, Netherlands, and Italian.

Certified and Compliant

CE Certified for operation in the European Union and broader global market. Adheres to the rigorous Good Manufacturing Practice guidelines required for legal compliance.

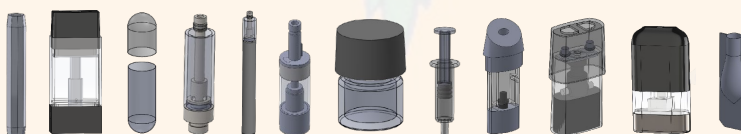
American-Made

Designed, manufactured, and distributed from the United States of America. Industrial control system with compliant materials and dispense components. Stainless steel check valves custom designed and manufactured specifically for oil filling applications. Exceptional customer support available for the lifetime of the machine.

Portable

Lightweight and portable benchtop design for quick and easy setup, operation, and cleaning. Requires 230V/50Hz power and 4 bar compressed air.

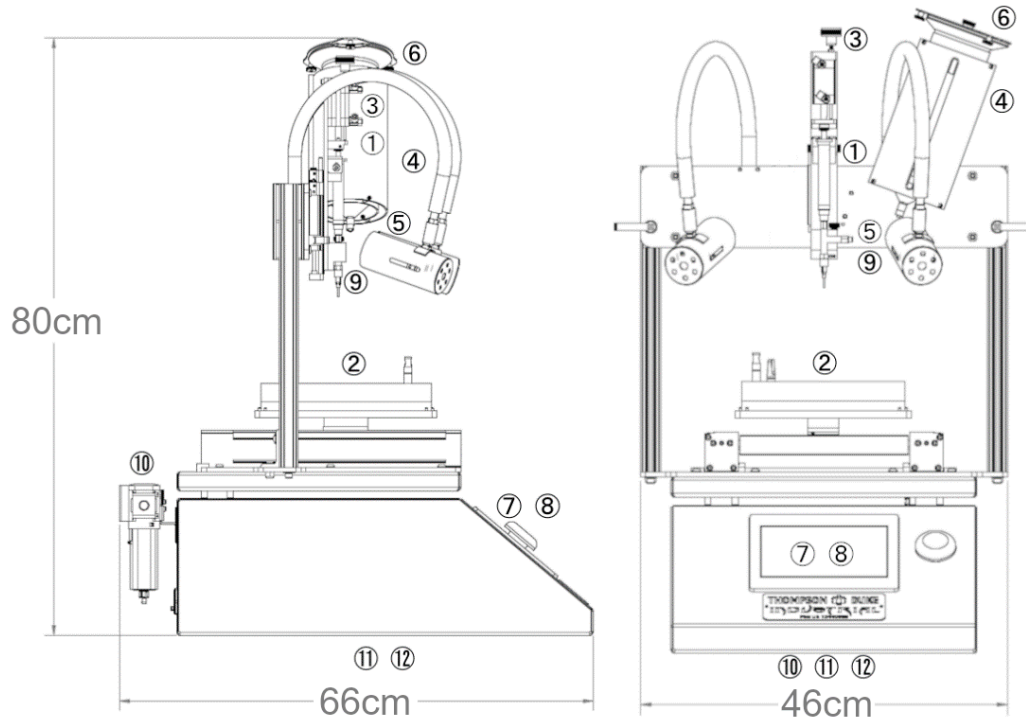
* Custom tooling may be required depending on manufacturer packaging



THOMPSON DUKE INDUSTRIAL

IZRC INDUSTRIAL FILLING MACHINE

The Thompson Duke Industrial IZRC is an industrial filling machine able to accommodate manufacturer packaging directly out of the box.* The IZRC includes an enhanced fill table size for tray arrays of up to 252 carts, a large 500ml reservoir and additional improvements dedicated to improving large scale cartridge filling and capping operations.



- ① Quickly adjust the angle of the oil delivery system to accommodate any cartridge form factor
- ② Automatically fill cartridges, pods, capsules, syringes and jars directly in manufacturer packaging*
- ③ Adjust the large 1.420mL dispense capacity precisely with a simplified, knob-based dispense volume adjustment. Optional accessories for dispensing from .05mL to 5.0mL.
- ④ Fill high viscosity oils and distillates with extreme accuracy, precision and repeatability
- ⑤ Minimal product loss during product changeover
- ⑥ Large 500ml glass, heated oil reservoir can be filled during operation
- ⑦ Seven inch touch screen for easy operation and total control of your filling process with new and improved serpentine filling pattern and the ability to control table speed to increase throughput. Select from six languages on the HMI. English, French, Spanish, Deutsch, Netherlands, and Italian.
- ⑧ System displays for cartridge tray, fill status and real time diagnostic alarms
- ⑨ Laboratory grade, food safe, replaceable components make switching between products quick and simple
- ⑩ Integrated pressure regulator
- ⑪ Portable benchtop design with adjustable height
- ⑫ Aluminum construction and stainless steel enclosure

Height	80cm MAX
Width	46cm
Depth	66cm
Weight	34kg
Ambient Temperature	0-45 C
Glass Reservoir Capacity	500mL
Temperature Range of Reservoir	Ambient - 93 C
Working Voltage	230V 50Hz Single Phase
Power Consumption	250W
Working Min Pneumatic Pressure	3 bar**
Working Max Pneumatic Pressure	15 bar**
Pneumatic Fitting Connection	Universal Female Adapter
Max Number of Cartridges Per Tray	252
Product Loss	<1g

*Custom tooling may be required depending on manufacturers' packaging

**Air compressor sold separately; use ANSI/ISA-7.0.01-1996 Quality Standard for Instrument Air.



THOMPSON DUKE INDUSTRIAL

M C F 2 C

The American-made, CE Certified, and GMP compliant MCF2C Semi-Automatic Filling Machine is foot pedal operated and designed to fill any oil vaporizer device available in the European Union and other global markets.

Versatile

Fill every type of cartridge and POD as well as capsules, syringes and jars. Refill the glass 500mL heated oil reservoir during operation. Adjust the dispense volume precisely up to 1.420 ml. Optional accessories for dispensing from .05mL to 5.0mL. Custom adapters available for septum pierced devices.

Dispense High and Low Viscosity Oils

Dual automatic digital temperature control with heated oil dispense system regulates oil viscosity at every point of the filling process. Fill high viscosity oils with extreme accuracy, precision and repeatability. Fine tune dispense speed and force for lower viscosity oils

Rapid Oil Formula Changes and System Cleaning

Replace the food safe, laboratory grade, dispense system components in less than one minute to switch oil formulas. Rapidly clean the dispense components with minimal loss. Two full dispense component sets are included.

CE Certified and GMP Compliant

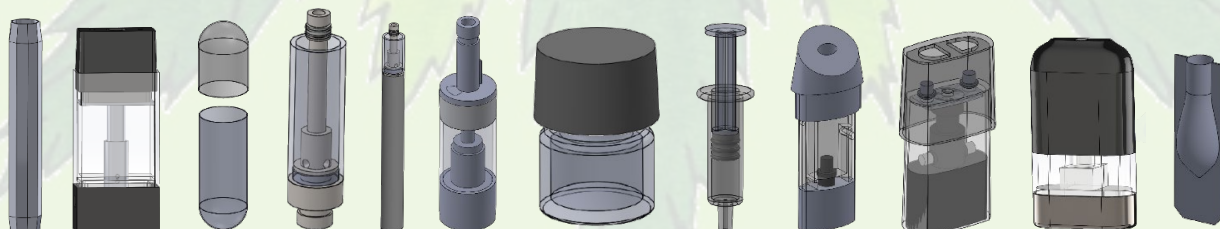
CE Certified for the European Union and other global markets. Adheres to the rigorous Good Manufacturing Practice guidelines required for legal compliance.

American-Made

Designed, manufactured, and distributed from the United States of America. Industrial control system with compliant materials and dispense components. Stainless steel check valves custom designed and manufactured specifically for oil filling applications. Exceptional customer support available for the lifetime of the machine.

Portable

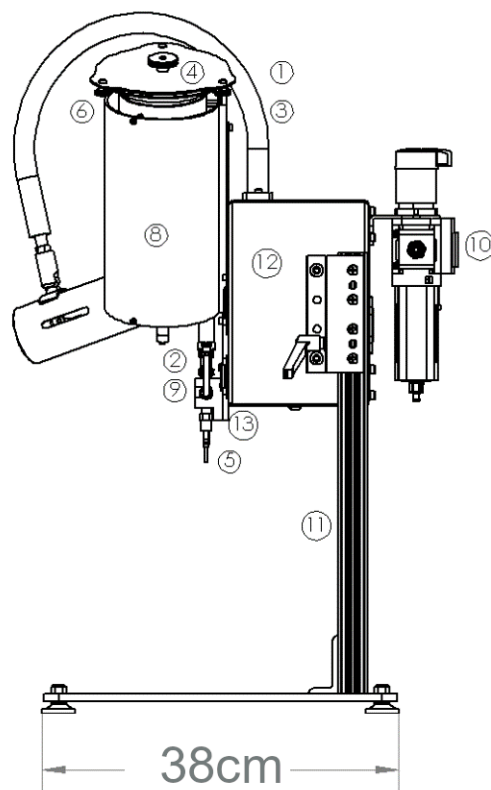
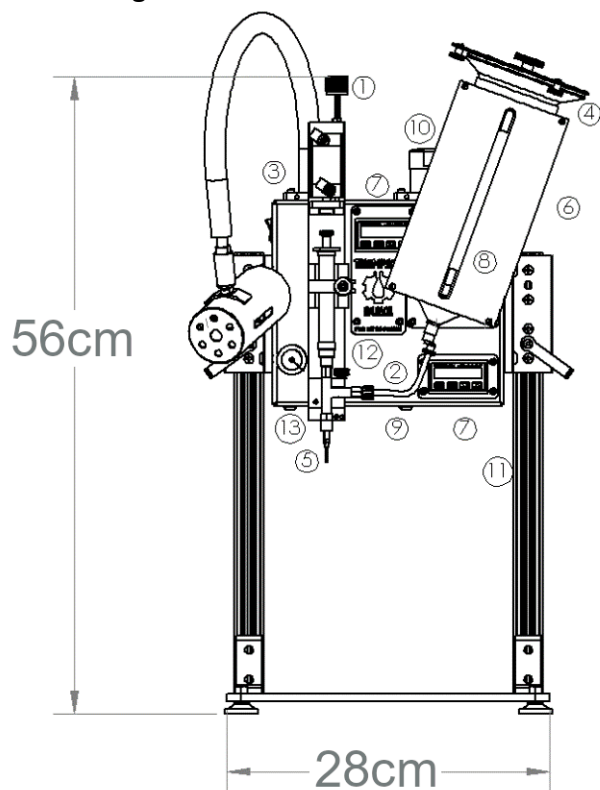
Lightweight and portable benchtop design for quick and easy setup, operation, and cleaning. Foot pedal operated dispense system. Requires 230V/50Hz power and 1 bar compressed air.



THOMPSON DUKE INDUSTRIAL

MCF2C AUTOMATIC VAPORIZER FILLING MACHINE

The American-made, CE Certified, GMP compliant MCF2C Semi-Automatic Filling Machine is foot pedal operated and designed to fill any oil vaporizer device available in the European Union and broader global markets.



- ① Quickly adjust the height and fill volume to accommodate any cartridge form factor
- ② Less than 1 mL loss during product changeover
- ③ Adjust the large 1.420mL dispense capacity precisely with a simplified, knob-based dispense volume adjustment. Optional accessories for dispensing from .05mL to 5.0mL.
- ④ Fill high viscosity oils and distillates with extreme accuracy, precision and repeatability
- ⑤ Fill high viscosity oils and distillates with extreme accuracy, precision and repeatability
- ⑥ The 500mL glass oil reservoir can be filled during operation
- ⑦ Automatic digital temperature control
- ⑧ Heated Oil Delivery System and Product Reservoir adjustable with dual temperature control up to 93C
- ⑨ Laboratory grade, food safe, replaceable components make switching between products quick and simple
- ⑩ Integrated pressure regulator
- ⑪ Portable benchtop design with adjustable height
- ⑫ Aluminum construction and stainless steel enclosure
- ⑬ Heated Duke Valve Mount with integrated temperature control

Height	56cm MAX
Width	28cm
Depth	38cm
Weight	7.25kg
Ambient Temperature	0-45 C
Glass Reservoir Capacity	500mL
Temperature Range of Reservoir	0-93 C
Working Voltage	230VAC 50Hz Single Phase
Power Consumption	150W
Working Min Pneumatic Pressure	3 bar*
Working Max Pneumatic Pressure	15 bar*
Pneumatic Fitting Connection	Universal Female Adapter
Syringe Filler Connection Type	Luer Lock/Luer Slip
Product Loss	<1g

*Air compressor sold separately; use ANSI/ISA-7.0.01-1996 Quality Standard for Instrument Air.

