CSM MACHINERY

OAKLEY
INDUSTRIAL MACHINERY

Coil Cleaning Machine

Solvent-free cleaning system for heating element coils.



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Machine composition

- **Stainless steel rack** for trays awaiting washing
- **Washer unit** for removal of residual lubricant
- **Drip rack** for pre-drying
- **Coil drying unit** (fan-forced oven)
- **Inlet water treatment system** (water softener) **and electric boiler**
- **10 trays**

Increasingly stringent pollution regulations, which limit the types of solvents that can be used, and the difficulty of disposing of spent material have pushed heating element manufacturers to find an alternative to the chlorinated solvents used for degreasing coils after winding.

The main problem in coil winding was the use of mineral oils to help wrap the wire around the mandrel. CSM MACHINERY uses a water-soluble and biodegradable lubricant, whose main components are soap and a very small amount of vegetable oil.

The best results are obtained when the coils are slightly space wound, as the water jets can get in between the loops of the coiled wire. If the coils are close wound, it is not possible to remove all traces of the soap solution lubricant, but the results are comparable to those obtained with conventional means (chlorinated solvents).

This system cannot be used to wash mineral oil lubricants. It has only been used and tested with our soap-type solution.



Cleaning cycle

1. **Loading**
   Manual loading of the trays from the first rack.
2. **Washing and rinsing**
   Washing time can be programmed up to 12 minutes, which is sufficient for most conditions. During the washing cycle, a small amount of industrial soap is added.
3. **Unloading onto the drip rack**
   Manual unloading of the trays onto the drip rack.
4. **Transfer to the oven**
   When the drip rack is full, the trays are transferred to the oven.
5. **Drying**
   Excess water on the coils is dried in the fan-forced oven. Temperature and time can be adjusted.
6. **Unloading**

UNITS OF THE COIL CLEANER SYSTEM

1	Pre-wash stainless steel rack for trays
2	Washing device for removal of residual lubricant
3	Pre-drying drip rack
4	Drying oven after washing
5	Inlet water treatment system (water softener)
6	Electric boiler

Technical characteristics

Power supply	400 V 3N / 50 Hz
Installed power	25 kW
Additional services	water
Max. quantity of coils per tray	2,5-3 kg (5.5-6.6 lb)
Typical washing time	15 min
Water lost per cycle (rinse)	4-5 l (1.1-1.3 gal)
Shelves	7
Trays per level	2
Weight	590 kg (1,301 lb)
Dimensions	mm to be defined

25
kW
installed power

2,5-3
kg
coils per tray, max.

15
min
typical washing time

4-5
l
water lost per cycle (rinse)

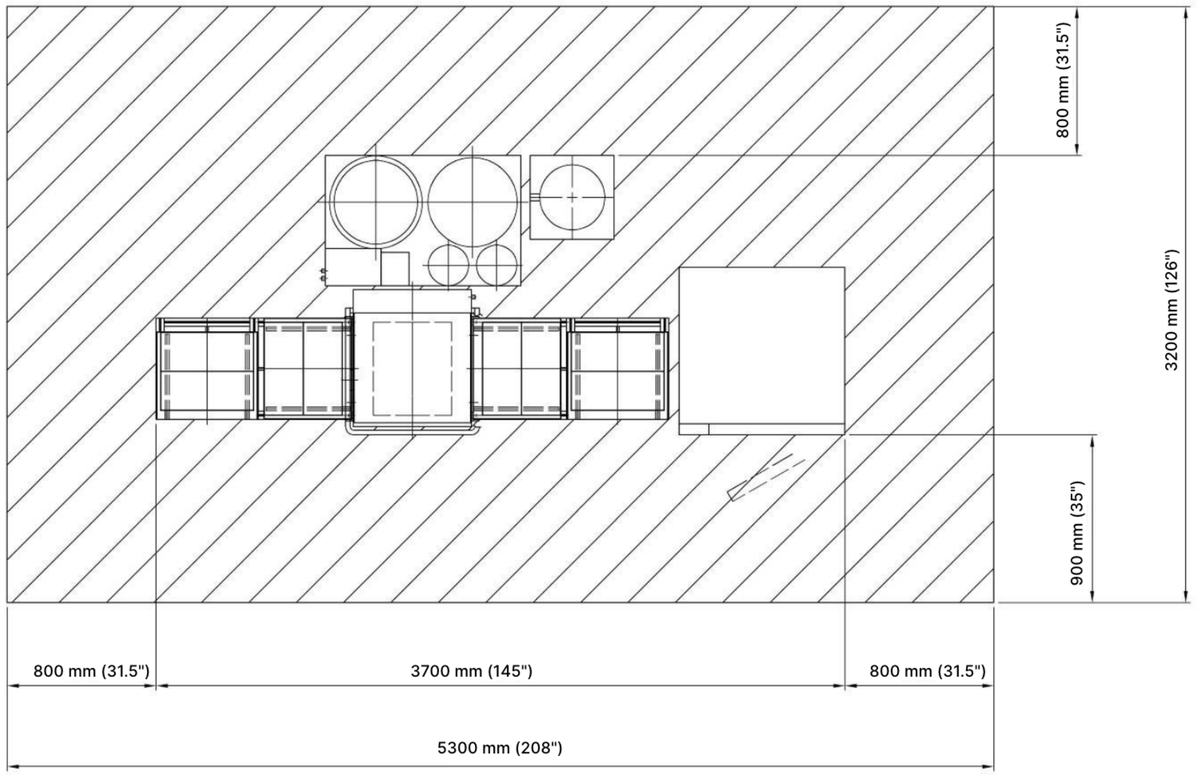
AVAILABLE VERSIONS

Mod. 118/10.H2O0BE – Complete coil cleaning system with electric boiler

OPTIONS

Mod. 118/10.200000 – Stainless steel trays for coils

Layout


800 mm (31.5")
3200 mm (126")
900 mm (35")
800 mm (31.5")
3700 mm (145")
800 mm (31.5")
5300 mm (208")