

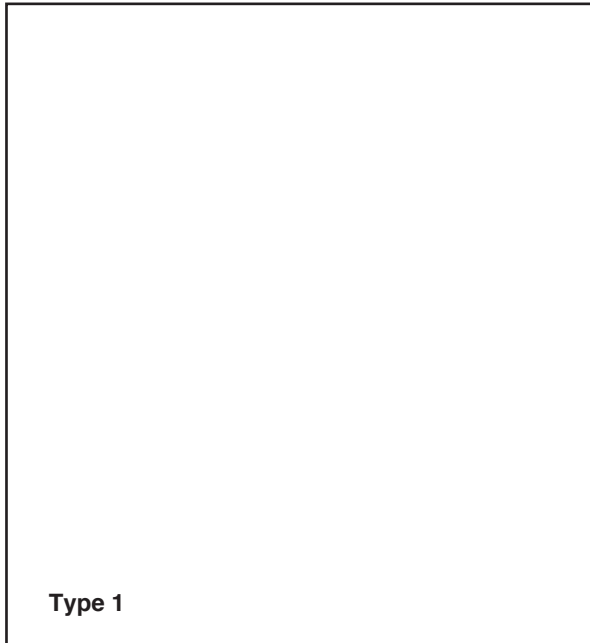
MADDEN

MANUFACTURING, INC.

Simple, Rugged Quality

Sample Cooler Pump Seal Flush Cooler

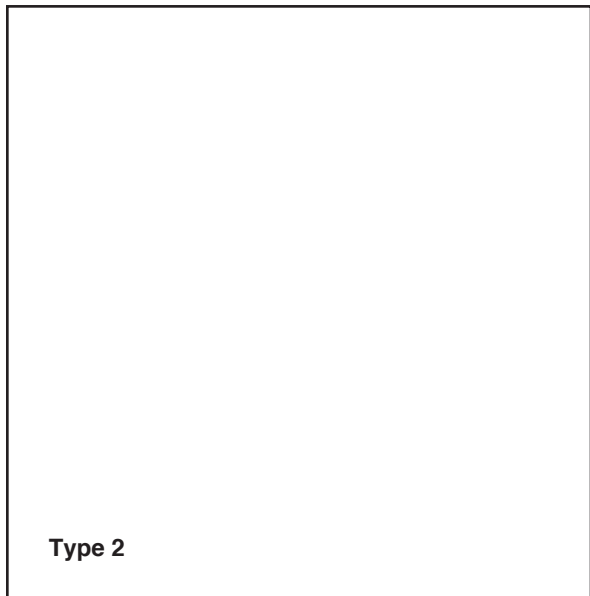
Efficient liquid to liquid mini heat exchangers.
Available with copper and stainless steel coils.



Madden Sample Coolers are miniature heat exchangers designed to reduce high temperature liquid samples to safe, usable temperatures for analysis. They also function as effective coolers for pump seal flush liquid. The counter flow design efficiently cools the tube side liquid.

Sample coolers are available in copper and Type 316 stainless steel tube coil material. All Madden sample coolers disassemble with standard tools for cleaning, or replacement of damaged coils. Carbon steel shell parts are painted with grey acrylic enamel. Shell side pressure rating is 150 psi. Madden Type 2 models may be constructed using a variety of materials to meet a customer's specific requirements. Contact the factory for a quotation for applications with special material specifications.

Type 1 sample cooler models have all the piping connections for the sample and the cooling water on the threaded cap on the top of the sample cooler. All coils are 1/4" OD tubing, and all piping connections are 1/4" NPT. Cooling water enters on the left and exits opposite on the right. Sample inlet connection is vertical on the top, and the cooled sample exits from the spout.



Type 2 sample coolers offer both 1/4" and 3/8" OD tubing coils. Sample connections are 1/4" NPTF and are made on the top plate. Cooling water connections are 3/8" NPTF located on both top and bottom plates. On our Type 2 design, we can offer up to 1" NPT cooling water connections.

Typically, liquid grab samples can be cooled with 1.3 square foot coil surface area models. For continuous cooling of samples for instrument probes, or for steam samples, 2.6 sf or larger coil surface area is recommended.

Part Number	Max. Coil PSI	Description - Type, coil surface area, coil material, coil tube size	Weight
SC0001	300	Type 1, 1.3 sf, copper coil w/ CI head, 1/4" OD tube	15#
SC0002	300	Type 1, 2.6 sf, copper coil w/ CI head, 1/4" OD tube	25#
SC0003	1,200	Type 1, 1.3 sf, 316 SS coil w/ SS head, 1/4" OD tube	15#
SC0003A	1,200	Type 1, 1.3 sf, 316 SS coil w/ SS head, 1/4" OD tube, SS shell	15#
SC0004	1,200	Type 1, 2.6 sf, 316 SS coil w/ SS head, 1/4" OD tube	25#
SC0004A	1,200	Type 1, 2.6 sf, 316 SS coil w/ SS head, 1/4" OD tube, SS shell	25#
SC101	300	Type 2, 1.3 sf, copper coil, 1/4" OD tube	25#
SC102	1,200	Type 2, 1.3 sf, 316 SS coil, 1/4" OD tube	25#
SC103	250	Type 2, 1.9 sf, copper coil, 3/8" OD tube	30#
SC104	250	Type 2, 3.8 sf, copper coil, 3/8" OD tube	59#
SC105	1,200	Type 2, 1.9 sf, 316 SS coil, 3/8" OD tube	30#
SC106	1,200	Type 2, 3.8 sf, 316 SS coil, 3/8" OD tube	55#
SC107	5,000	Type 2, 3.8 sf, 316 SS coil, 3/8" OD tube	61#
SC108	5,000	Type 2, 1.9 sf, 316 SS coil, 3/8" OD tube	35#

Dimensions and Specifications

