Heating a catheter tipping die

Objective Water-cooled brass mandrel die, nylon LDPE catheter, “K” type thermocouple and temperature controller.

Material materials, supplies involved in the application

Temperature 400°F (204°C)

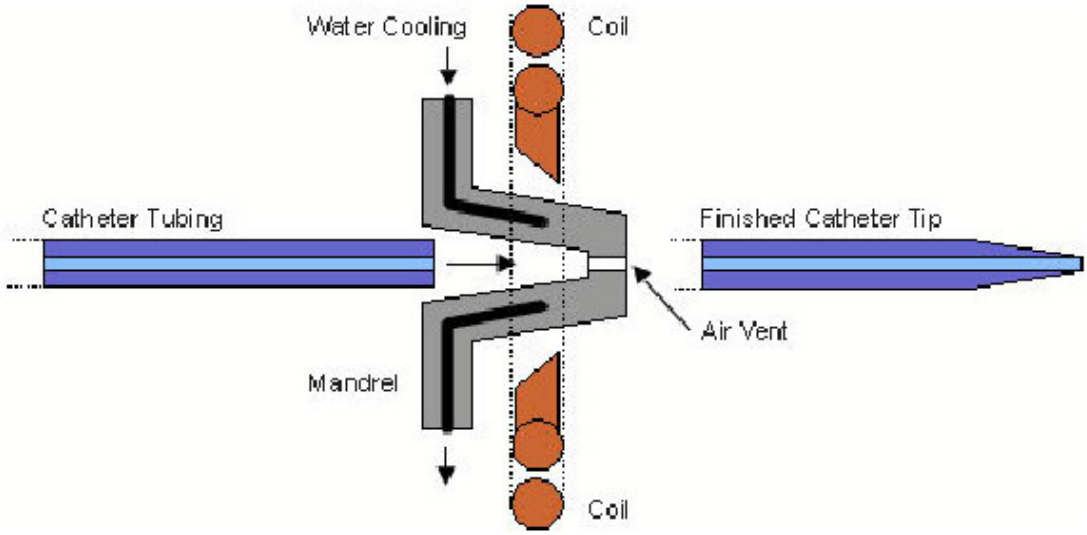
Frequency 325kHz

Equipment Ambrell 3kW induction heating system, remote heat station containing one 0.66 microfarad capacitor.

Process A two turn plate concentrator coil is used to heat the die. To measure the temperature on the ID and establish the time-to-temperature relationship, the thermocouple is inserted inside the brass die. RF power is applied for 3 seconds to heat the die to 400°F (204°C). The nylon tube is pushed into the die and formed into a catheter.

Results/Benefits Induction heating provides:

- Increased throughput and reduced cycle time
- Consistent and repeatable results
- Clean heating
- Precise temperature control



Ameritherm Inc.
www.ameritherm.com
+1.585.889.9000

Cheltenham Induction Heating, Ltd.
www.cihinduction.com
+44 (0)1242 514042

Ameritherm France Sàrl
fr.ambrell.com
+33 (0)3 89 76 01 24

Ambrell B.V.
www.ambrell.com
+31 (0)548 659044

med_die.doc | © 2009 All information subject to change without notice