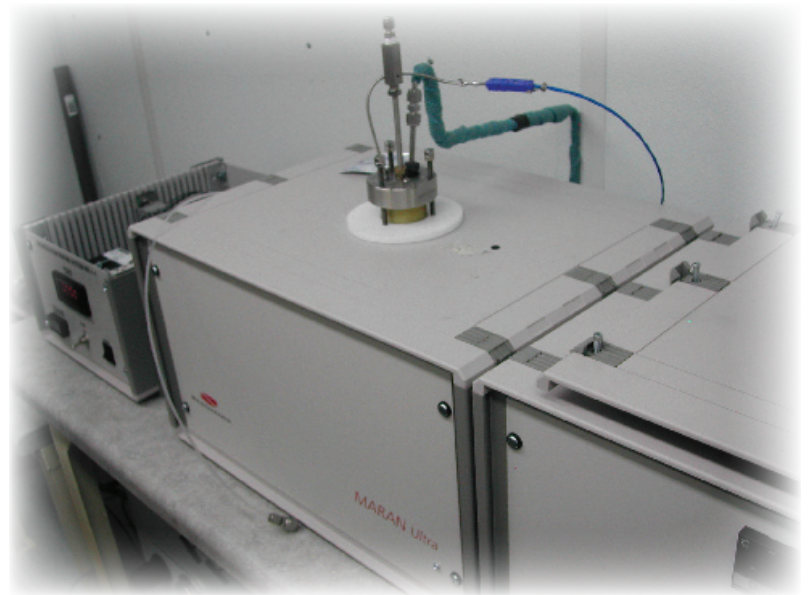


# Temco, Inc.

Design Excellence in Core Analysis Instrumentation

## NMR/MRI Microwave Core Holder FCH Series

Temco, the worldwide leader in core holders for NMR and X-ray applications, announces a new series of composite core holders for use with the low field NMR instruments. These core holders offer a new composite body of Fiberglass and PEEK. This new design offers significant advantages as listed below.



### Enhancements:

- Measurement Properties of the New Body material described as "Clear Improvements"
- Tests reveal "No Appreciable NMR signal"
- Removal of the body liner
- Easier assembly and disassembly
- Overall reduction in weight of the core holder

Temco has been providing composite core holders for use with NMR and X-ray instruments since the mid 1980's. These composite materials are required, in place of metal materials, because of their non-magnetic properties. Not any composite fiber can be used for the NMR application. Temco is using the proprietary Fiberglass material for these non-magnetic applications. These core holders have developed over time to include core sleeve material of Aflas for low temperature applications and Heat Shrink Teflon for high temperature applications. The end pieces of the core holder are manufactured from non-magnetic metal and the distribution plugs are designed from PEEK material.

The sample size that is available for testing includes 1", 30 mm, 1-1/2", 2" and certain larger diameters. The measurement sample size is determined by the inner diameter of the RF coil or bore through the NMR instrument. Based upon these dimensions, the maximum outer diameter of the core holder is determined. Using the maximum diameter of the core holder, then the internal parts are designed and the maximum core sample measurement diameter is determined. Temco has standard core holders available for most NMR instruments. When requesting a core holder, please advise the model number of the NMR instrument that is in use, the RF coil or bore diameter, and the location of the measurement position within the NMR cabinet. With this information, Temco will be able to provide a core holder that will meet the specific application.

Heating of the core holder within the NMR instrument is also important to simulate reservoir conditions. Temco offers a heating system for the re-circulation of confining fluids within the core holder at test pressures. The system is designed to provide heat to 150oC or 300oF at pressures of 5,000 to 10,000 psi.

#### Ordering Information:

When ordering, please provide the following information and circle the desired specification.

- NMR Instrument to be used: \_\_\_\_\_
- RF coil inner diameter or bore: \_\_\_\_\_
- Location of measurement within NMR Cabinet: \_\_\_\_\_
- Core Diameter(s): 1", 1-1/2", 2", 30 mm, 40 mm, \_\_\_\_\_
- Core Length: 0-2" standard \_\_\_\_\_
- Working Pressure: 2,500 psi, 5,000 psi, 7,500 psi, 10,000 psi, \_\_\_\_\_
- Working Temperature: 100oC (212oF), 150oC (300oF) \_\_\_\_\_
- Fluid Inlet and Outlet: 1 each standard \_\_\_\_\_
- Re-circulation, heating, and confining pressure system: Yes No \_\_\_\_\_
- Electrical: 240 VAC 1 Phase 60 Hz, 220-240 VAC 1 Phase 50 Hz \_\_\_\_\_