

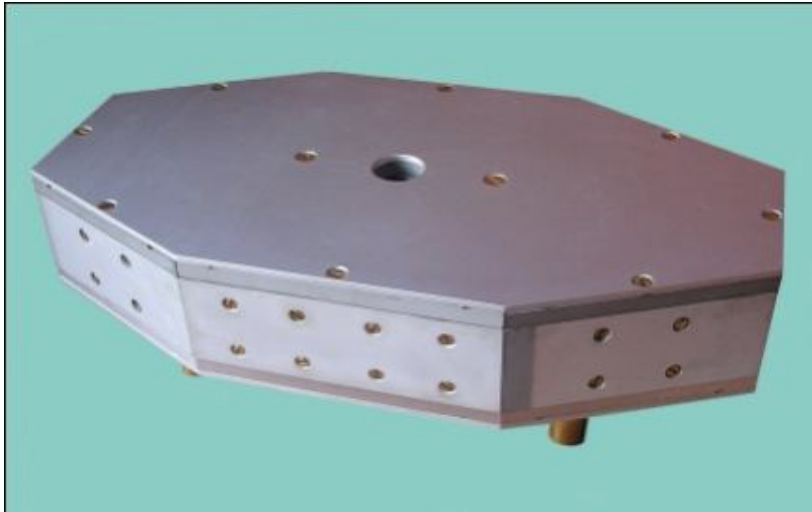
AMT&C LLC offers various types of  
electromagnetic systems, magnetic field sources  
and measuring equipment  
Custom design and manufacturing

**Get in touch**

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**AMT&C LLC  
MAGNETIC FIELD  
SOURCES  
ELECTROMAGNETIC  
SYSTEMS  
MEASURING  
EQUIPMENT**



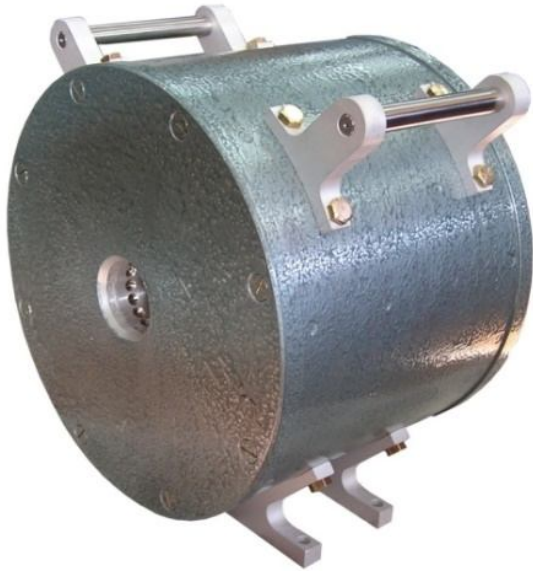


WITH STATIC  
MAGNETIC FIELD IN  
THE WORKING BORE



WITH VARIABLE  
MAGNETIC FIELD  
IN THE WORKING  
BORE

## AXIAL FIELD SOURCES



working bore  $\varnothing$  50 mm  
magnetic field – 1.25 T  
relative field homogeneity in the area of  $\varnothing$  20×20 mm – better than  $10^{-3}$   
field direction - axial  
dimensions  $\varnothing$  300×240 mm  
weight 105 kg



working bore  $\varnothing$  120 mm  
magnetic field - up to 0.4 T  
field homogeneity in the toroidal area – up to  $\pm 2\%$   
field direction - axial  
dimensions  $\varnothing$  300×240 mm

# PERMANENT MAGNET MAGNETIC FIELD SOURCES

## HALBACH-TYPE WITH EXTENDED UNIFORMITY FIELD AREA FOR NMR APPLICATIONS



working bore  $\varnothing$  100 mm

magnetic field 0.16 T

field area with relative homogeneity of  $10^{-4}$  -  $\varnothing$  100 mm  $\times$  100 mm

field direction - transverse to the working bore axis

dimensions  $\varnothing$  300  $\times$  500 mm

weight 150 kg



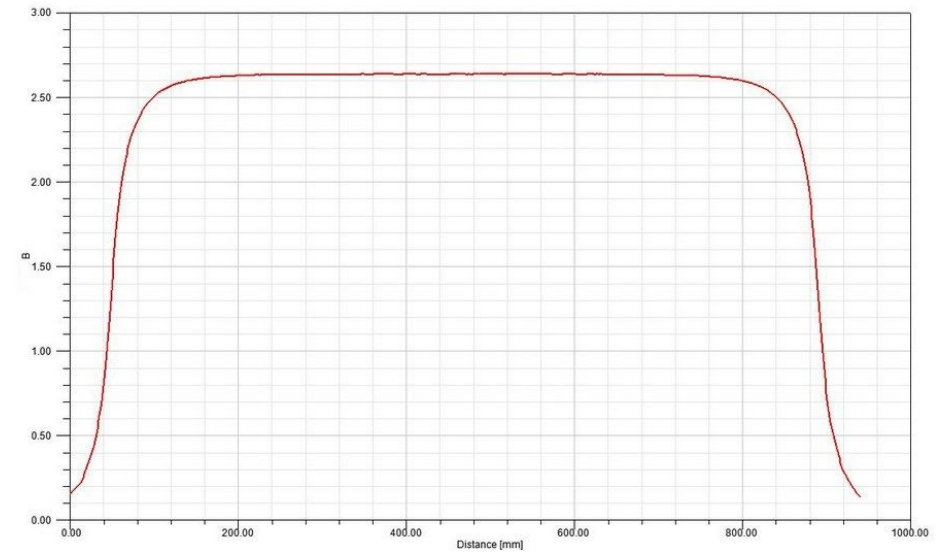
# PERMANENT MAGNET MAGNETIC FIELD SOURCES HALBACH-TYPE WITH HIGH MAGNETIC FIELD IN THE WORKING BORE



working bore  $\varnothing$  40 mm  
magnetic field 1.2 T  
uniform field ( $\pm 0.5\%$ ) area 20 mm  
field direction - transverse to the working bore axis  
dimensions  $\varnothing$  165  $\times$  125 mm  
weight 13 kg

# MagEq<sup>®</sup> PERMANENT MAGNET MAGNETIC FIELD SOURCES

## HALBACH-TYPE WITH HIGH MAGNETIC FIELD IN THE WORKING BORE



working bore  $\varnothing$  20 mm  
magnetic field 2.6 T  
uniform field ( $\pm 0.5\%$ ) area 12 mm  
field direction - transverse to the working bore axis  
dimensions  $\varnothing$  220  $\times$  880 mm  
weight 330 kg

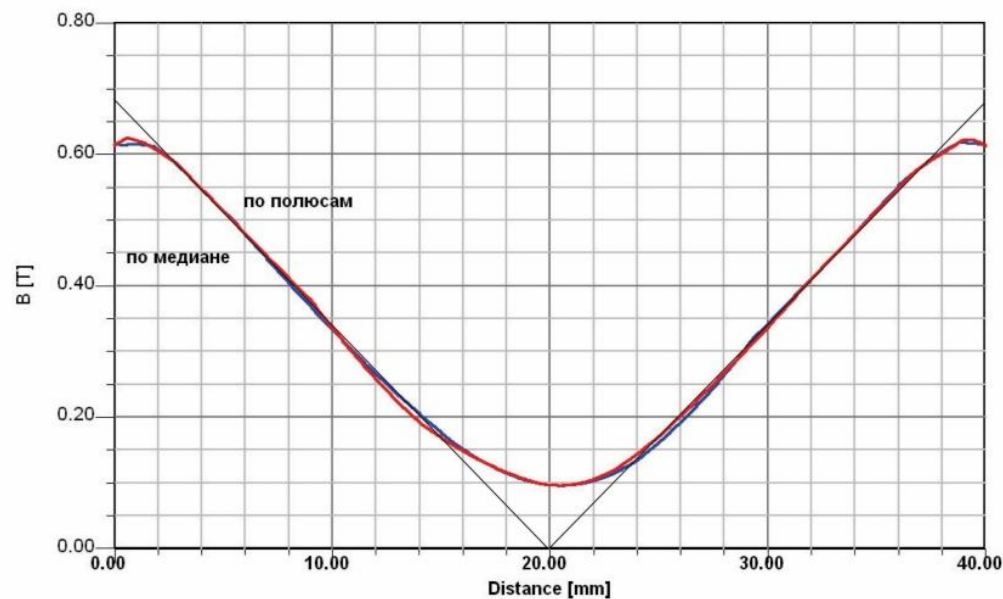
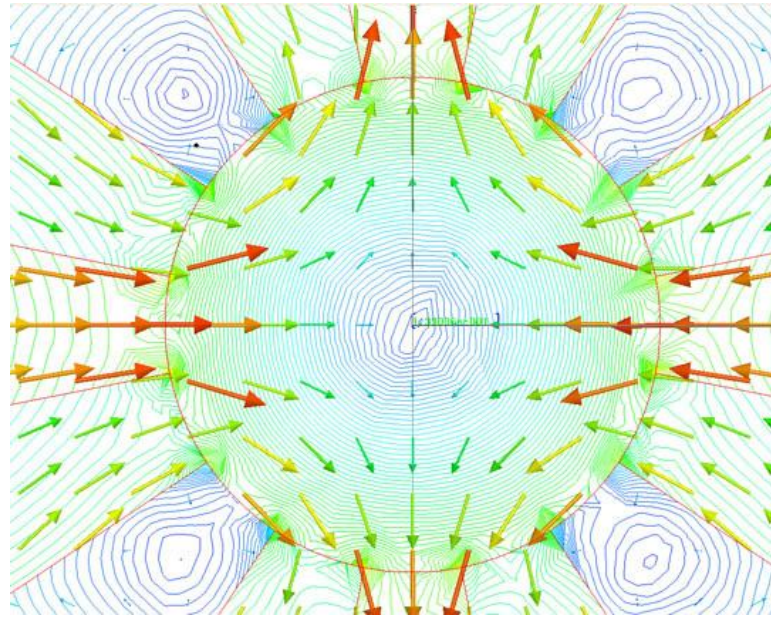
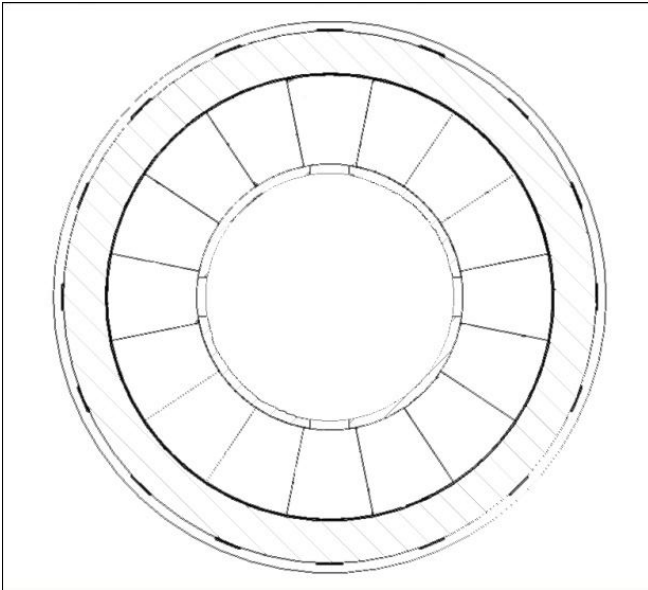
# agEq<sup>®</sup> PERMANENT MAGNET MAGNETIC FIELD SOURCES WITH HIGH MAGNETIC FIELD IN THE WORKING BORE



working bore

working bore 11.5 mm  
magnetic field 2.6 T  
pole size 25 × 70 mm  
dimensions 515 × 275 × 105 mm

# agEq<sup>®</sup> PERMANENT MAGNET MAGNETIC FIELD SOURCES WITH HIGH-GRADIENT MAGNETIC FIELD IN THE WORKING BORE



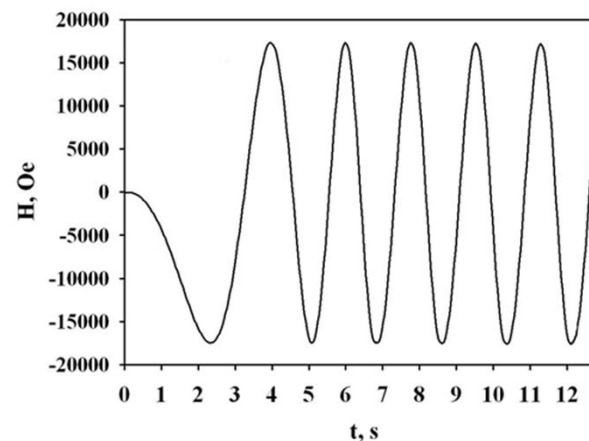
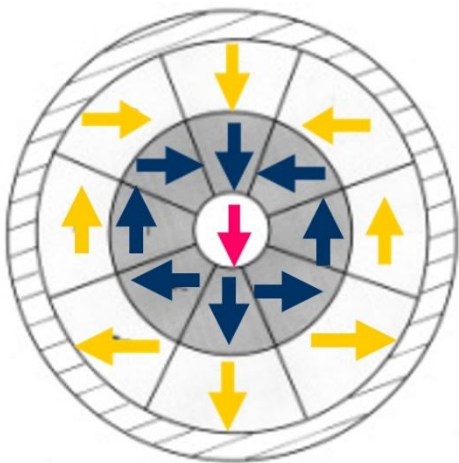
quadrupole  
magnetic  
system



# agEq<sup>®</sup> PERMANENT MAGNET MAGNETIC FIELD SOURCES WITH VARIABLE MAGNETIC FIELD IN THE WORKING BORE



working bore 36 mm  
magnetic field  $-1.8 \text{ T} \div +1.8 \text{ T}$   
field direction - transverse to the working bore axis  
maximal field changing rate 6 T/sec  
field homogeneity  $\pm 0.5\%$  in a region  $\varnothing 20 \times 20$  mm  
overall dimensions  $396 \times 324 \times 466$  mm  
weight 108 kg



# agEq<sup>®</sup> PERMANENT MAGNET MAGNETIC FIELD SOURCES WITH VARIABLE MAGNETIC FIELD IN THE WORKING BORE



Adjustable magnetic field system for optical experiments

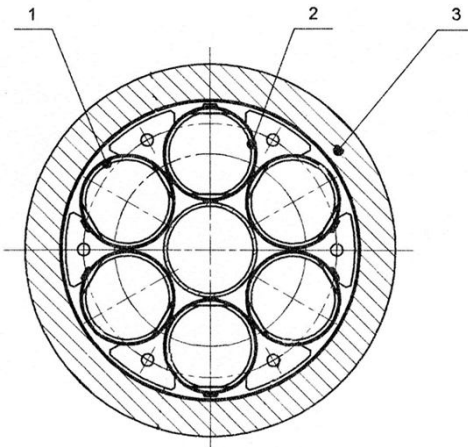
working bore 42 mm

magnetic field  $-0.7 \text{ T} \div +0.7 \text{ T}$

field homogeneity  $\pm 1\%$  in a region  $\varnothing 10 \times 20$  mm

overall dimensions  $200 \times 200 \times 450$  mm

weight 30 kg



# PERMANENT MAGNET MAGNETIC FIELD SOURCES FOR MAGNETIC NON-DESTRUCTIVE TESTING



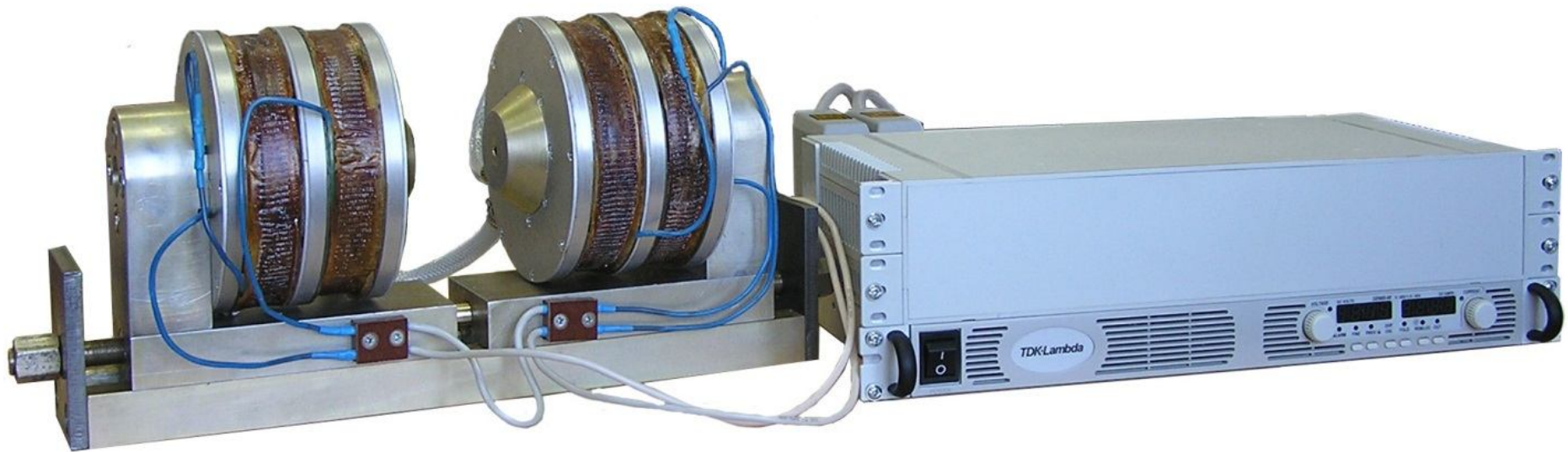
Permanent magnet magnetic systems (blocks) for magnetic non-destructive testing (NDT).



# ELECTROMAGNETS

## WATER COOLED ELECTROMAGNETS

maximal magnetic induction in the working bore – up to 2 T  
adjustable working bore  
computer and electronic control with field direction switching  
optical channel along the field direction and other options





# ELECTROMAGNETS

## ELECTROMAGNETIC SYSTEMS FOR CALIBRATION PURPOSES

maximal magnetic field induction 50 mT  
field inhomogeneity in the operating region  
0.01 - 0.05 %  
computer and electronic control with field  
direction switching  
power consumption 200 W  
dimensions 280×340×340 mm  
weight 95 kg





We design and manufacture unique magnetic field sources exactly according to customer requirements

## CONTACT US

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