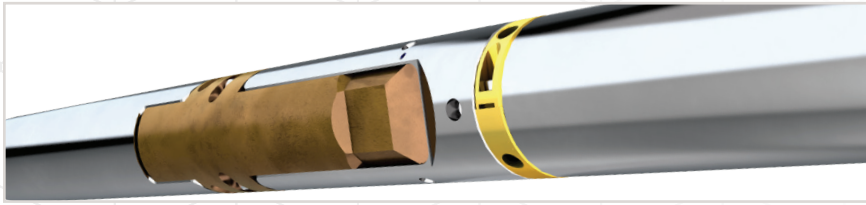


Intelligent Compensated Neutron (iCN)



The Intelligent Compensated Neutron tool utilizes an Americium-241/Beryllium (Am/Be) neutron source and dual Helium-3 detectors to measure the ratio of thermal neutrons at each detector. The ratio is environmentally corrected and porosity is calculated for the desired lithology. When run in combination with the Intelligent Litho Density tool, indications of lithology and gas zones can be interpreted.

LOGGING APPLICATIONS:

- Determination of porosity
- Lithology identification
- Identification of gas zones

MECHANICAL:

LENGTH	5.3 ft (1.6 m)
DIAMETER	2.25 in (57 mm)
WEIGHT	43 lbs (19.5 kg)
PRESSURE RATING	20,000 psi (140 Mpa)
TEMP RATING	350 °F (175 °C)
MAX HOLE SIZE	14 in
TENSILE STRENGTH	65,000 lbs (289,134 N)

MEASUREMENT:

OUTPUT	Thermal Neutron Porosity
RANGE	-3 to 60 pu
VERTICAL RESOLUTION	12 in (30 cm)
ACCURACY	+/- 1 pu or 6%
DEPTH OF INVESTIGATION	9 in (23 cm)



Dual He3
neutron detectors

Utilizes Am241Be
radioactive source