

Facility	Thermal < 0.5 eV (n/cm ² .s)	Fast > 1 MeV (n/cm ² .s)	Diameter (cm)	Length (cm)
CIF (Al)	1.0 * 10¹³	5.2 * 10¹²	4.4	38
PTS (Void)	4.6 * 10¹²	2.3 * 10¹²	1.5	10
NTD (Void)	3.1 * 10¹¹	1.2 * 10¹⁰	8.8	22

All fluxes given for 1 MW operation.

CIF: Central Irradiation Facility

PTS: Pneumatic Transfer System

NTD: Neutron Transmutation Doping (> 10 locations)

NIF: Neutron Irradiation Facility

φfast/ φthermal: CIF 50%, PTS 50%, and NTD 3.6%.

Pulsing: Typical pulse reactivity **\$1.60** (or \$0.60 prompt reactivity)

Peak temperature > **200 oC**

Peak power ≈ **320 MW**

Total energy release ≈ **12 MW-sec**

FWHM ≈ **30 msec**