

Name, links and pictures	Location	Operating	Aspect ratio	Major radius (m)	TF (tesla)	IP (MA)	ECH (MW)	ICH (MW)	NBI (MW)	LH (MW)	Notes and special features
ACST (Alternating Current Spherical Tokamak)	S Korea, Seoul	2000- 2002	2	0.06	0.02	0.0005	-	-	-	-	AC operation. Helicon plasma discharge.
Asperator T-3	Japan, Tohoku	1974	1.6	0.27	?	0.1	-	-	-	-	
CDX-U, (Current Drive Experiment)	USA Princeton	1993- 2004	1.4	0.3	0.23	0.03	-	-	-	-	FW heating. Now resurrected as the Lithium Tokamak Experiment, LTX.
<u>ETE</u>	Brazil INPE	2000	1.5	0.3	0.6	0.4	-	-	-	-	Limiter machine
<u>Globus-M</u>	Russia IOFFE	2002	1.5	0.36	0.62	0.5	-	1	1.5	-	0.3 second pulses
GUTTA (at IOFFE)	IOFFE	1980- 1985	2	0.16	1.5	0.15	0.03				Russia's first spherical tokamak.
GUTTA (at St Petersburg University)	Russia St Petersburg State Univ.	2004	2	0.16	1.5	0.15	0.03				Formerly operated at IOFFE Institute. Operations restarted 2004 in St Petersburg State University. Start-up and ECRH studies.
HIST	Japan Himeji	1998	1.3	0.3	0.2	0.1	-	-	-	-	
<u>HIT2</u> (Helicity Injected Torus)	USA Seattle	1997- 2004	1.5	0.3	0.5	0.225	-	-	-	-	Limiter / single null divertor machine to study Coaxial Helicity Injection (CHI).
<u>KTM, (Kazakh Tokamak for Material studies)</u>	Kazakhstan	?	2	0.86 - 0.43	1	0.75		2			Low aspect ratio spherical tokamak for material testing. Will be able to exchange the divertor plates without breaking vacuum. 20 single turn TF coils.
<u>LATE</u> (Low Aspect ratio Torus Experiment)	Japan, Kyoto Univ.	2000	1.25	0.25	0.12	0.004	0.2				
LTX (Lithium Tokamak Experiment)	USA, Princeton	2005	1.5	0.4	0.4	0.4	-	-	-	-	Liquid lithium walls. FW heating.
<u>MAST</u> Mega Amp Spherical Tokamak	UK Culham	1999	1.4	0.85	0.5	1.4	1	-	4	-	Merging compression technique to drive plasma current, saving solenoid flux.
MEDUSA (Madison EDUcational Small Aspect ratio)	USA, Madison	c 1994 - ?	1.5	0.12	0.45	0.04	-	-	-	-	Test bed for educational purposes and studies leading to the construction of PEGASUS.
<u>NSST</u> (Next Step Spherical Torus)	USA, Princeton	?	?	1.5	2.7	5 to 10	?	?	?	?	Proposed as the step between today's spherical tokamaks and a large Component Test Facility (CTF). Possibly to use the site that was previously used for TFTR.
<u>NSTX</u>	US Princeton	1999	1.4	0.85	0.6	1.4	?	3 HHFW	4.7	?	1 second + pulses
NUCTE-ST	Japan, Nihon Univ.	1998	1.2	0.062	0.45	0.34	-	-	-	-	High elongation machine (10)
<u>PEGASUS</u>	USA Madison	1996	1.1 - 1.2	0.2 - 0.45	0.18	0.1 - 0.3		2			Extremely low aspect ratio tokamak. Double null divertor. EBW heating.
<u>Proto-SPHERA</u>	Italy Frascati	Soon	1.2 - 1.3	0.35	?	0.24	?	?	?	?	Uses START vacuum vessel.
ROTAMAK	Australia Lucas Heights	1987- 1997	1.1	0.07	0.02	0.003					Rotamak with central rod.
ROTAMAK	Australia Flinders	1998- 2002	1.6	0.1	0.016	0.012					Rotamak with central rod.
Spheromak and rod	Germany, Heidelberg	1987 - ?	1.1	?	?	?					
SPHEX	UK Manchester	1991	1.05	0.23	0.045	0.2					Spheromak, fitted with TF rod in 1991.
<u>START</u>	UK Culham	1991- 1998	1.25	0.3	0.5	0.31	-	-	1	-	First 'hot' ST, achieved world record $\beta_T = 40\%$. To ENEA Frascati June 2004 for use in Proto-Sphera

STPC-EX	Turkey, Ankara		1.5	0.084	0.12	0.0065	-	-	-	-	
<u>SUNIST</u> (Sino UNited Spherical Tokamak)	China, Beijing	2003	1.3	0.3	0.15	0.05	-	-	-	-	Double null divertor / limiter. 0.2MW of EBW heating
TS-3	Japan Tokyo	1986	1.4	0.2	0.2	0.3	-	-	-	-	Limiter machine
TS-4	Japan Tokyo	2000	1.2	0.55	0.5	0.08	-	-	-	-	Limiter machine
TST-M	Japan Tokyo										
<u>TST-2</u> (Tokyo Spherical Tokamak)	Japan Tokyo	1999	1.5	0.38	0.4	0.2	0.2	-	-	-	Major upgrade of TST-M. Double null divertor / limiter. 0.2 sec pulses. Studying plasma turbulence. Upgrades to heating and current drive systems planned soon.

Key to colour code
Currently operating
Under construction
Planned
Currently not operating
Unknown status
Decommissioned or 'dead'

Conventional Tokamaks
are covered in a separate table.
Follow the link at www.tokamak.info.

Key to Abbreviations

DNB: Diagnostic Neutral Beam. ECH: Electron Cyclotron Resonance Heating. FW: Fast Wave. IB: Ion Bernstein Wave. ICH: Ion Cyclotron heating. IP: Max plasma current. LH: Lower Hybrid Current Drive. NBI: Neutral Beam Injection. SC: Superconducting. TF: Toroidal Field.
"y" means yes, but that no details have been obtained.
Blank boxes mean that I simply don't know!