



BRODSKI ENERGETSKI SUSTAVI

Brodske plinske turbine



Prednosti i nedostaci

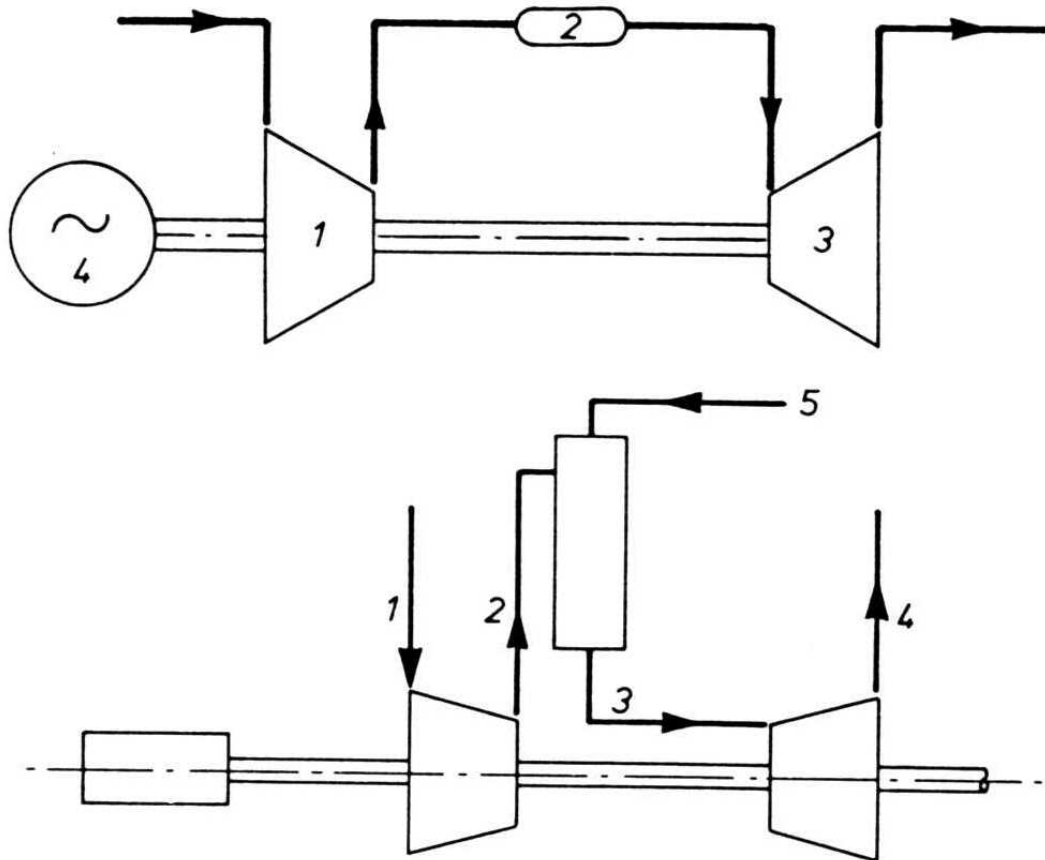
- manji η (30%)
- brzo startanje i dobar $P/m \rightarrow$ ratni
- veliki broj okretaja \rightarrow reduktor
- bolje gorivo (zaštita okoliša), ali skuplje
- manje strojnih sustava
- danas kod elektropropulzije



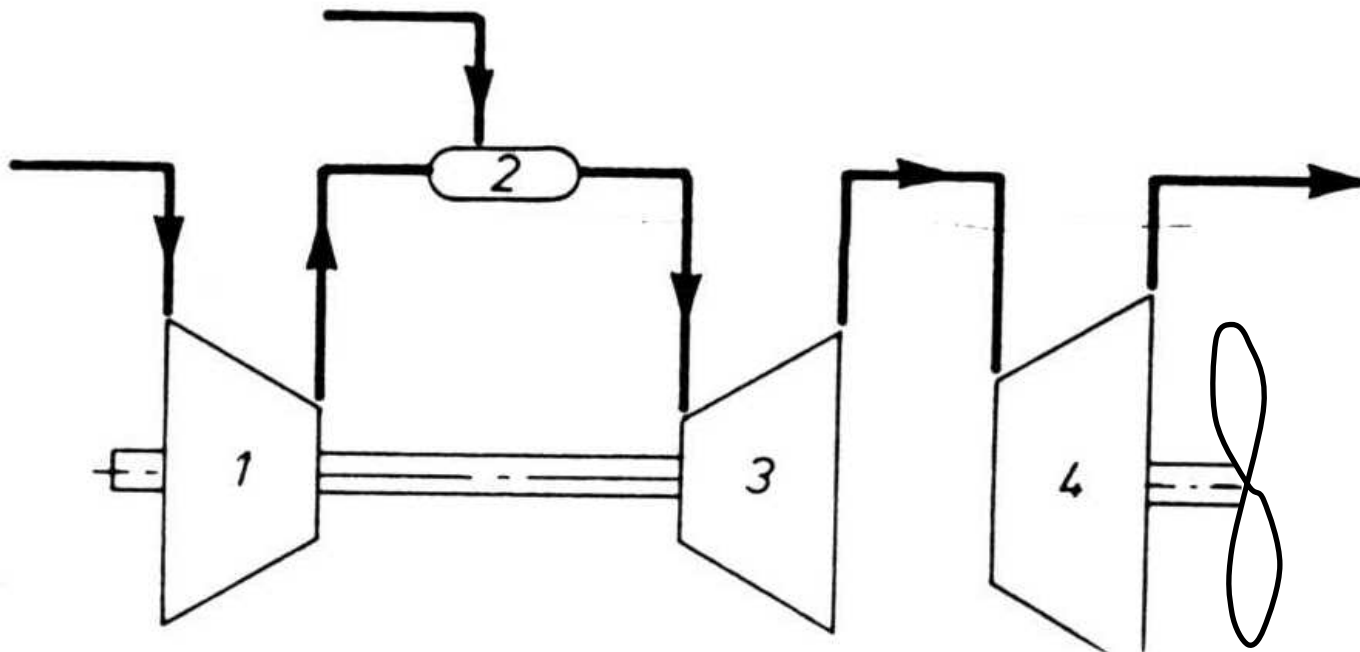
TIPOVI - PODJELA

- otvoreni ciklus – brod
- dvostepena kompresija/ekspanzija
- zatvoreni ciklus
- jedna ili dvije osovine
- kombinacija s parnim turbinama
- $\eta=0,34$

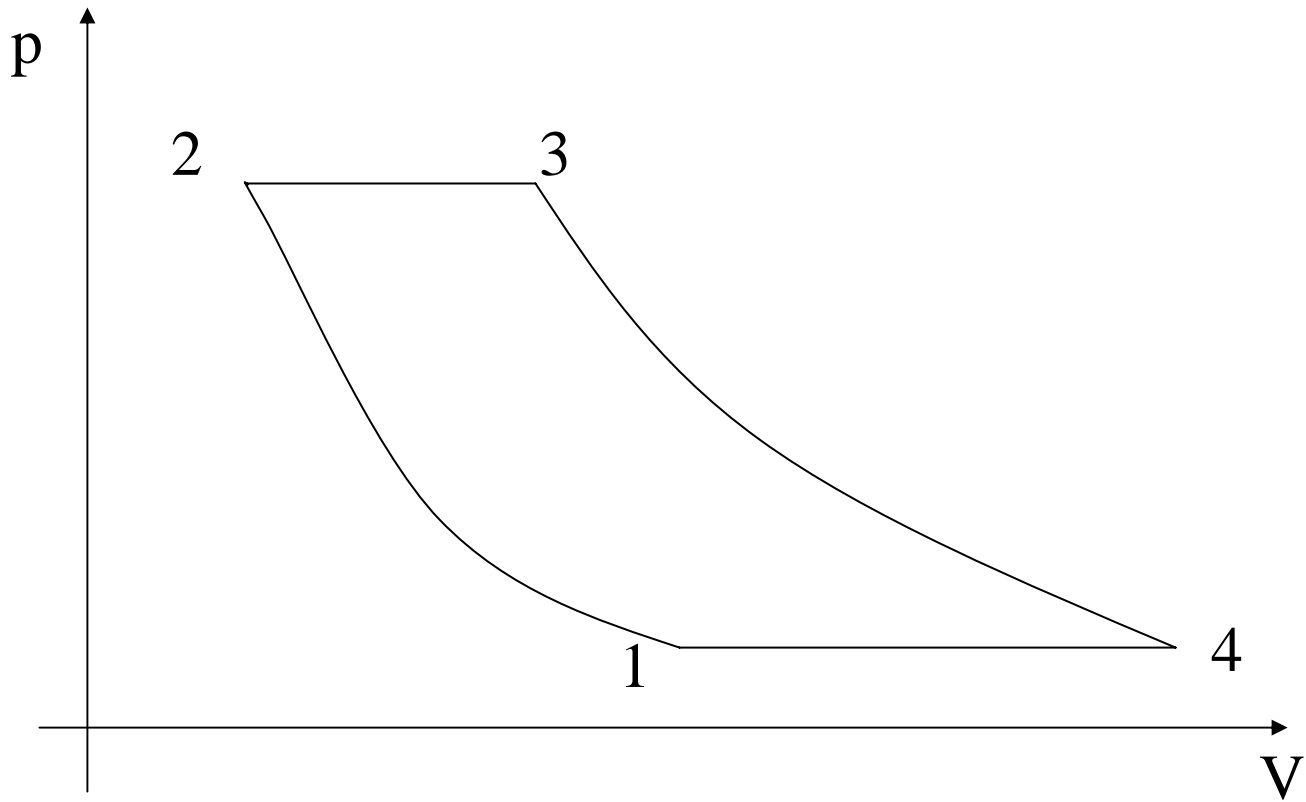
Otvoreni ciklus



Dvije osovine



Toplinski proces

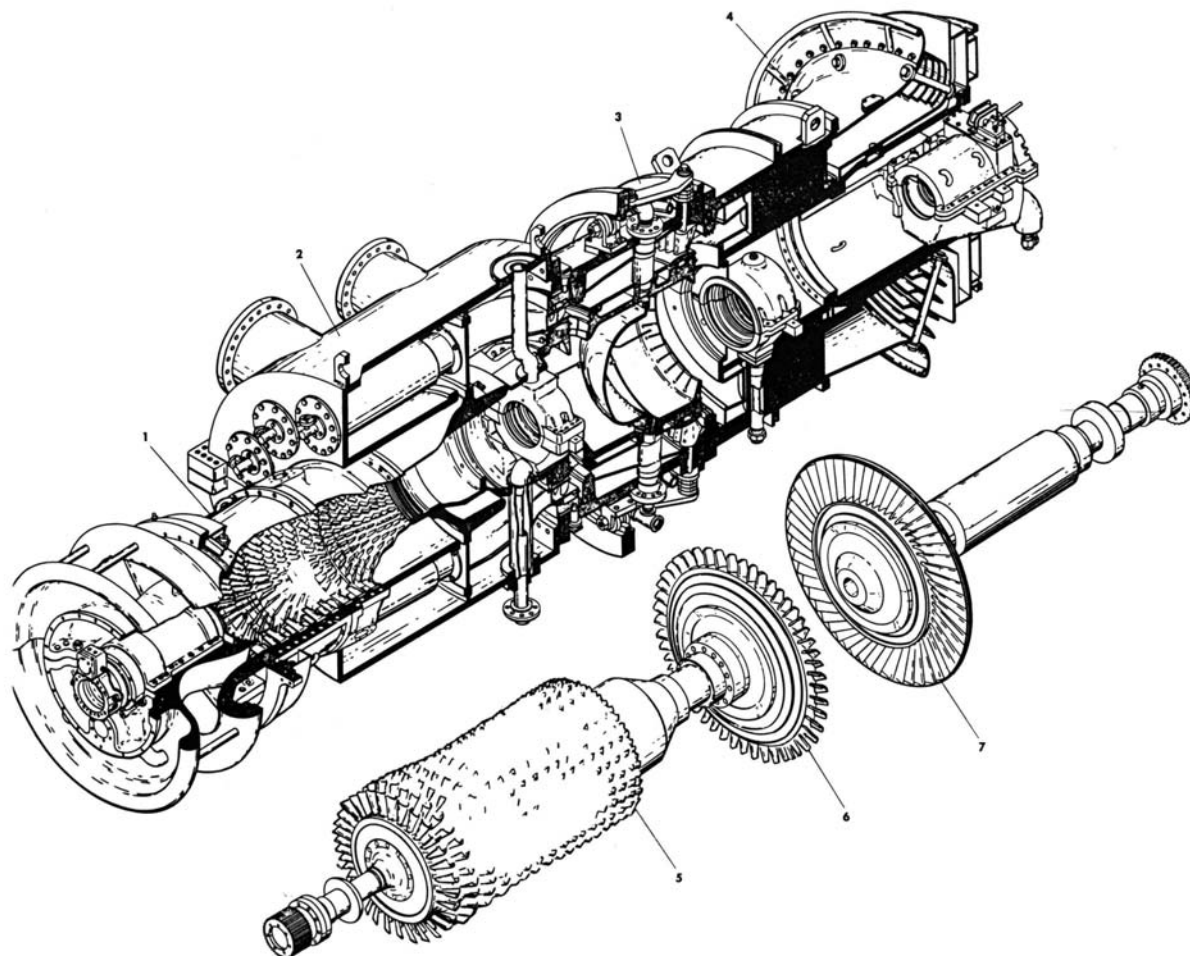




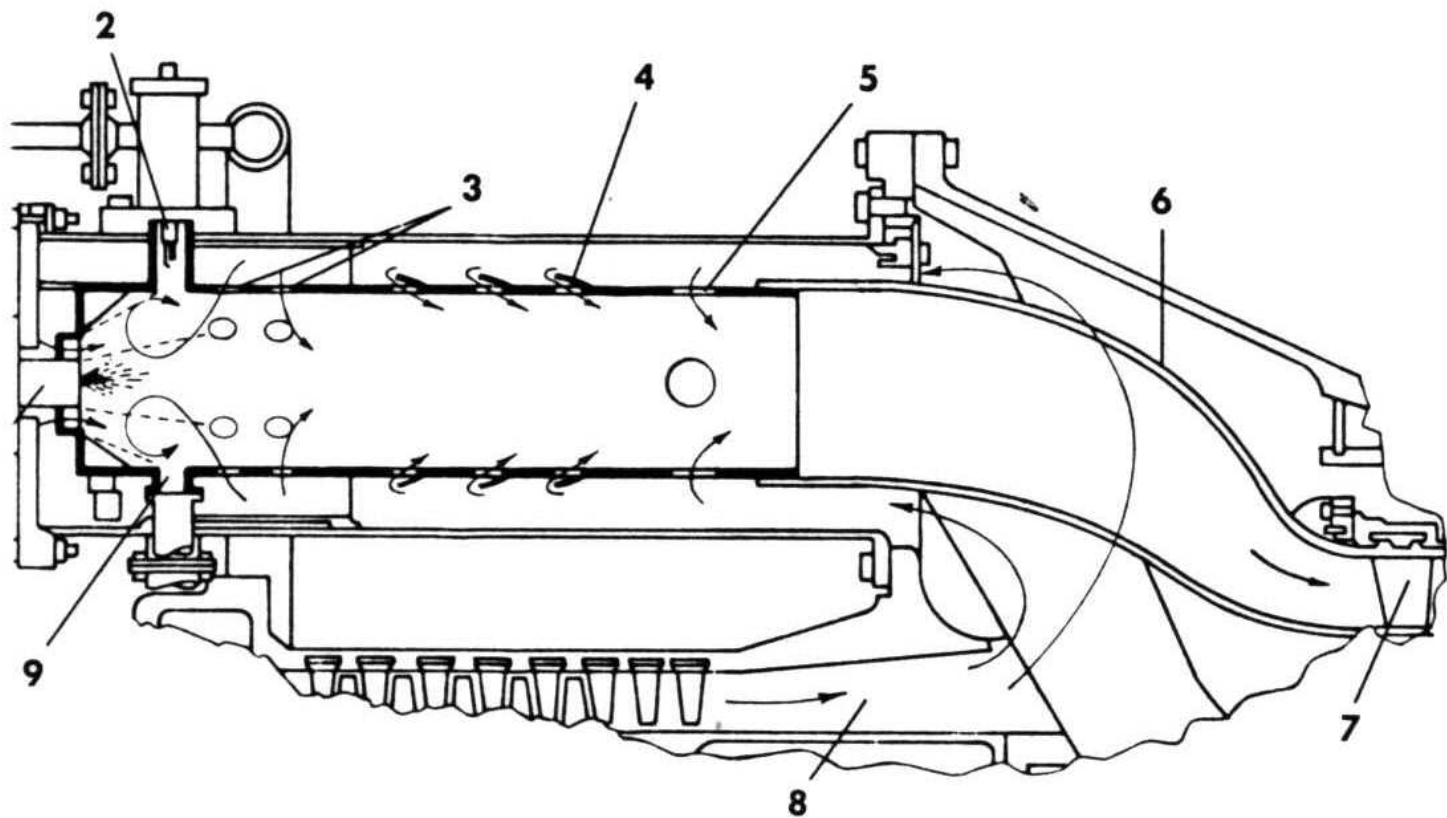
Dijelovi

- kompresor
- komore izgaranja
- turbina (I i II stupanj)
- kućište
- zagrijači zraka za izgaranje

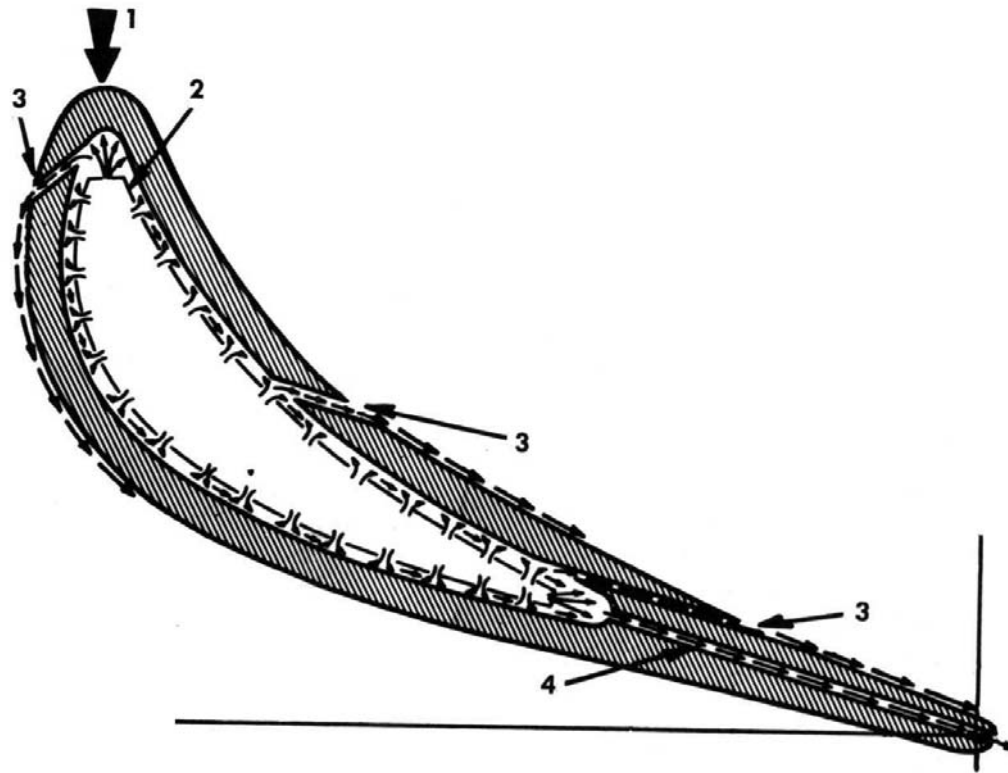
Plinska turbina - dijelovi



Komora izgaranja



Lopatica

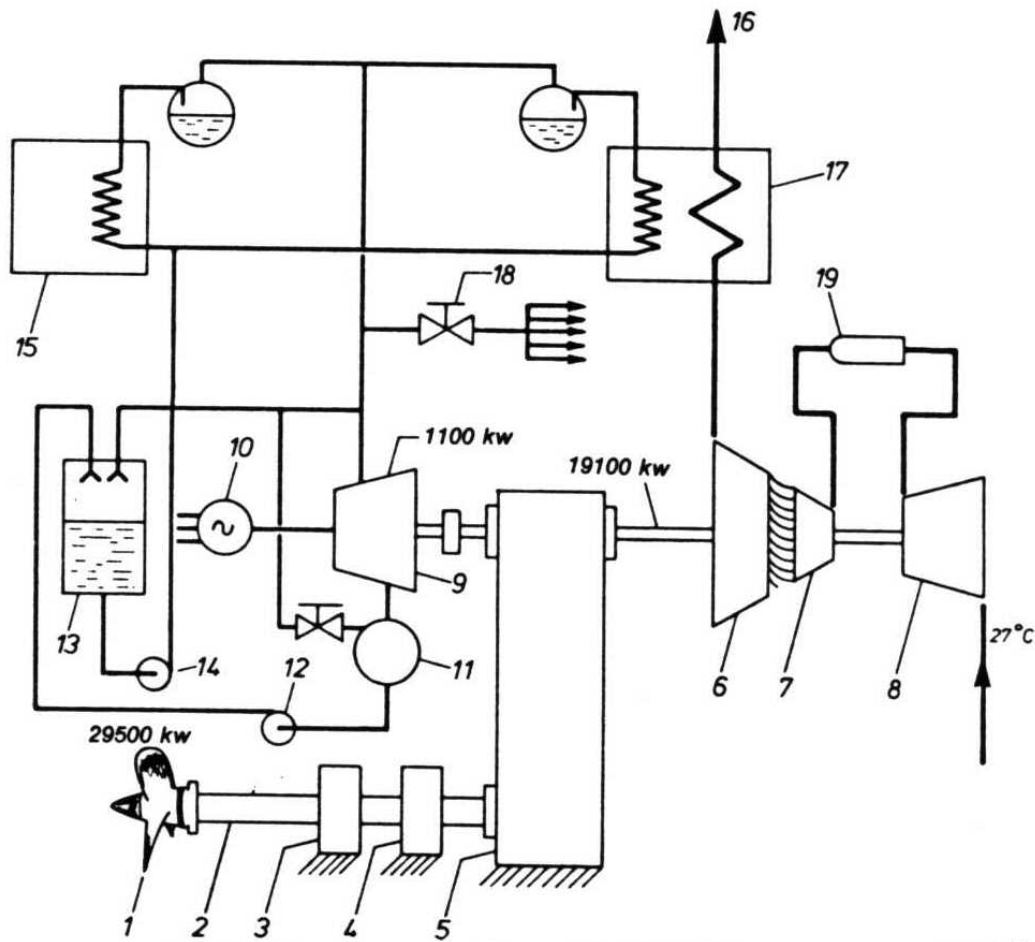




REGULACIJA OPTEREĆENJA

- Količinom goriva
- Temperatura izgaranja?

Kombinirani porivni sustav



Kombinirani porivni sustav

