Session 9
STEAM TURBINE GLAND SEALING SYSTEM
Pengantar

Fungsi utama *gland sealing*

Mengurangi kebocoran uap, khususnya pada celah *shaft*
Mengurangi intrusi udara ke dalam turbin, khususnya pada *low-pressure turbine*
Labyrinth Seal

FIGURE 9.1 Labyrinth seals. (a) Plain; (b) stepped; (c) double-stepped; (d) vernier.
Gland Type

Flexible metallic packing
Water packing
Carbon packing

(a) Water-sealed glands and labyrinth seals as used on the high-pressure end of condensing turbines.
(b) Labyrinth-type gland as used on noncondensing turbines. (Siemens Westinghouse Power Corp.)
Labyrinth Gland

FIGURE 9.2 Labyrinth glands. (a) Axial radial labyrinth; (b) spring-back labyrinth.
Gland Sealing Layout

FIGURE 9.4 Glands. (a) HP final glands; (b) LP glands.
FIGURE 9.3 Typical gland sealing system.
Gland Steam Superheater

FIGURE 9.5  Gland steam desuperheater.
Gland Steam Condenser

**FIGURE 9.6** Gland steam condenser.