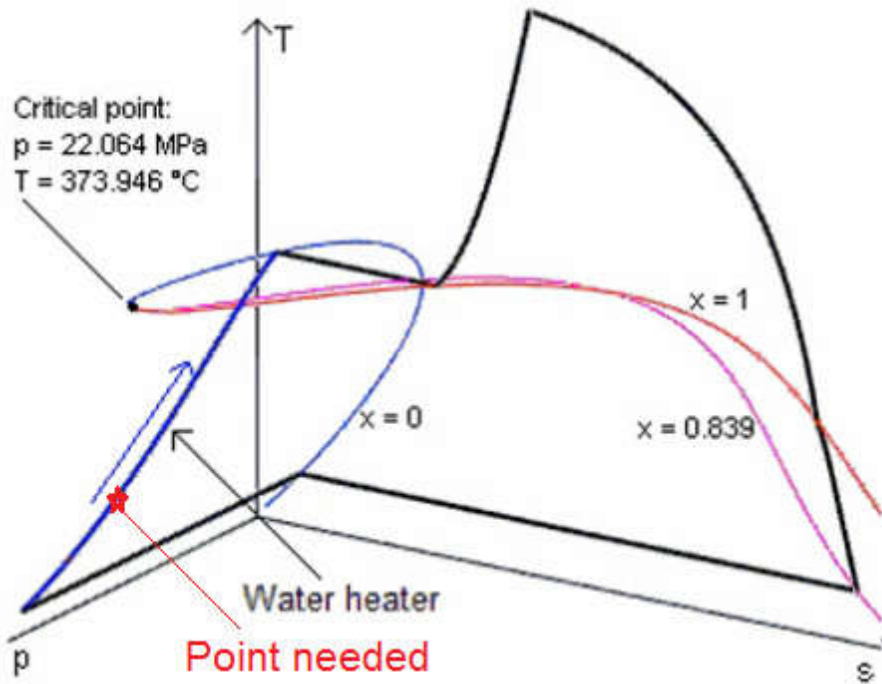
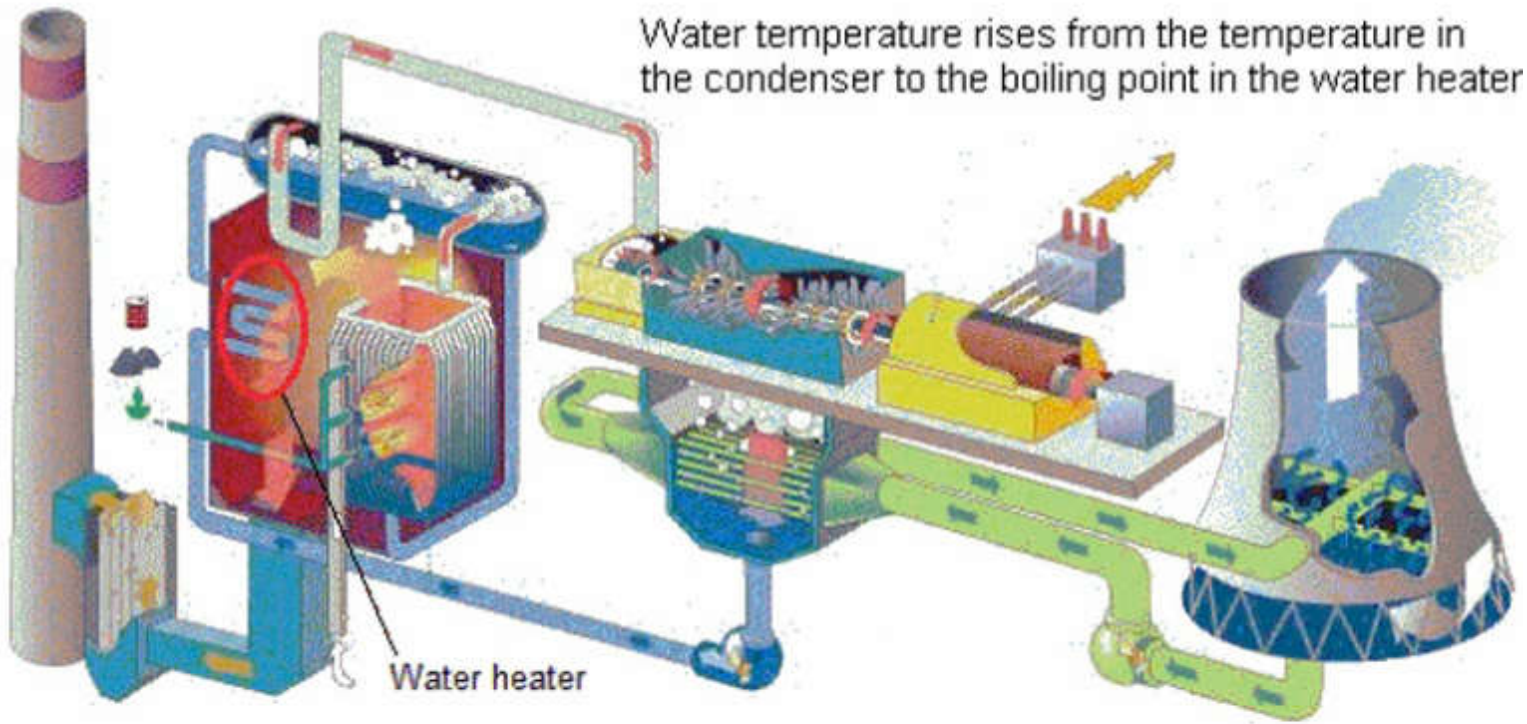


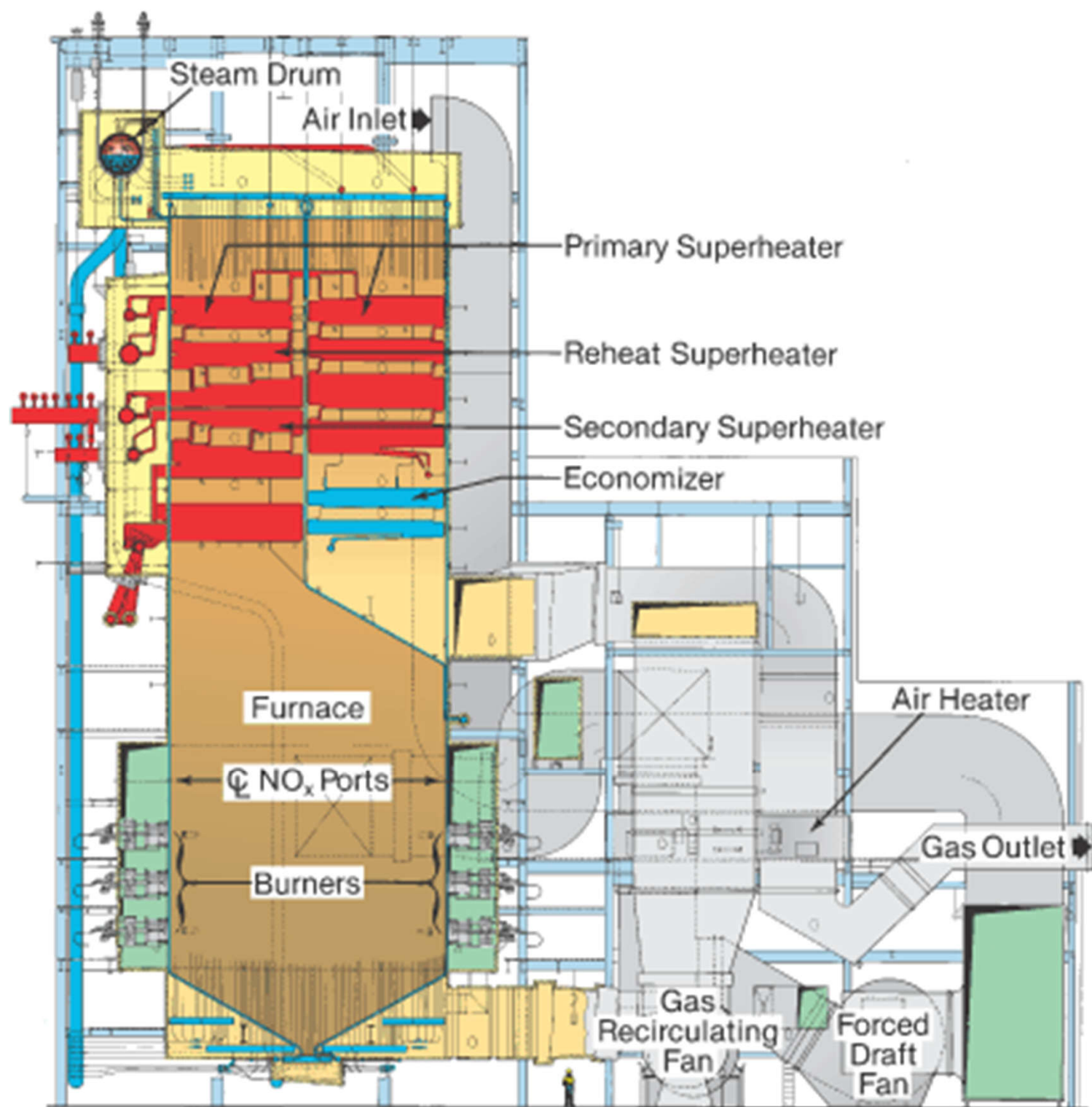
Water temperature rises from the temperature in the condenser to the boiling point in the water heater

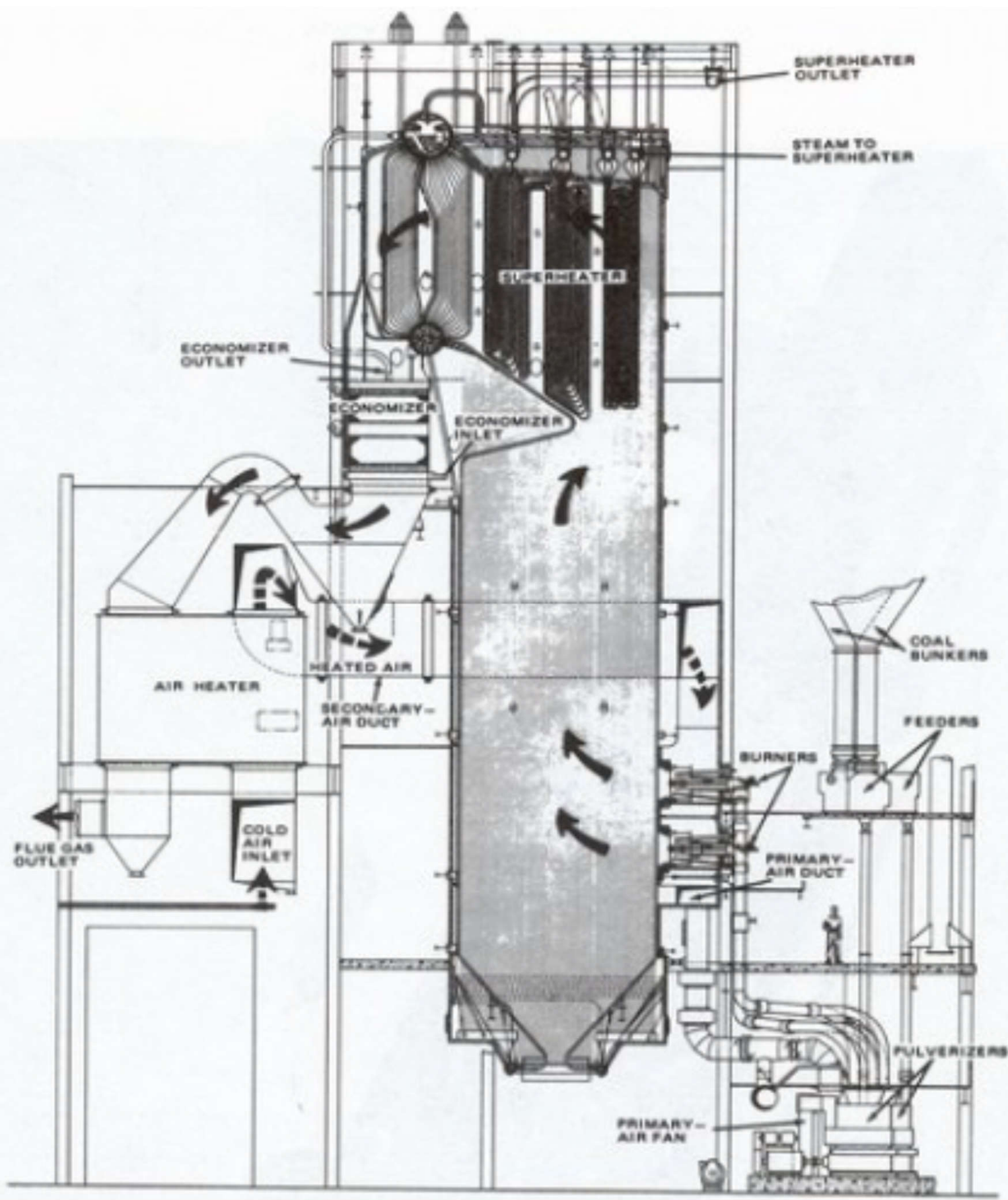


Rankine Thermal Cycle

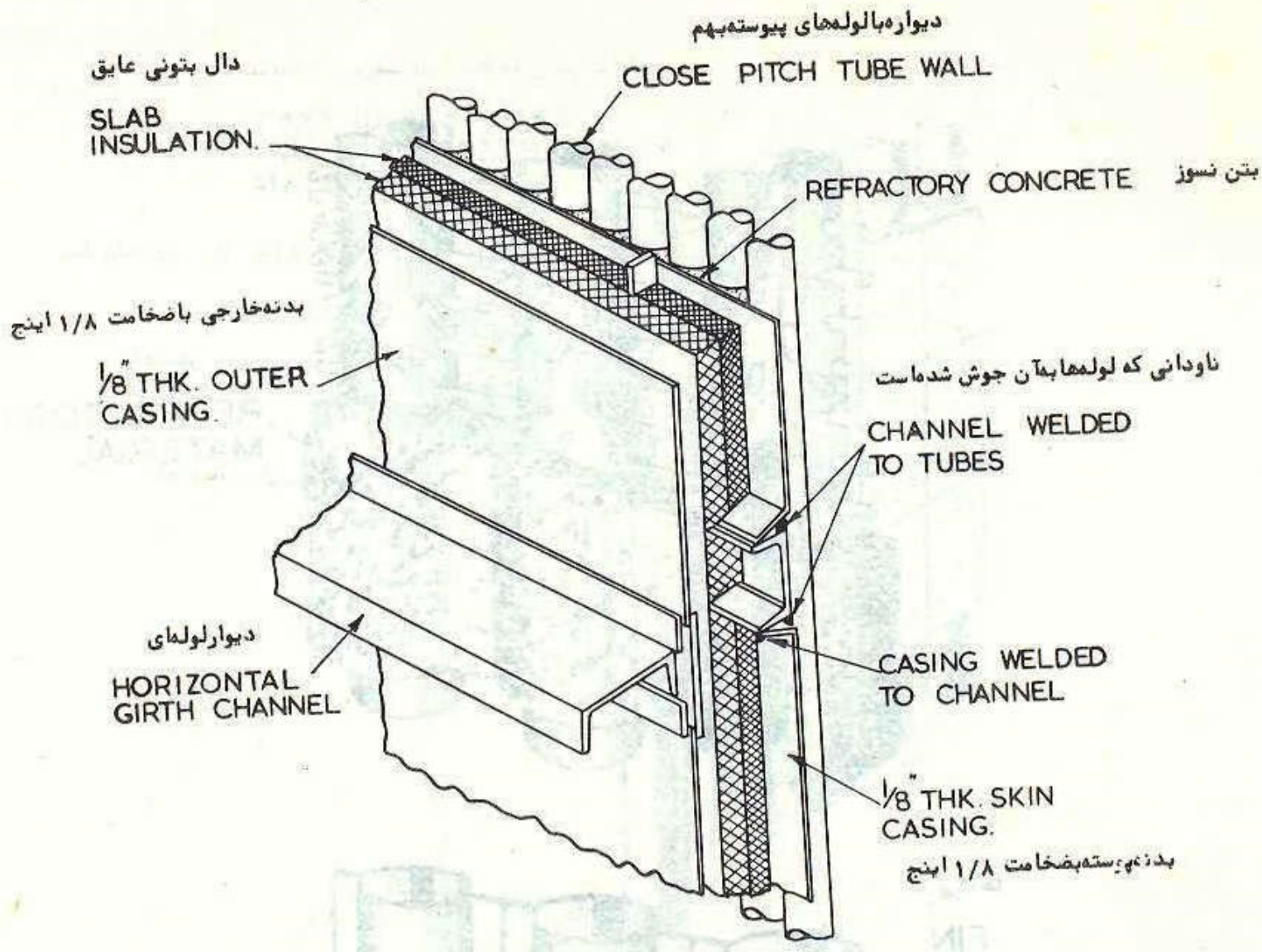
Pressure	$p = 12.50000 \text{ MPa}$
Temperature	$T = 164.6 \text{ }^\circ\text{C}$
Entropy	$s = 1.974 \text{ kJ/(kg K)}$
$x = 0$ - water	$x = 1$ - steam
	$x = 0$

Created by Valery Ochkov

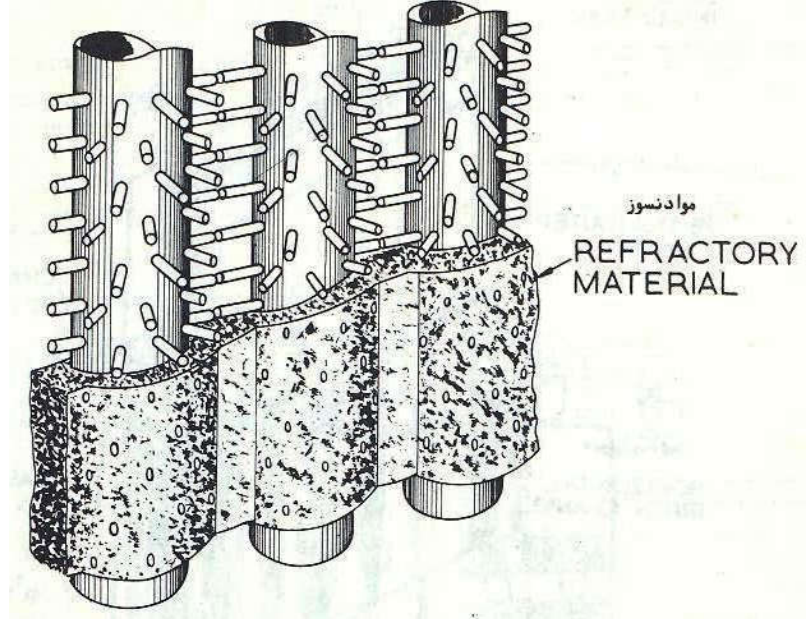
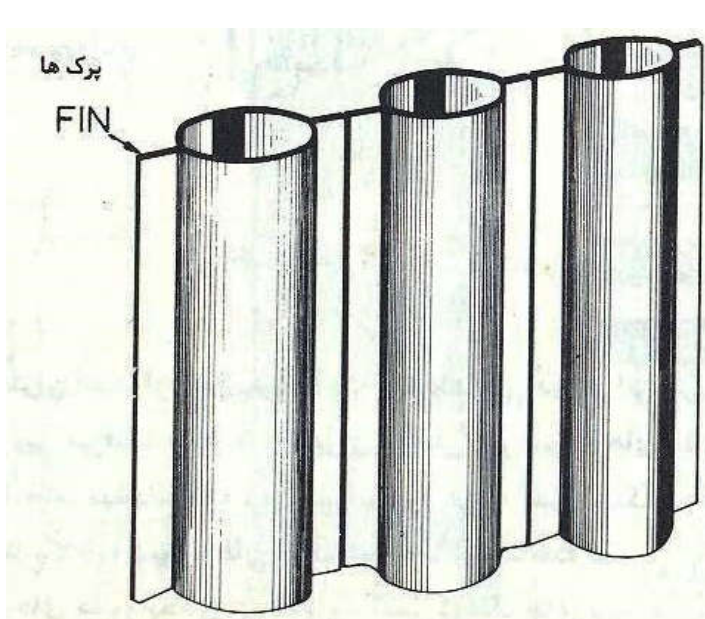




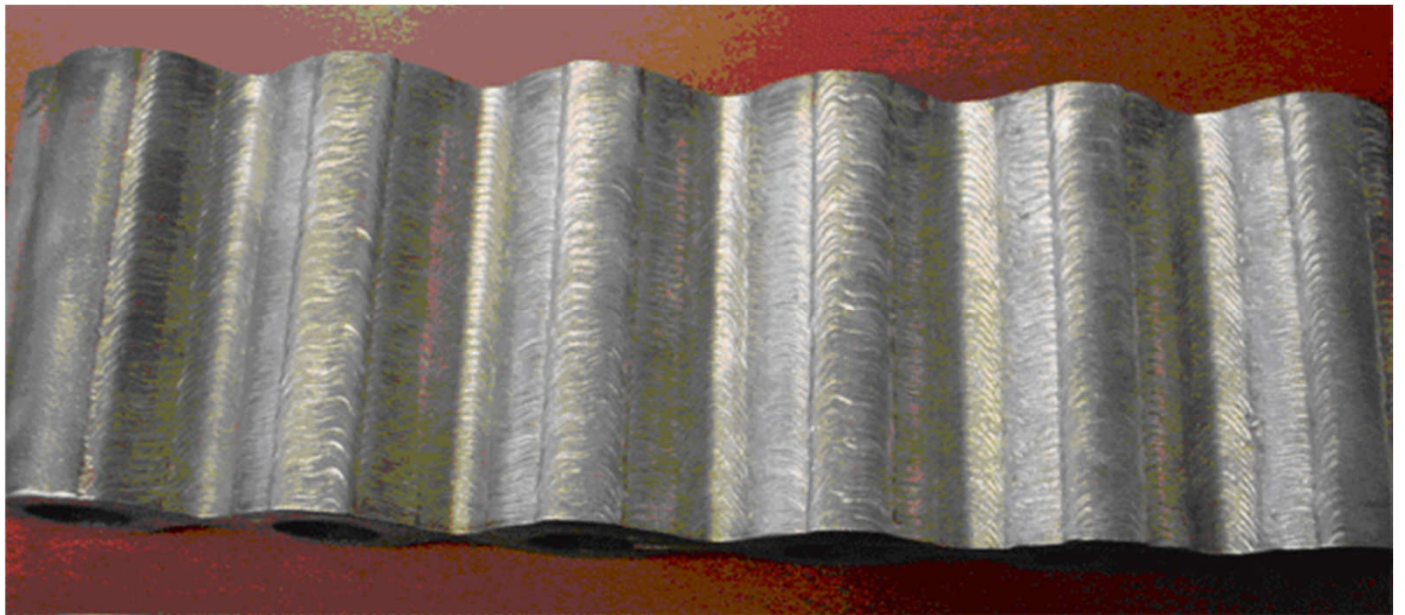


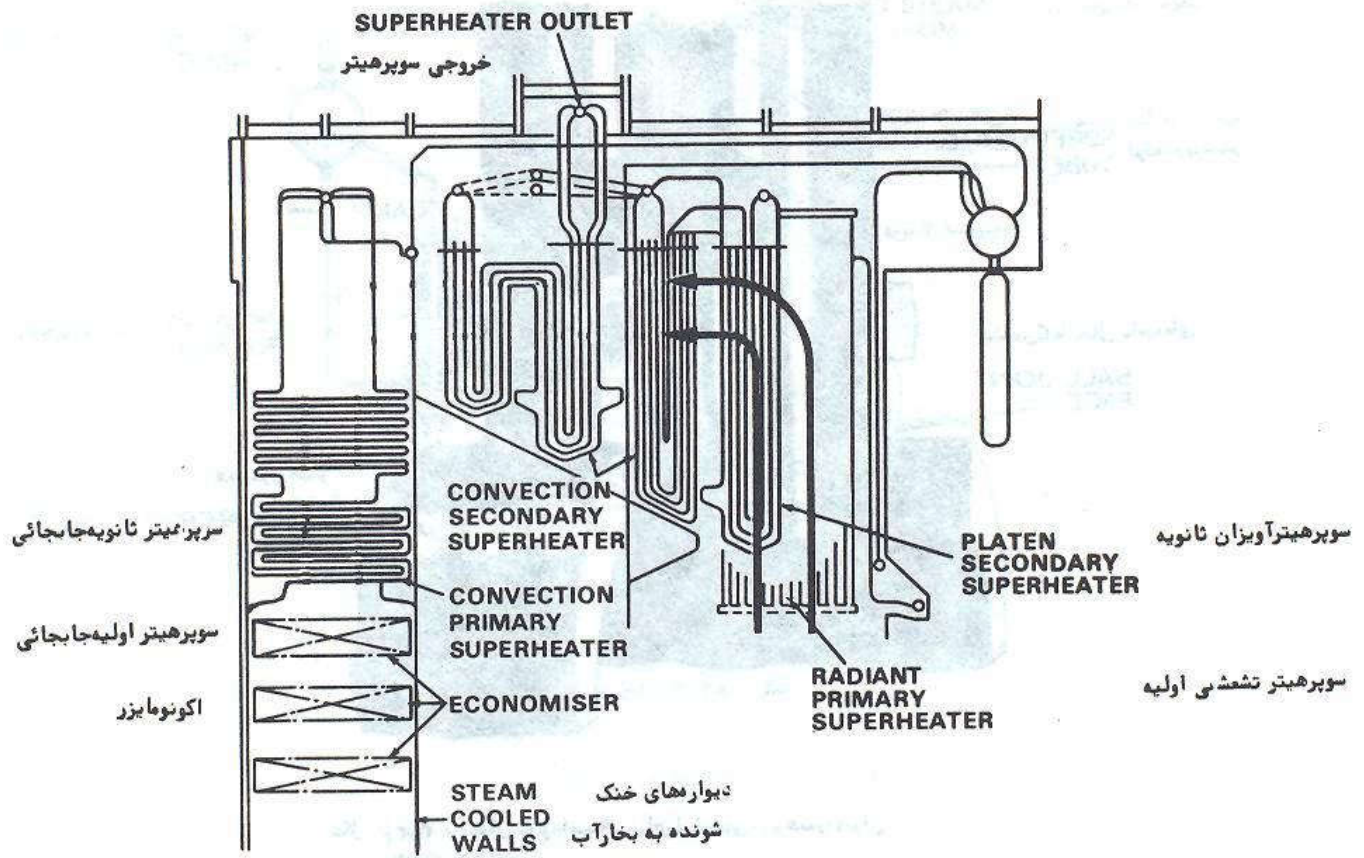




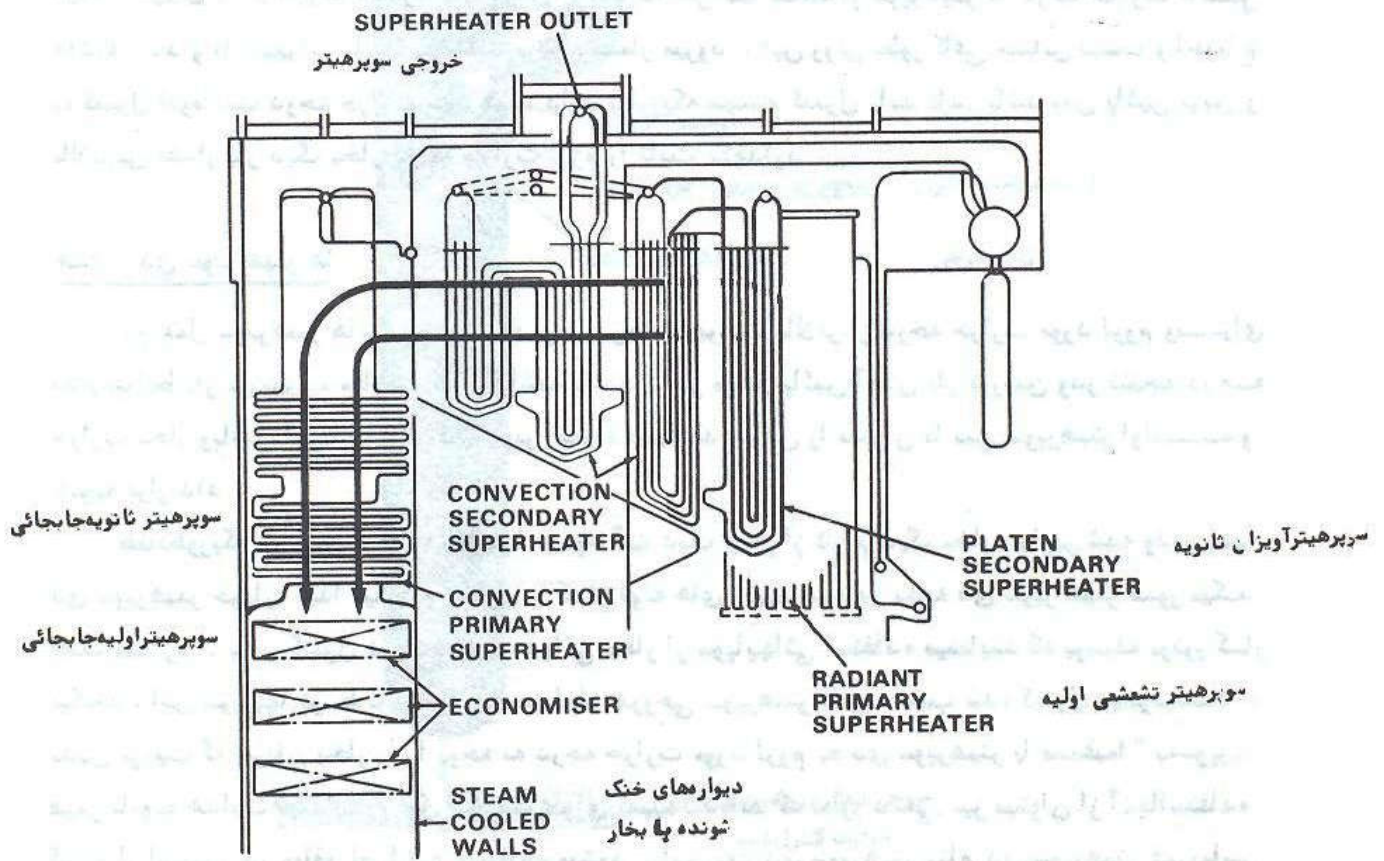


شکل ۳-۱ ، دیواره آب با لولمهای پرک دار :





شکل ۳۳-۳ ، سوپرهیتر تشعشی



شکل ۳۳-۴ ، سوپرهیتر جا بجائی

STEAM INLET AND
OUTLET HEADERS

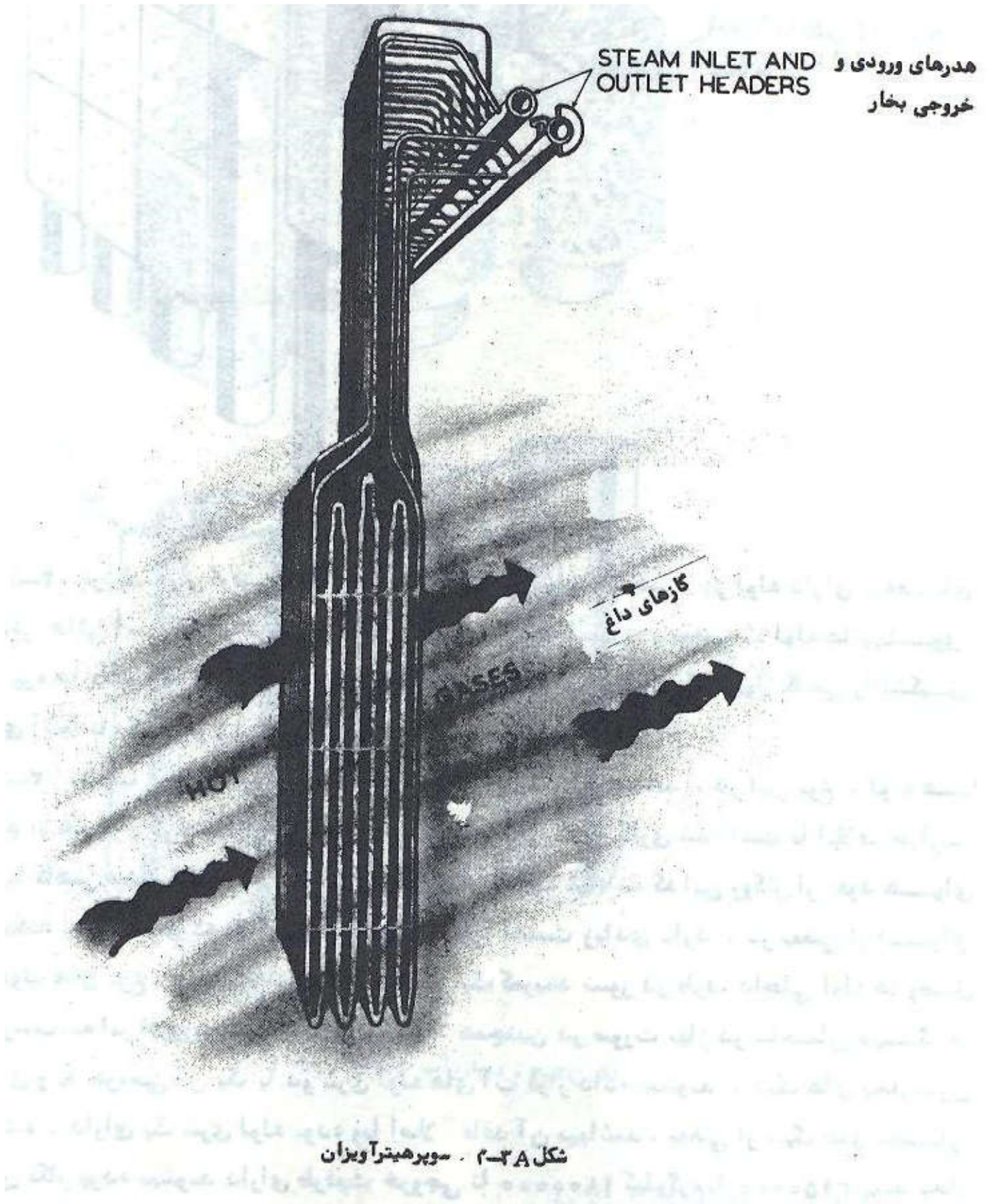
هدرهای ورودی و
خروجی بخار

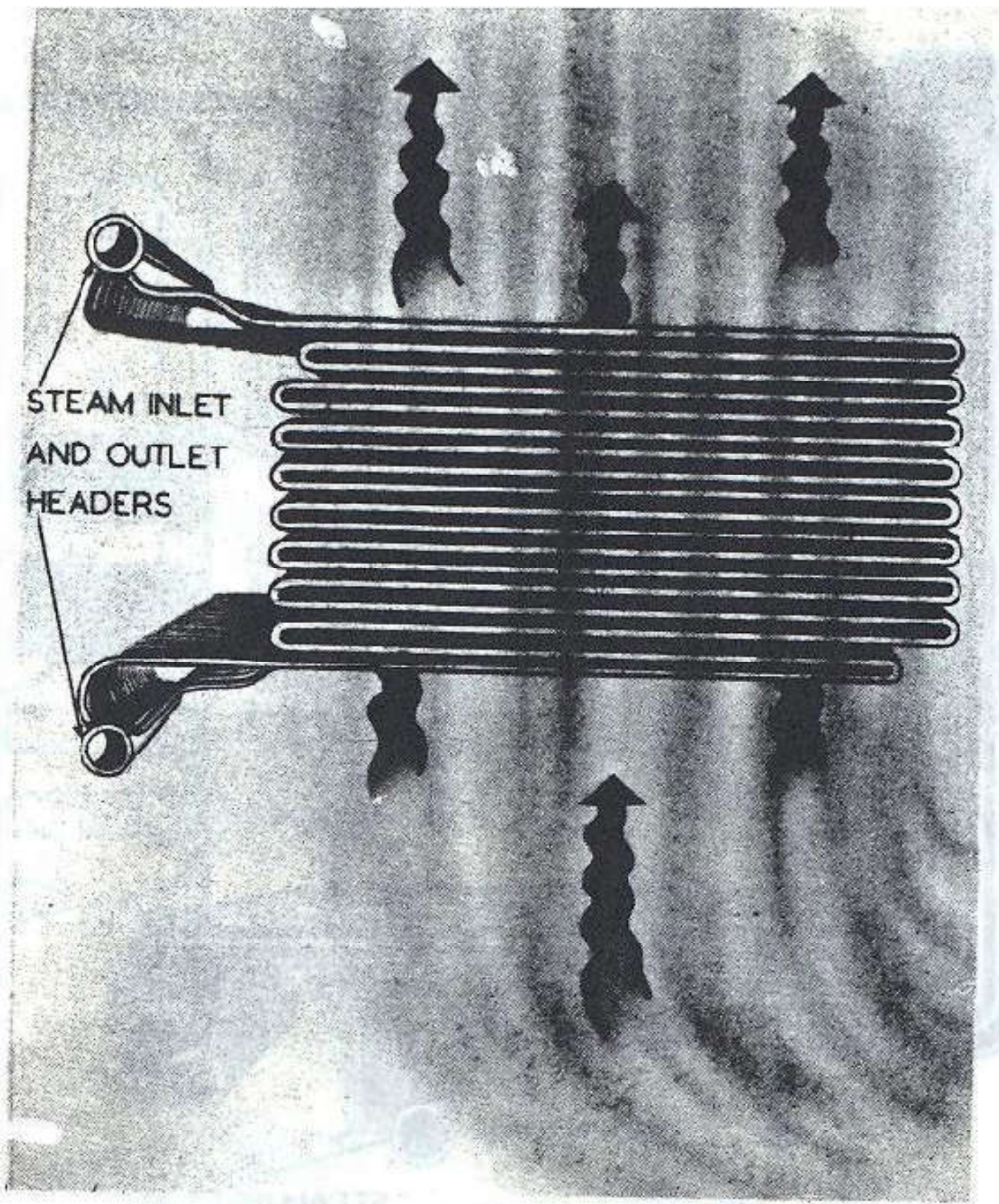
گازهای داغ

MANIFOLDS

HOT

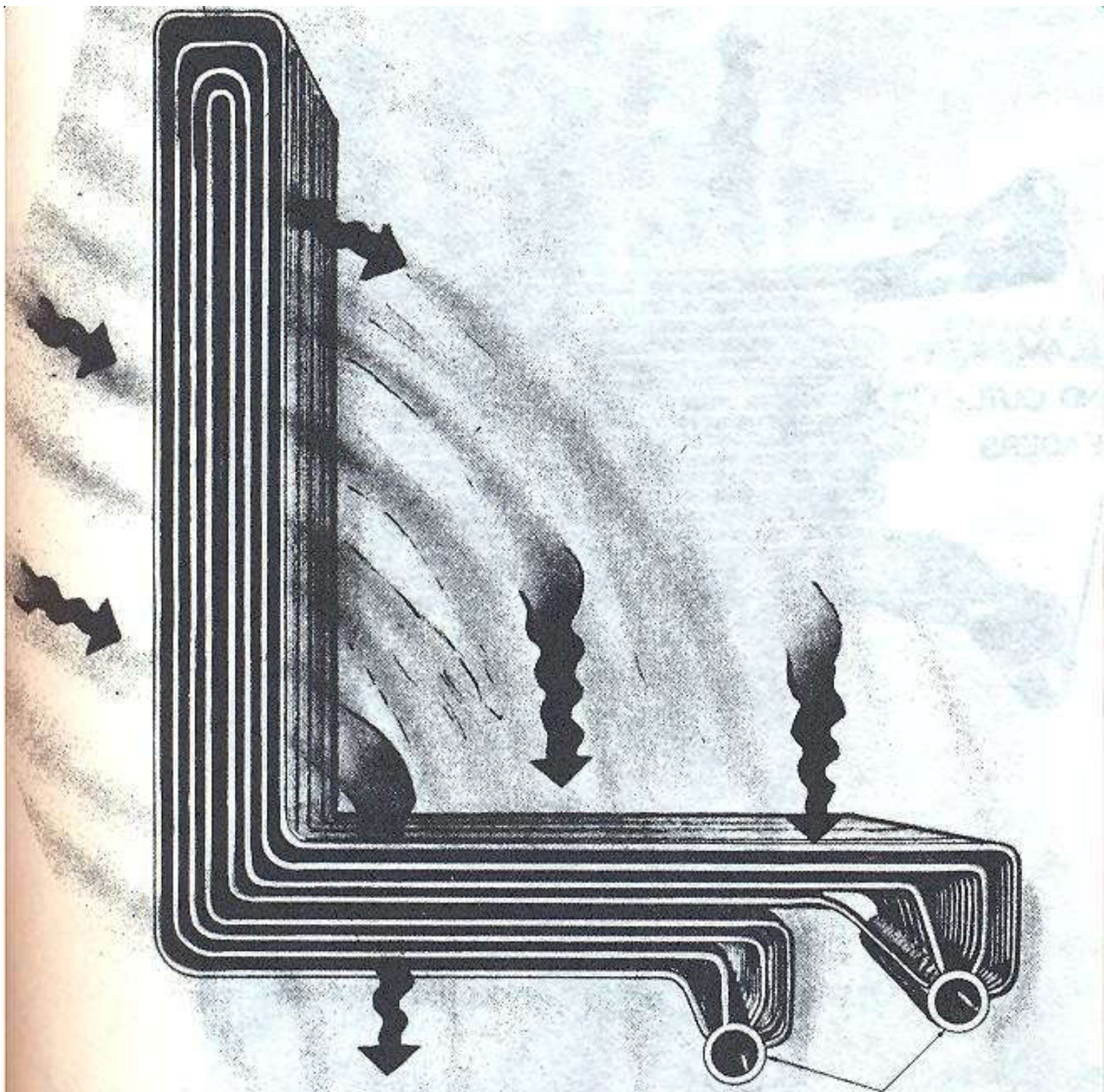
شکل ۳۸-۲ . سوپرهیتراویزان





STEAM INLET
AND OUTLET
HEADERS

شکل ۳-۳ ، سوپر هیترو افقی

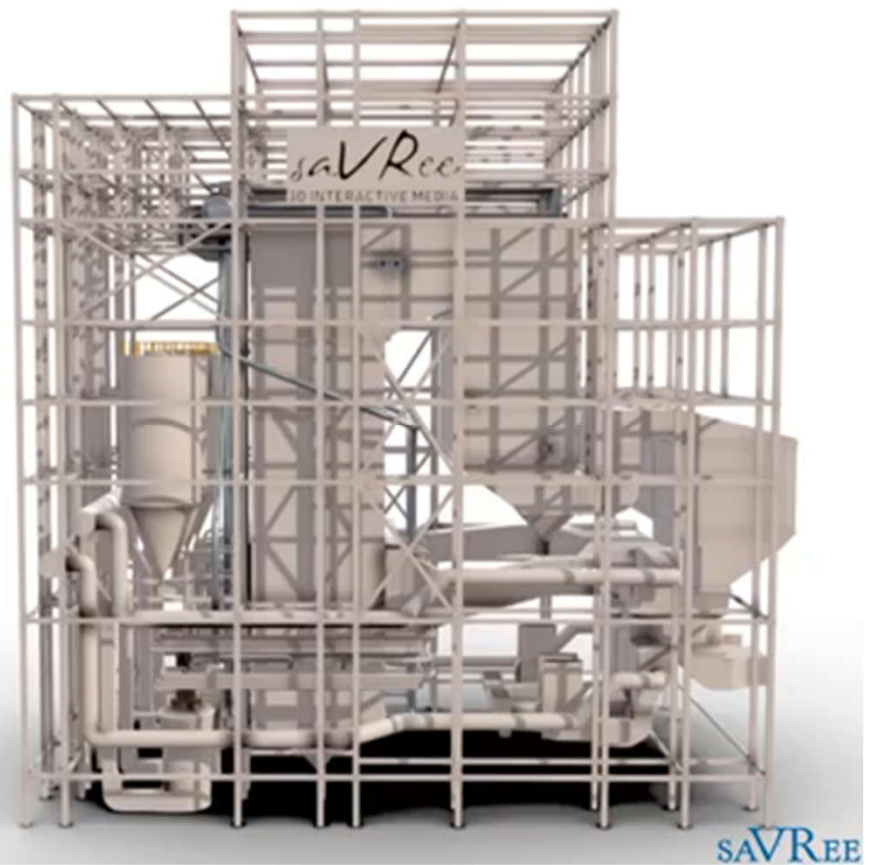


هدرهای ورودی و خروجی بخار

STEAM INLET AND
OUTLET HEADERS.

شکل C-۳ ، سوپرهیتر L شکل

How
Watertube
Boilers
Work!

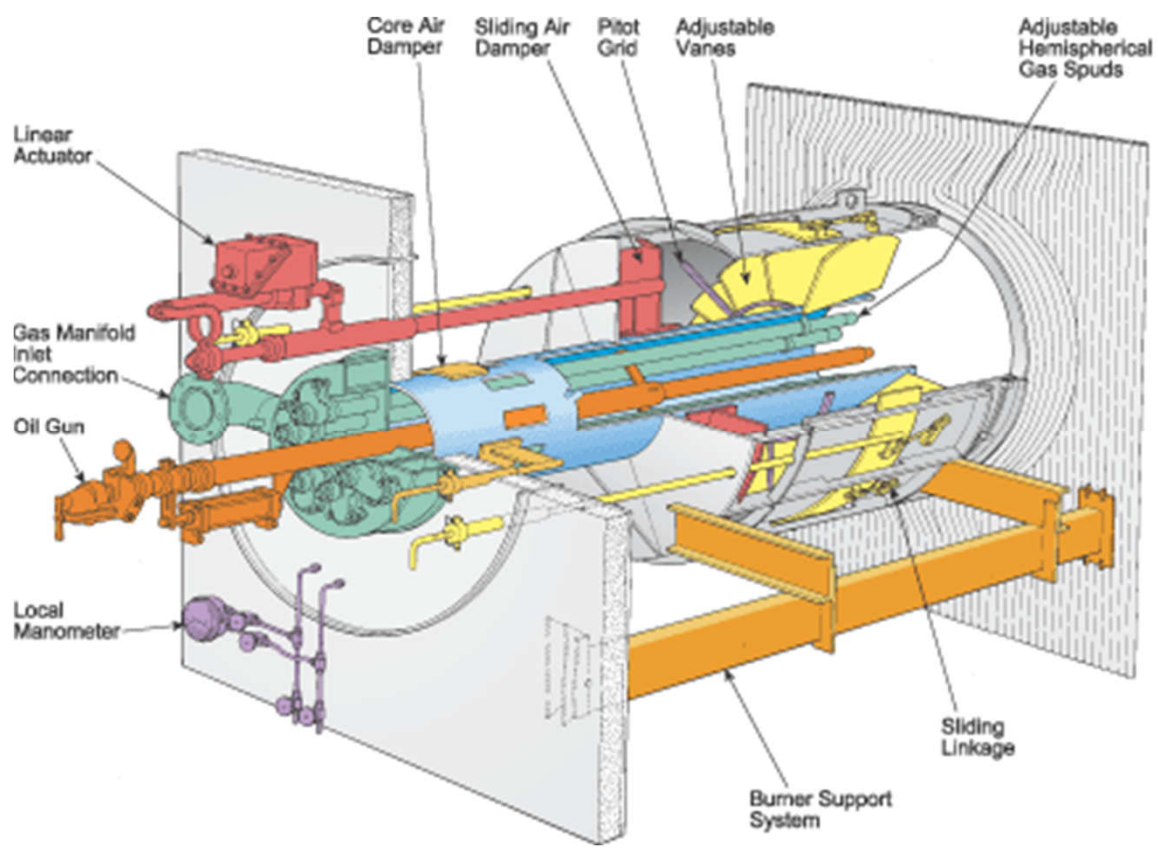


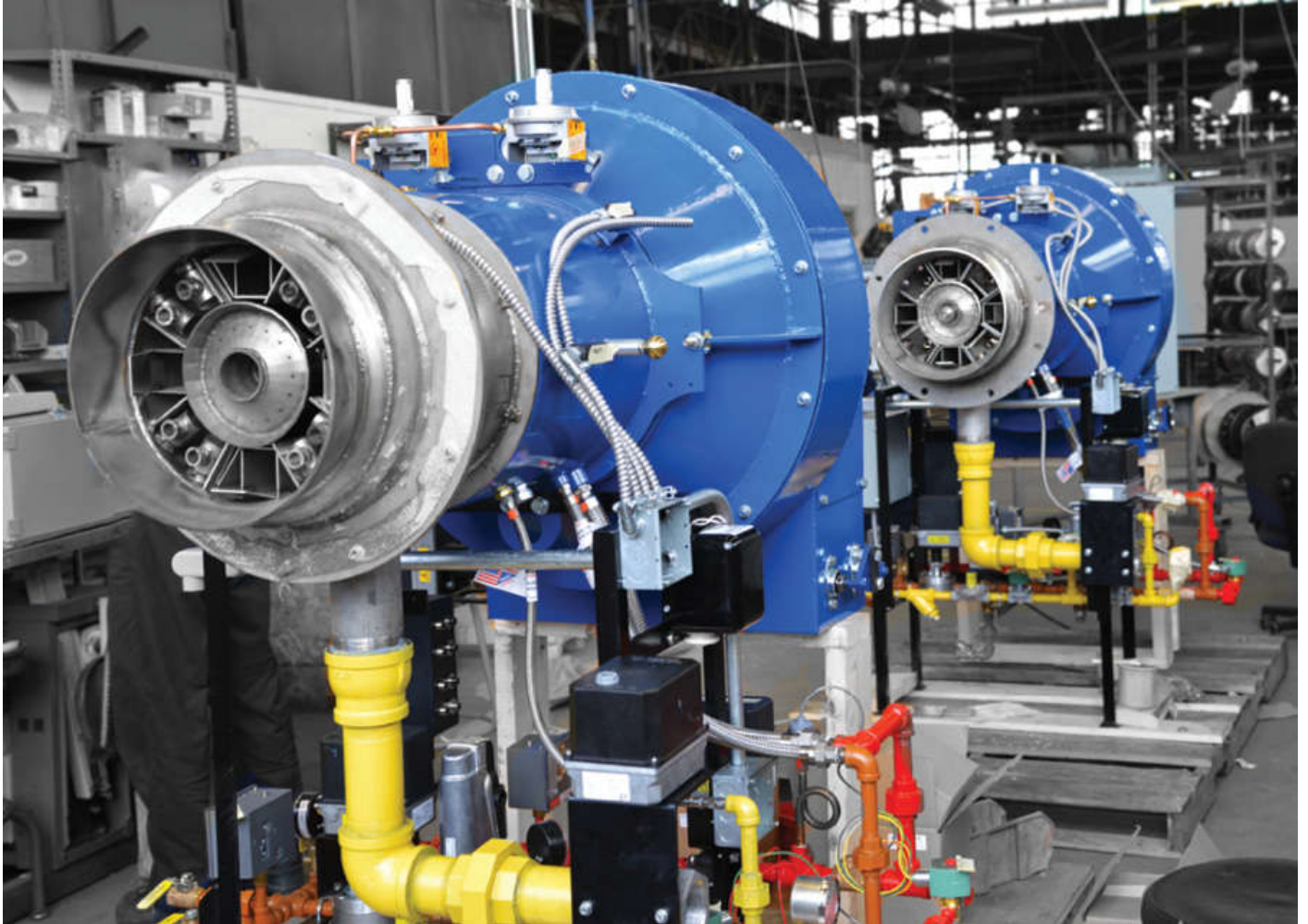
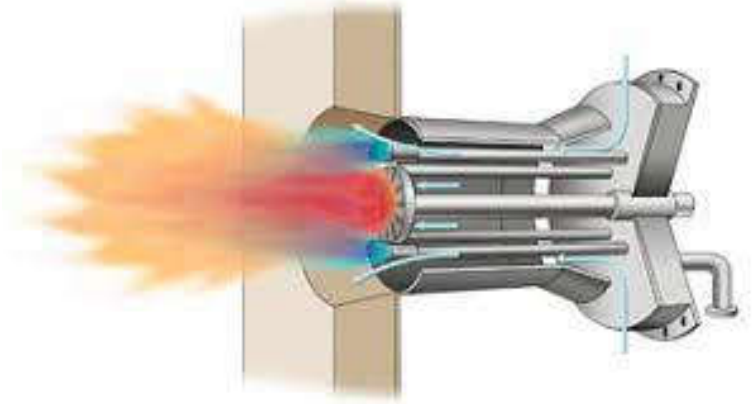
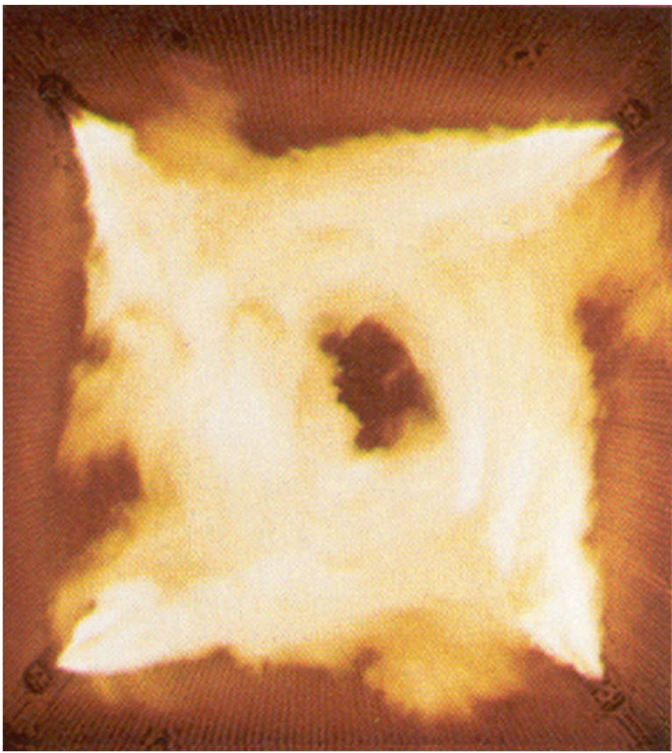
Sponsored by

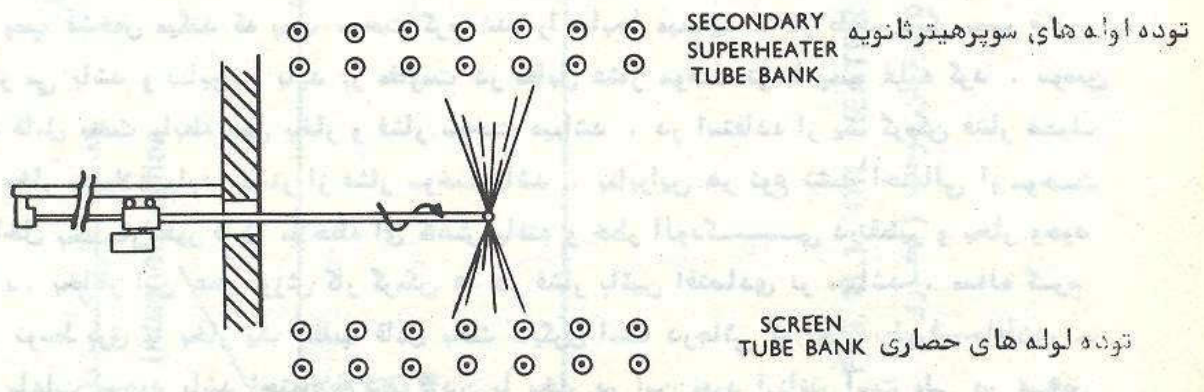
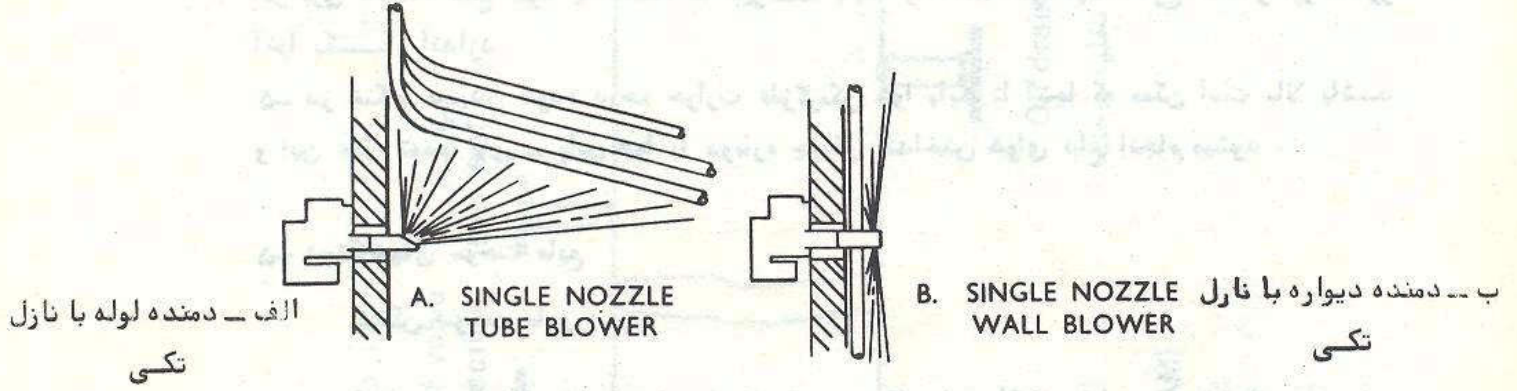


Designed for non-commercial use

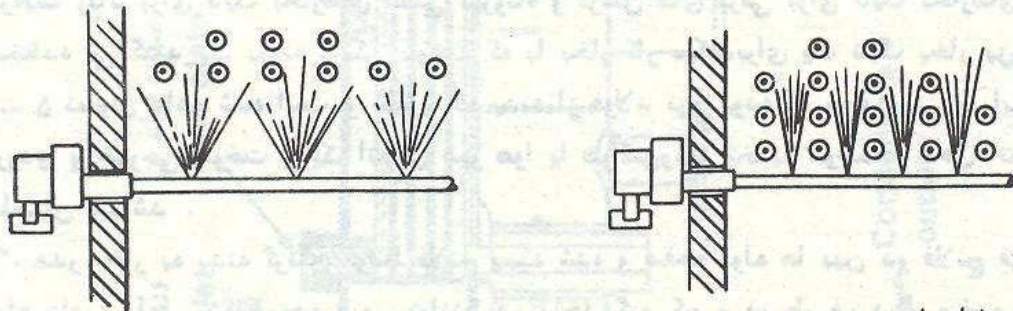
To remove branding, please use Freemake Gold Pack







ج - دمنده لوله ای نوع فشاری

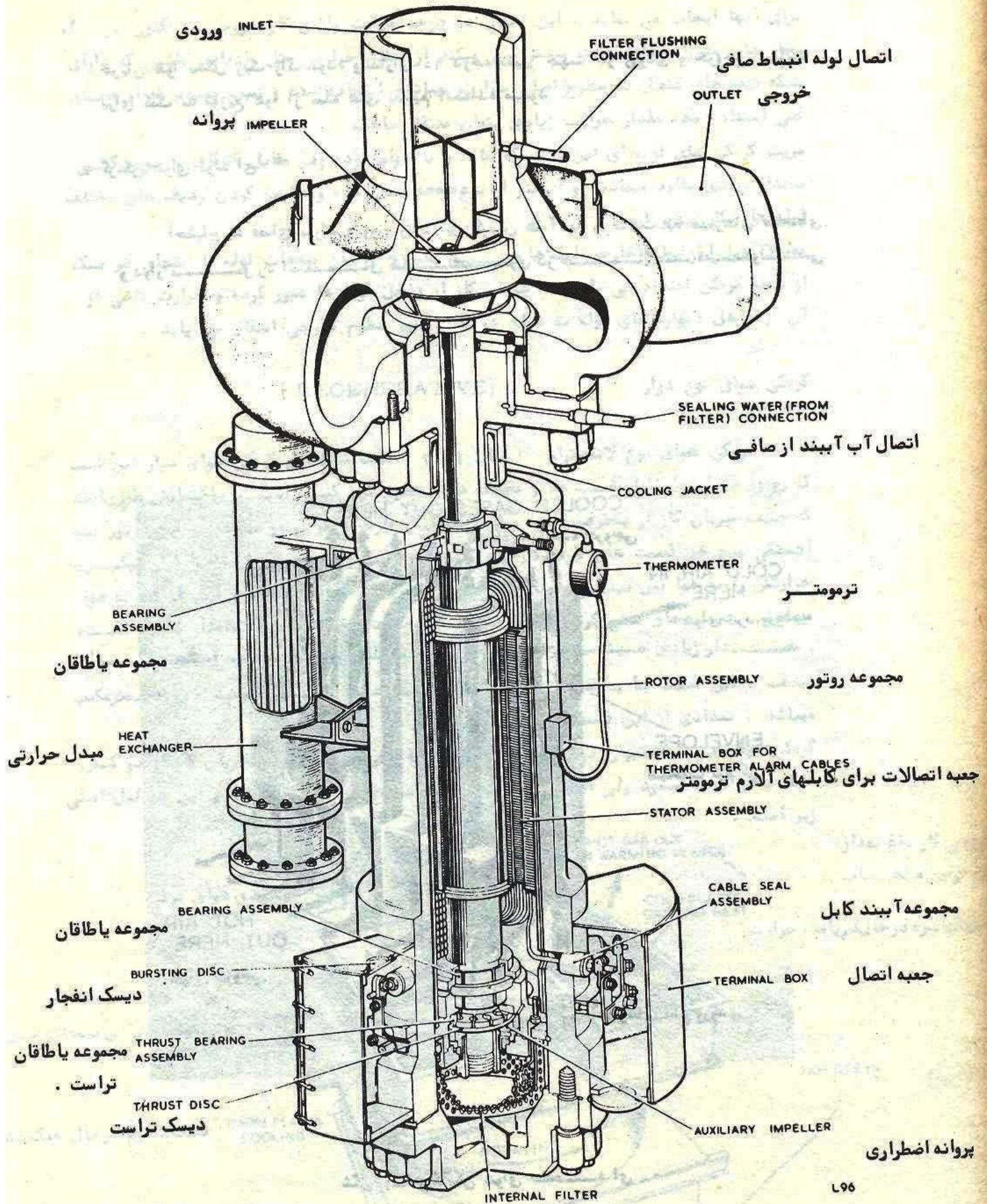


د - دمنده لوله ای چند فواره ای

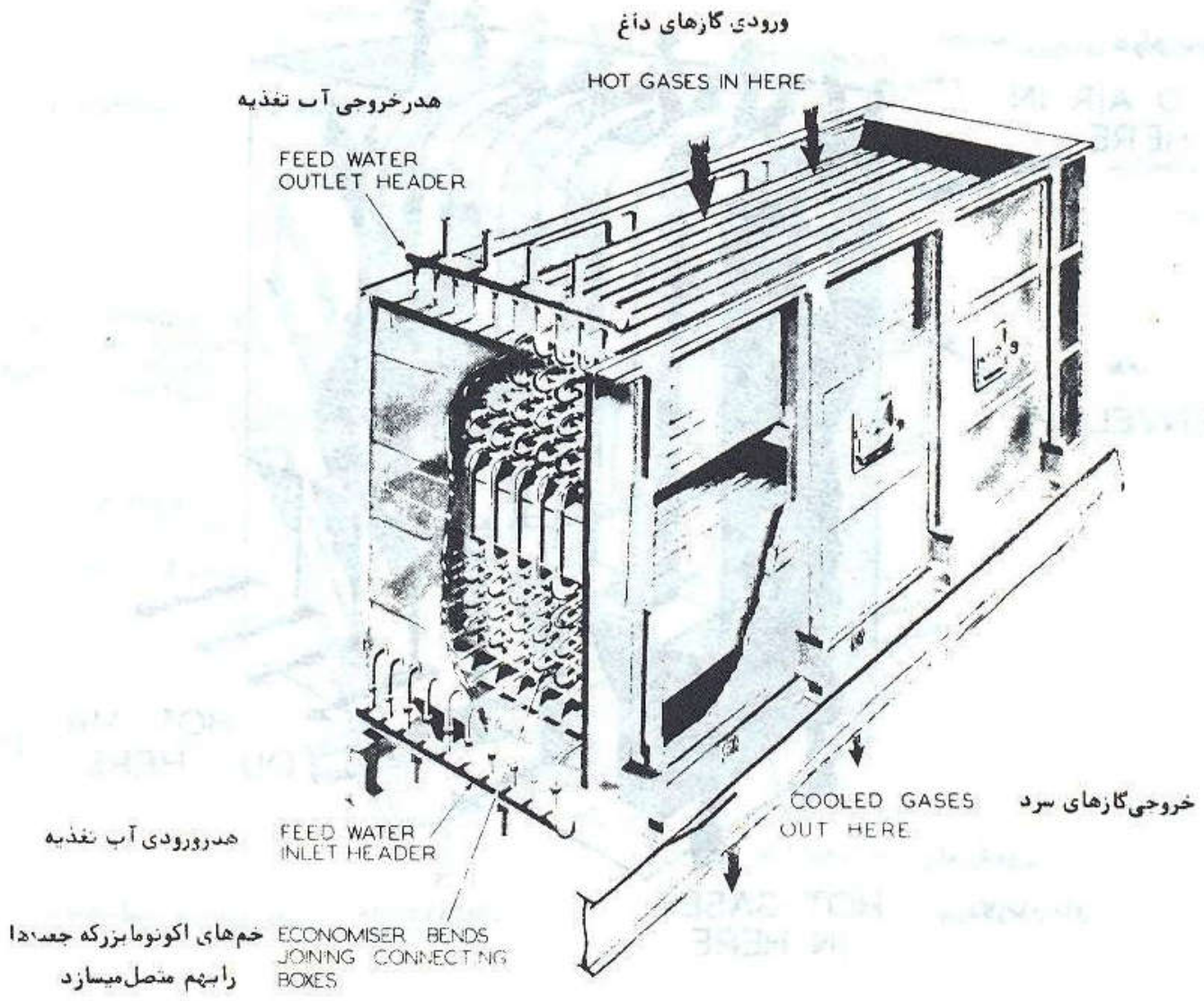
ه - دمنده ناودانی چند فواره ای

FIG. 8.1 TYPES OF SOOTBLOWER





شکل ۱-۲ پمپ گردش آب دیگ بخار



شکل ۳-۱ ، اکونومایزر با لوله‌های شبکه‌ای Gilled Tube



موتورگرداننده درام

خروج گاز داغ پس از گرم کردن صفحاتها

ورود هوای سرد

COLD AIR IN

MOTOR PRODUCING ROTATION OF DRUM

HOT GAS OUT AFTER WARMING PLATES

COLD PLATES GAINING HEAT

صفحات سرد که حرارت با دست میآورند

صفحات فلزی چین دار که بطور عمودی قرار گرفته اند

CORRUGATED METAL PLATES PACKED VERTICALLY

WARM PLATES COOLING

صفحات گرم در حال سرد شدن

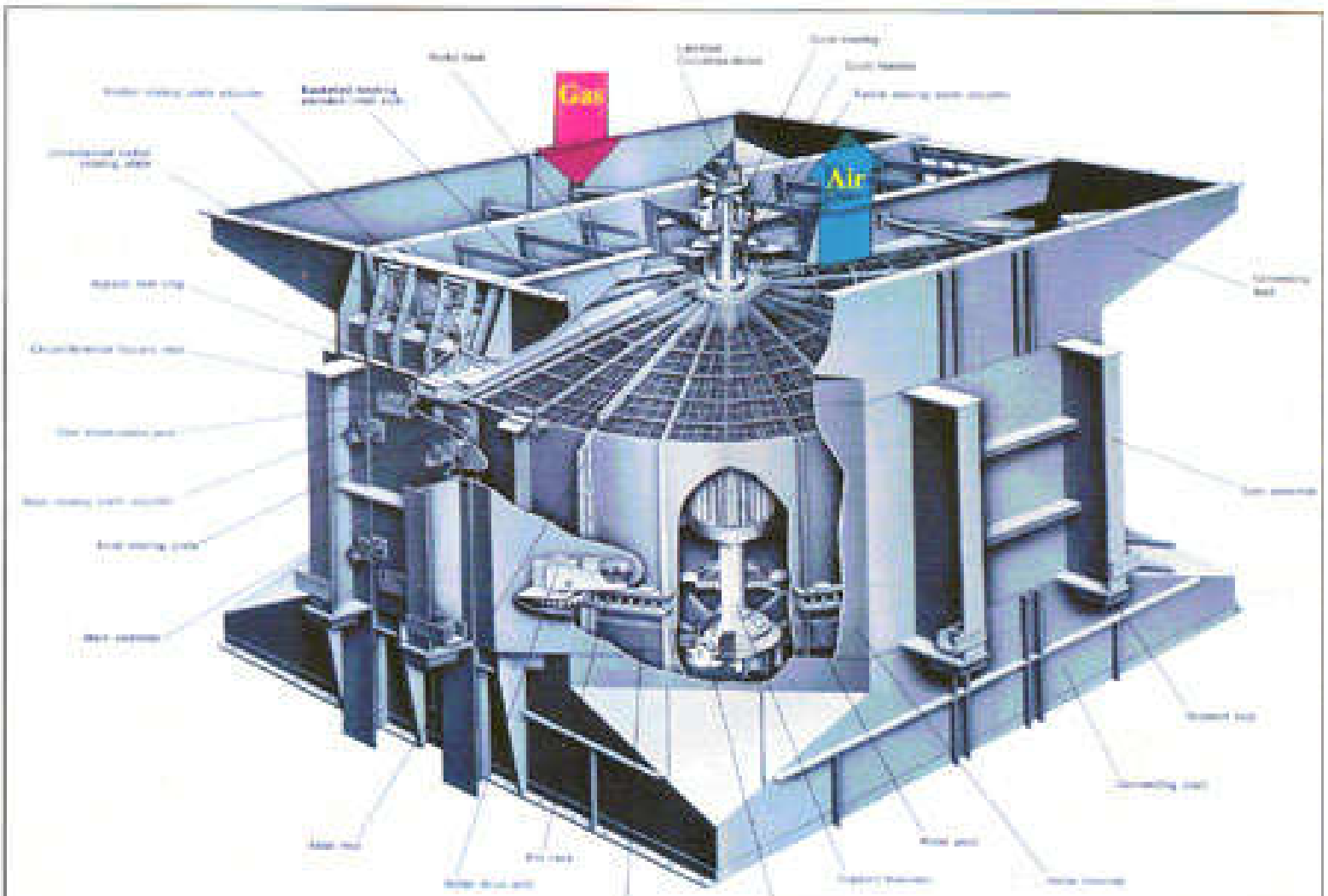
ROTATING DRUM

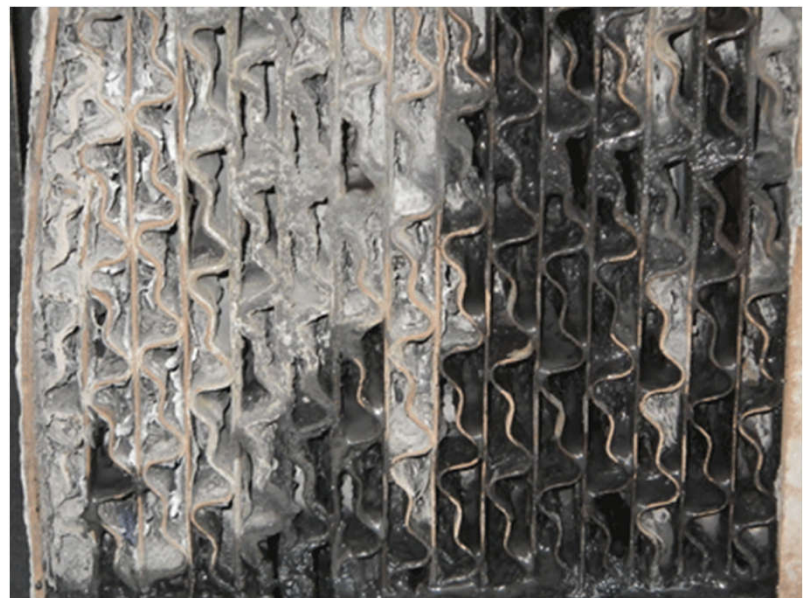
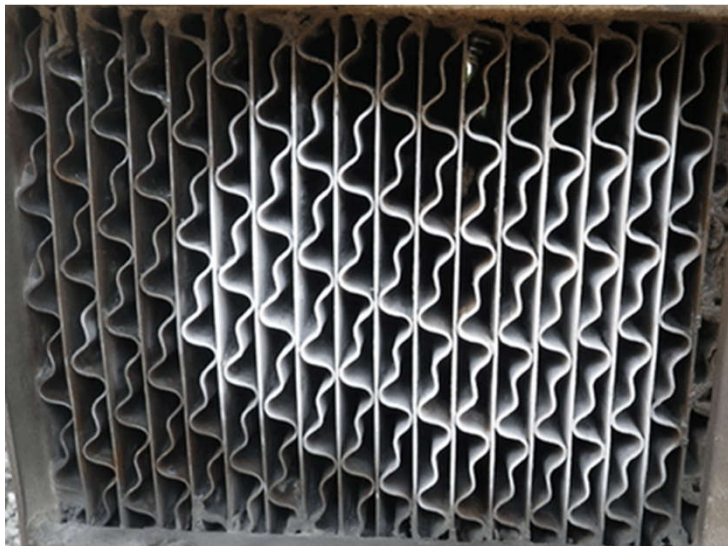
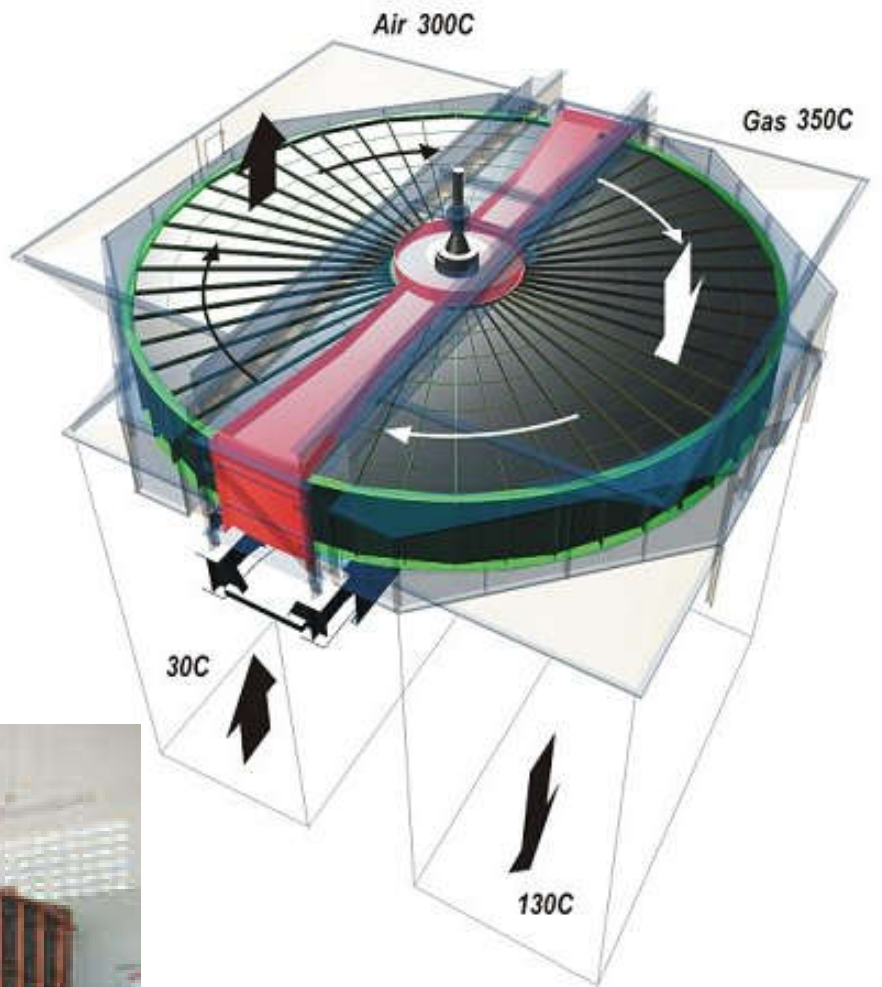
درام دوار

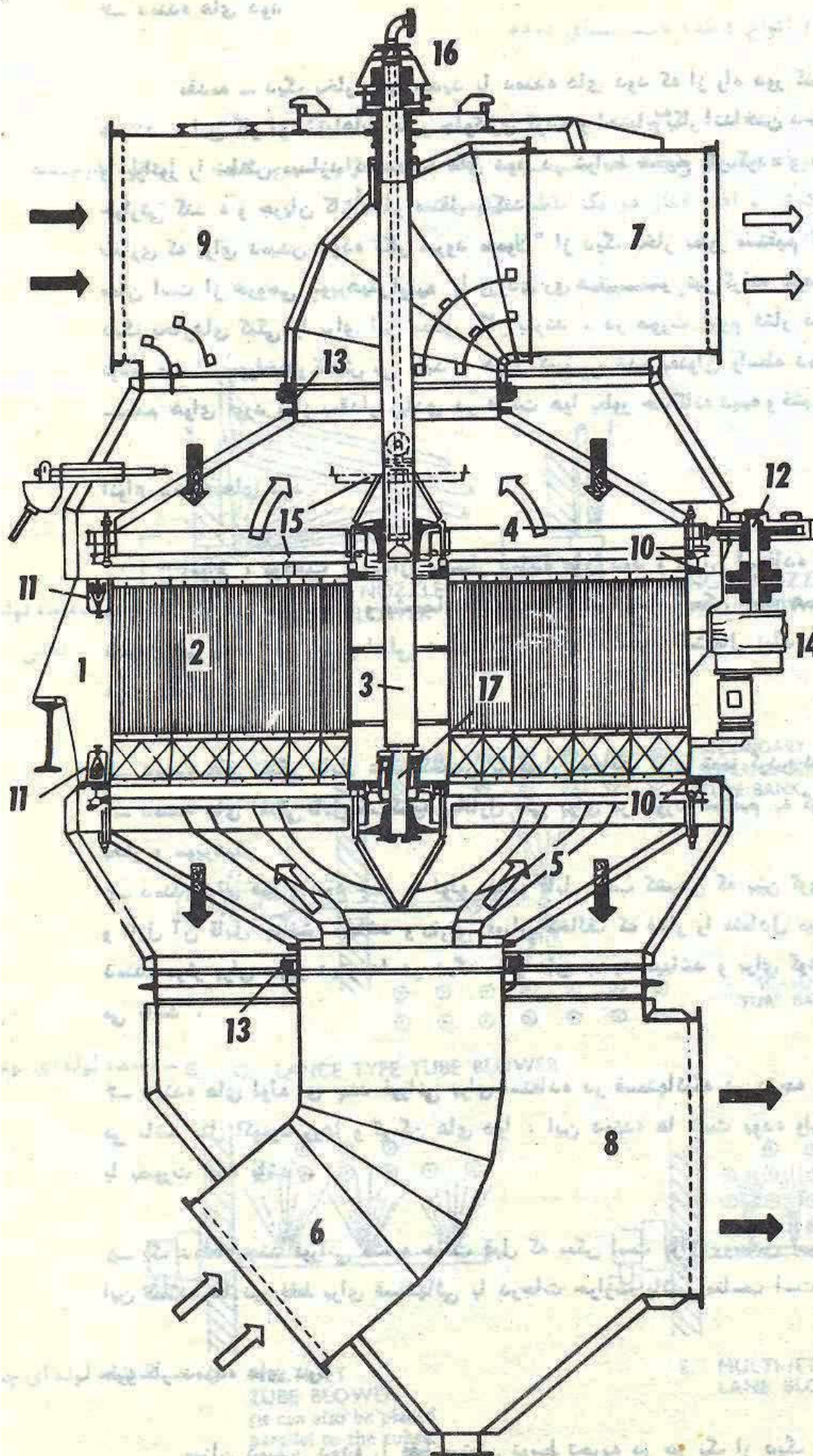
HOT GAS IN ورود گاز داغ

هوای گرم شده توسط صفحات

AIR WARMED BY PLATES



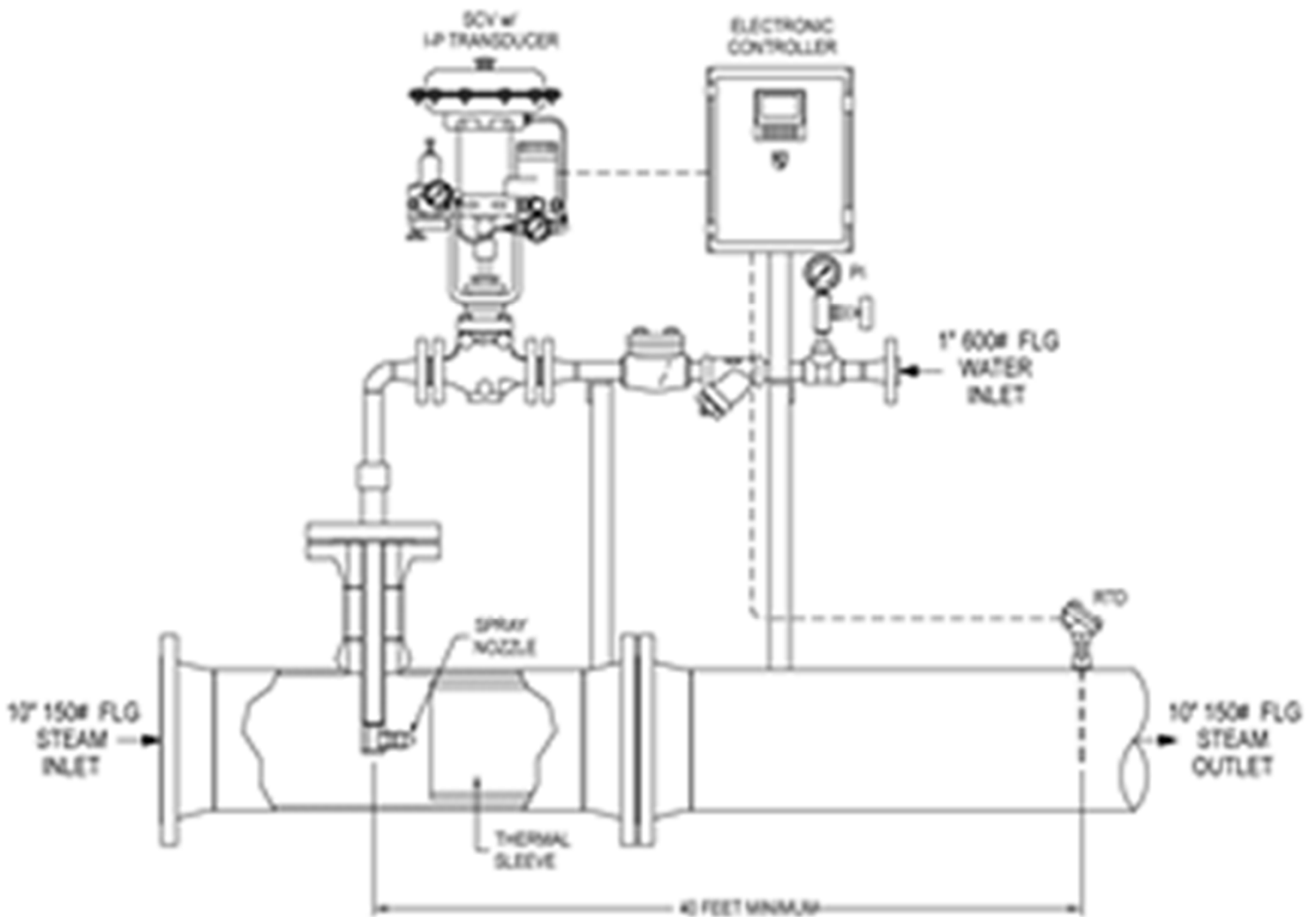
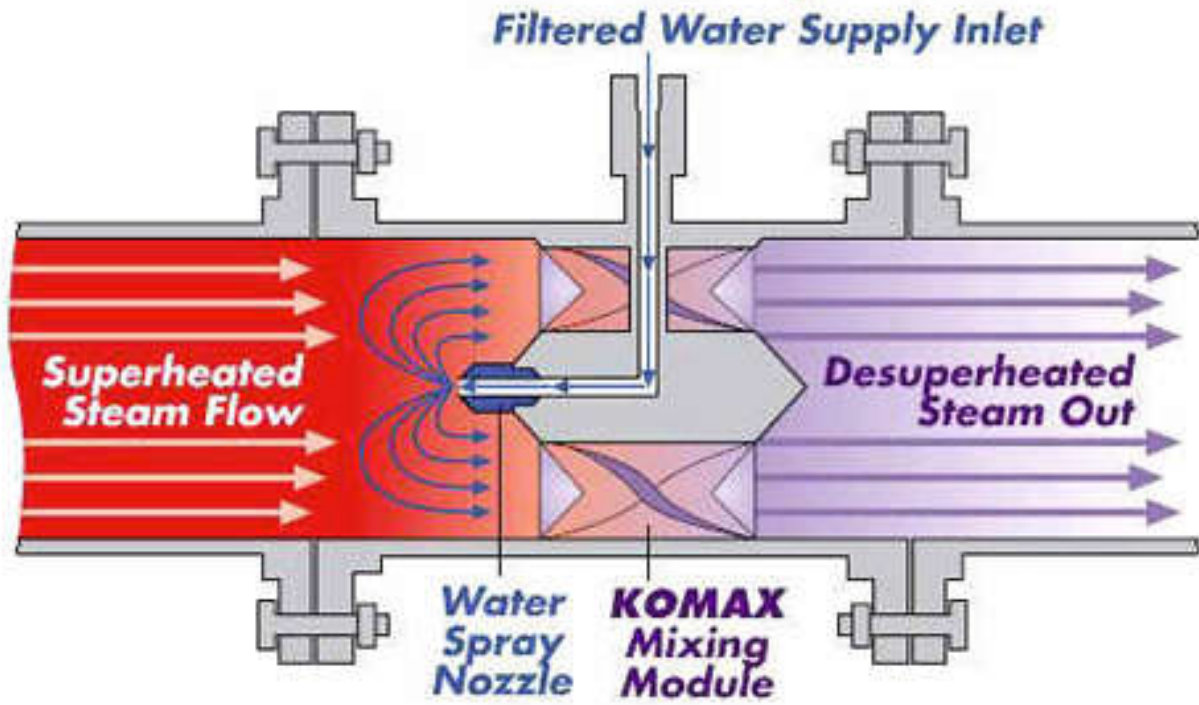


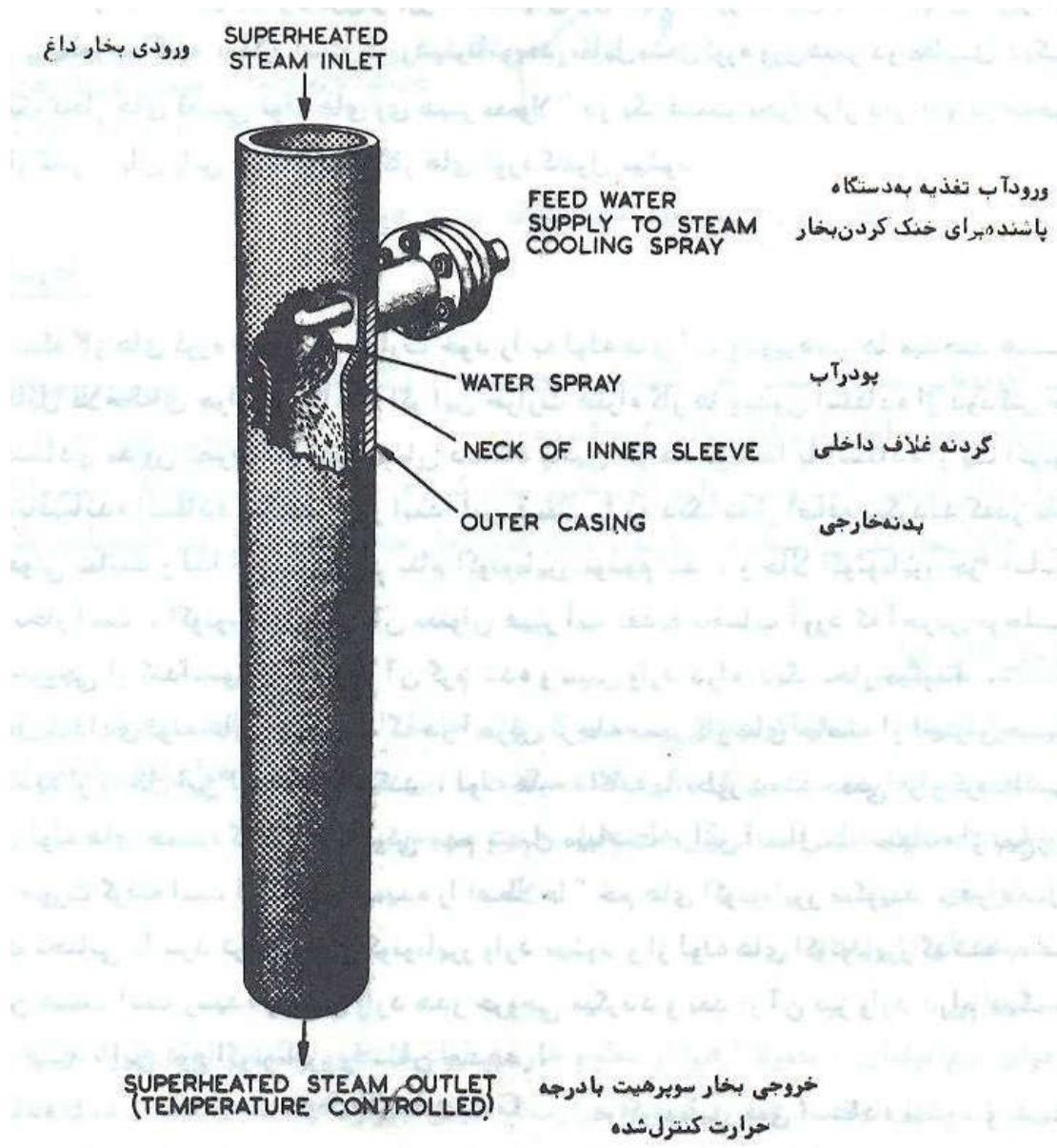


- ۱- استاتور
 - ۲- عناصر گرم کن
 - ۳- محور
 - ۴- کلاهک هوای بالائی
 - ۵- کلاهک هوای پائینی
 - ۶- کانال ورودی هوا
 - ۷- کانال خروجی هوا
 - ۸- کانال خروجی گاز
 - ۹- کانال ورودی گاز
 - ۱۰- محفظه آب بند
 - ۱۱- غلطکهای کلاهک هوا
 - ۱۲- پینیون گرداننده
 - ۱۳- آب بندهای حلقوی
 - ۱۴- واحد گرداننده
 - ۱۵- دمنده دوده
 - ۱۶- یاطاقان تراست
 - ۱۷- یاطاقان راهنما
- نشان دهنده جریان گاز
 نشان دهنده جریان هوا

شکل ۳-۳ گرمکن هوای دوار

KOMAX Desuperheater





Steam drum - water separation

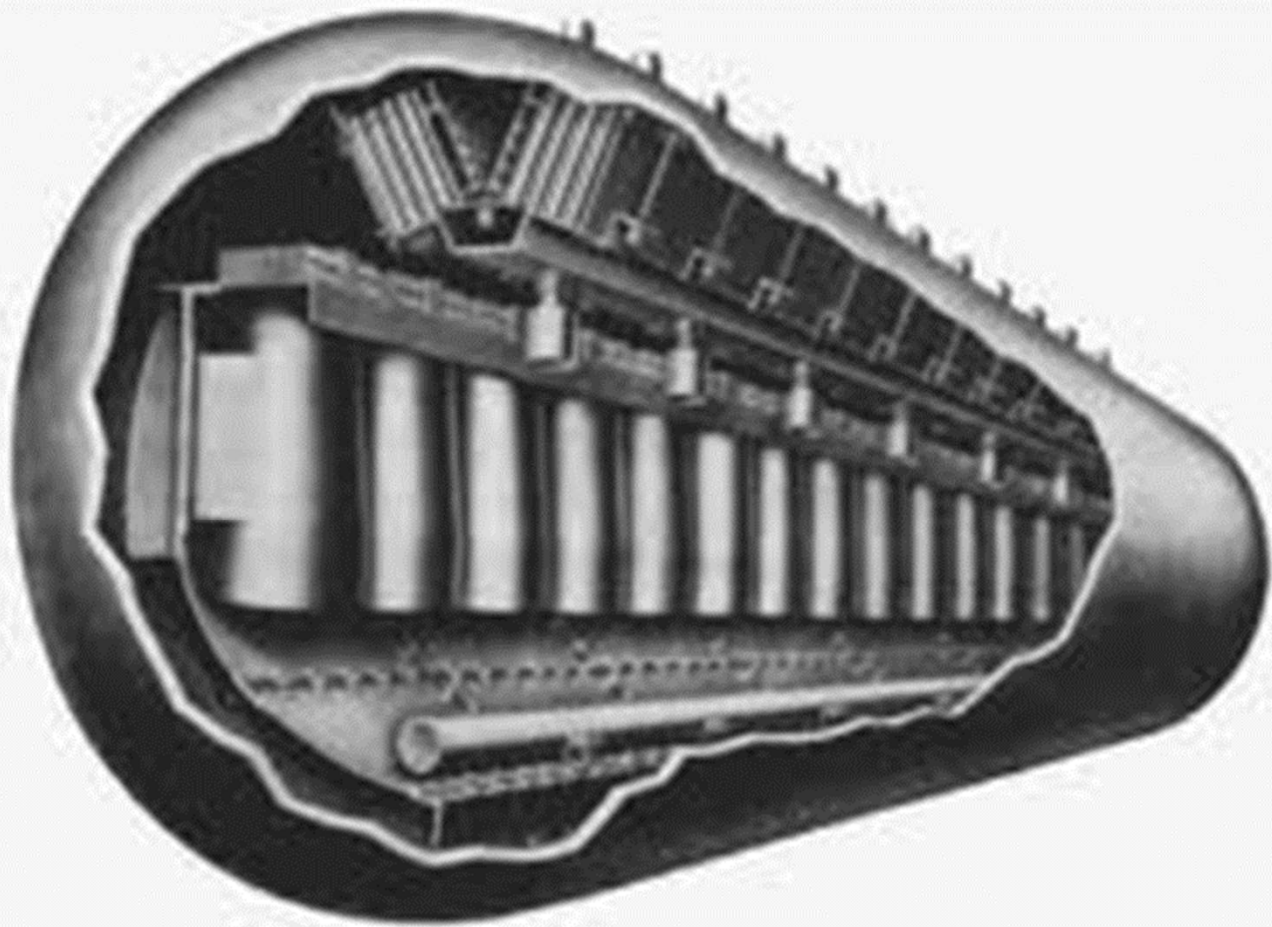
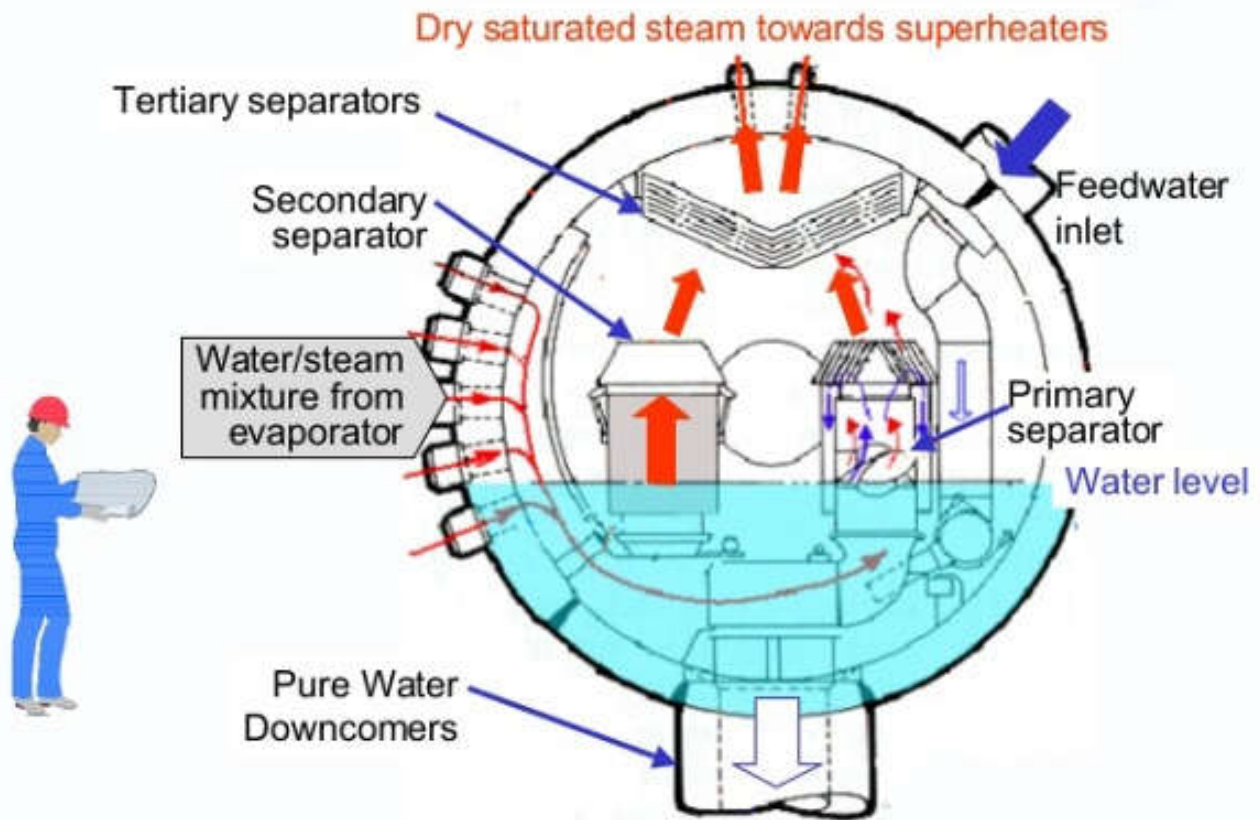
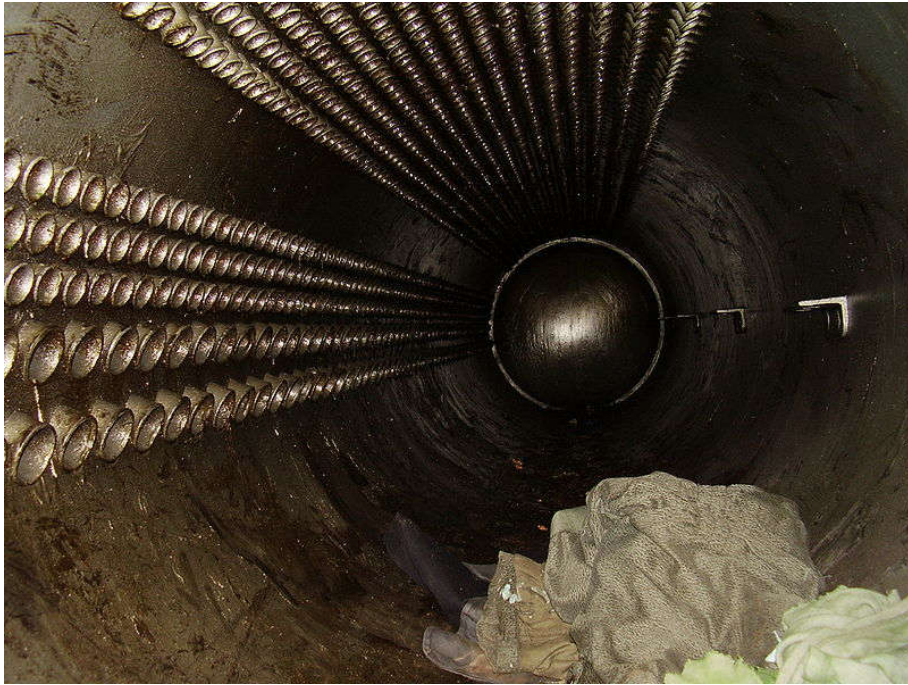
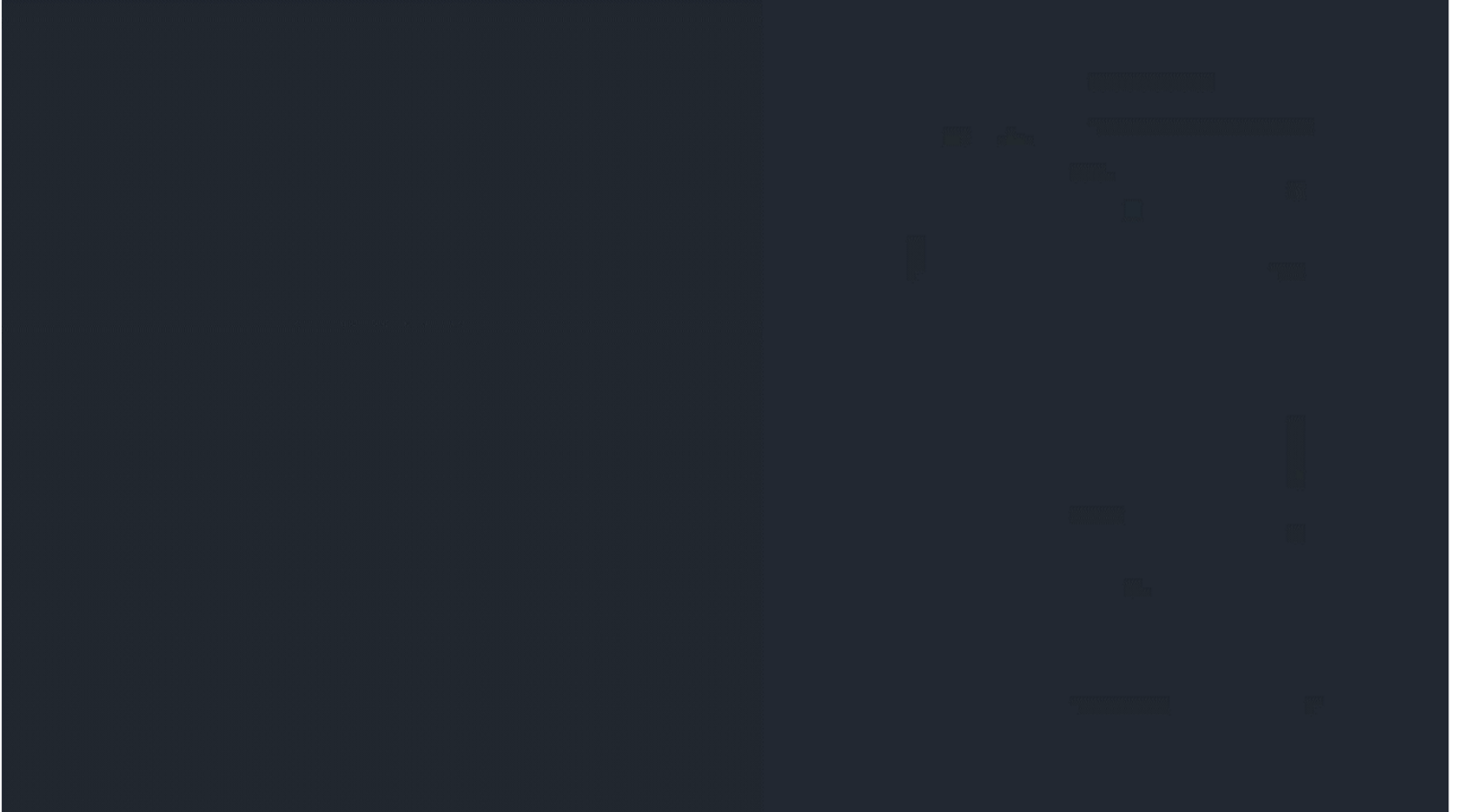
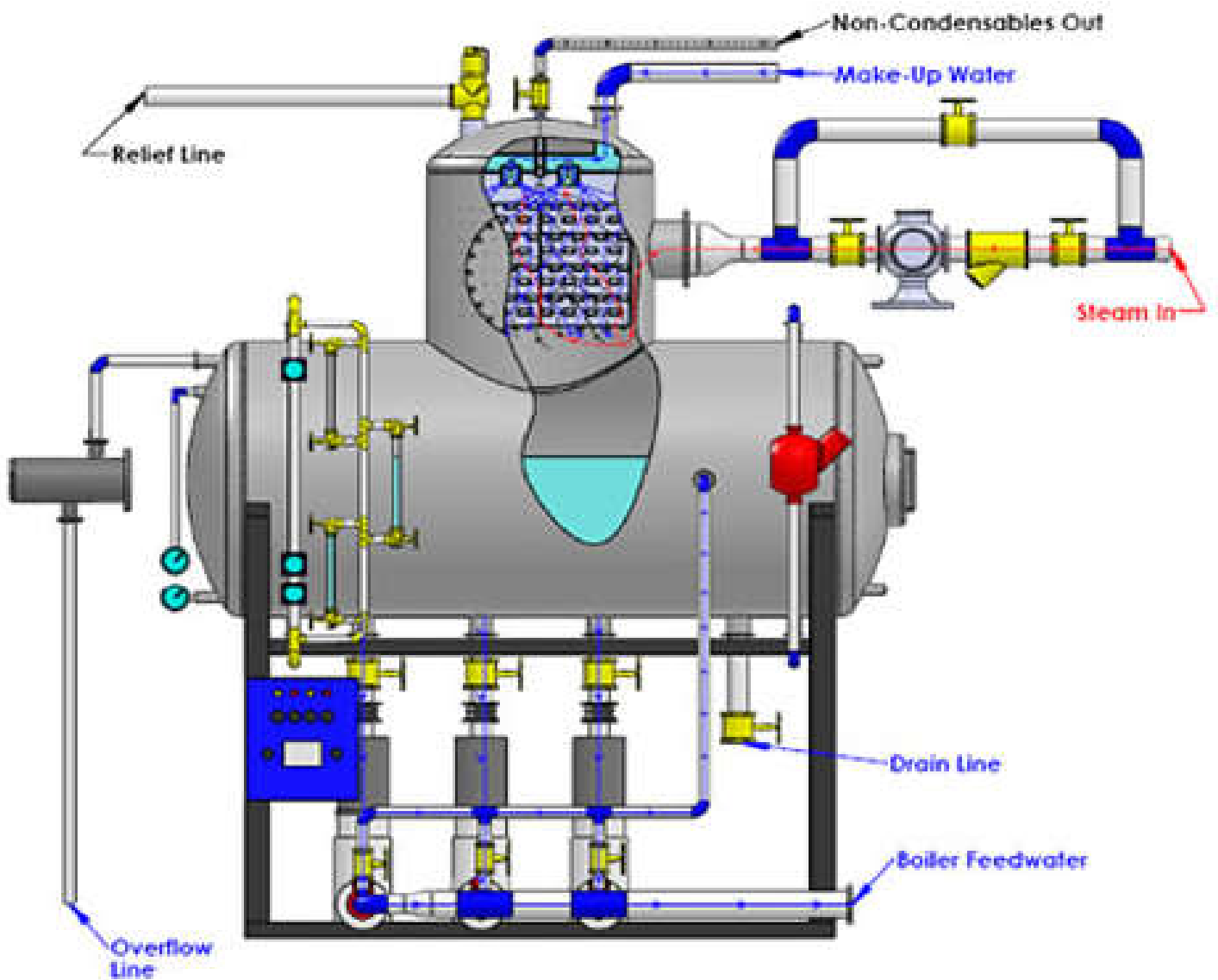
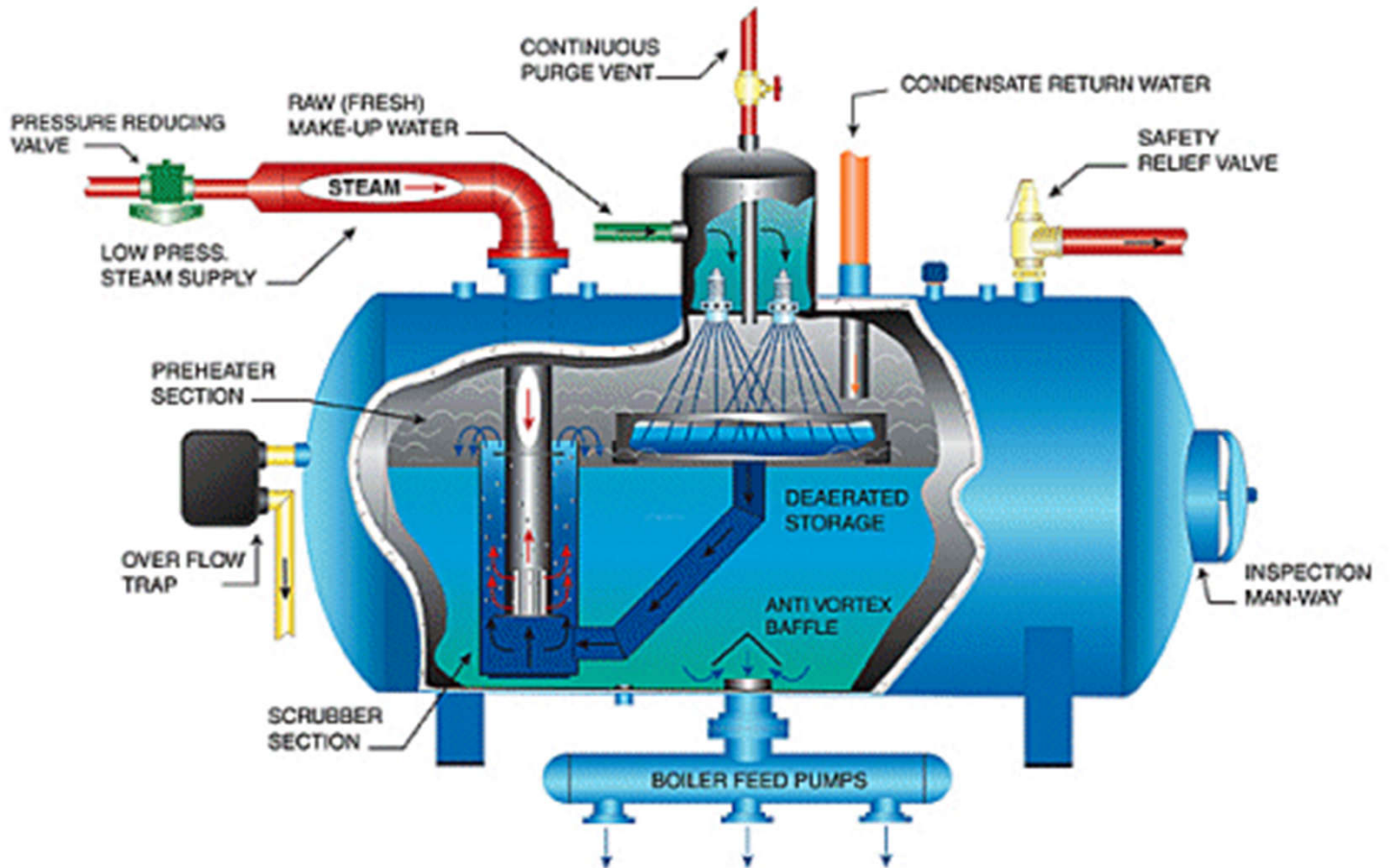


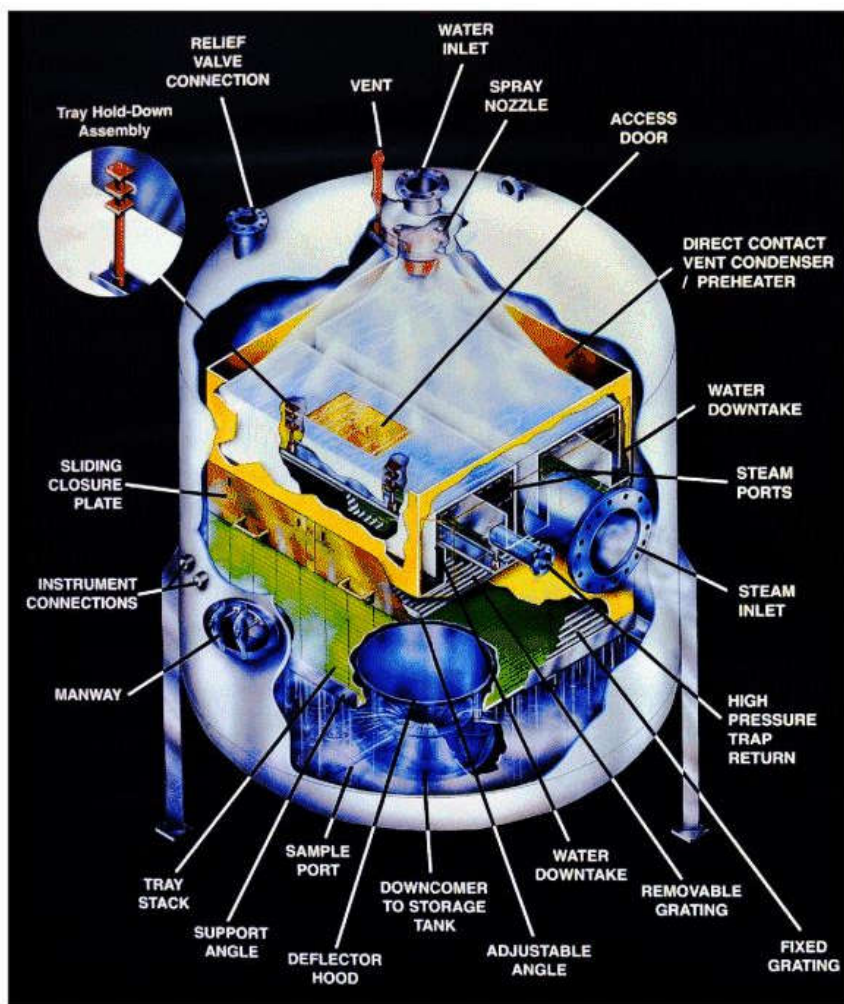
Figure 2.15 Single-row arrangement of cyclone steam separators with secondary scrubbers. (Babcock & Wilcox, a McDermott company.)



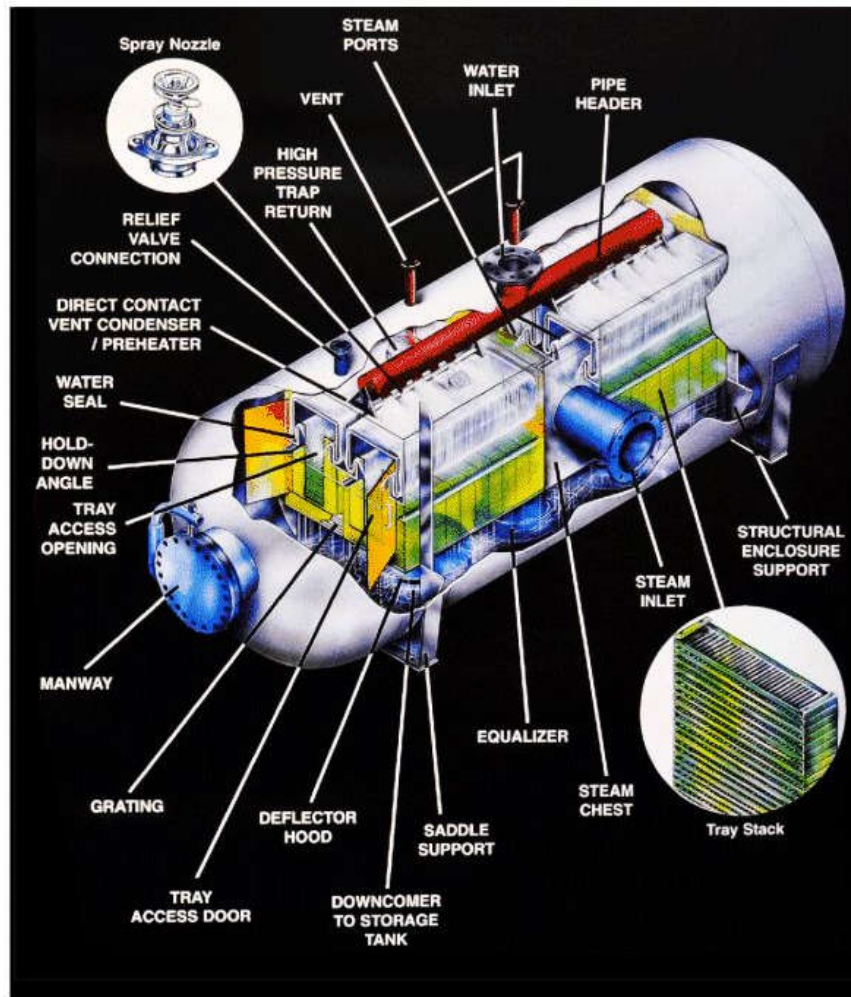








Vertical Configuration



Horizontal Configuration

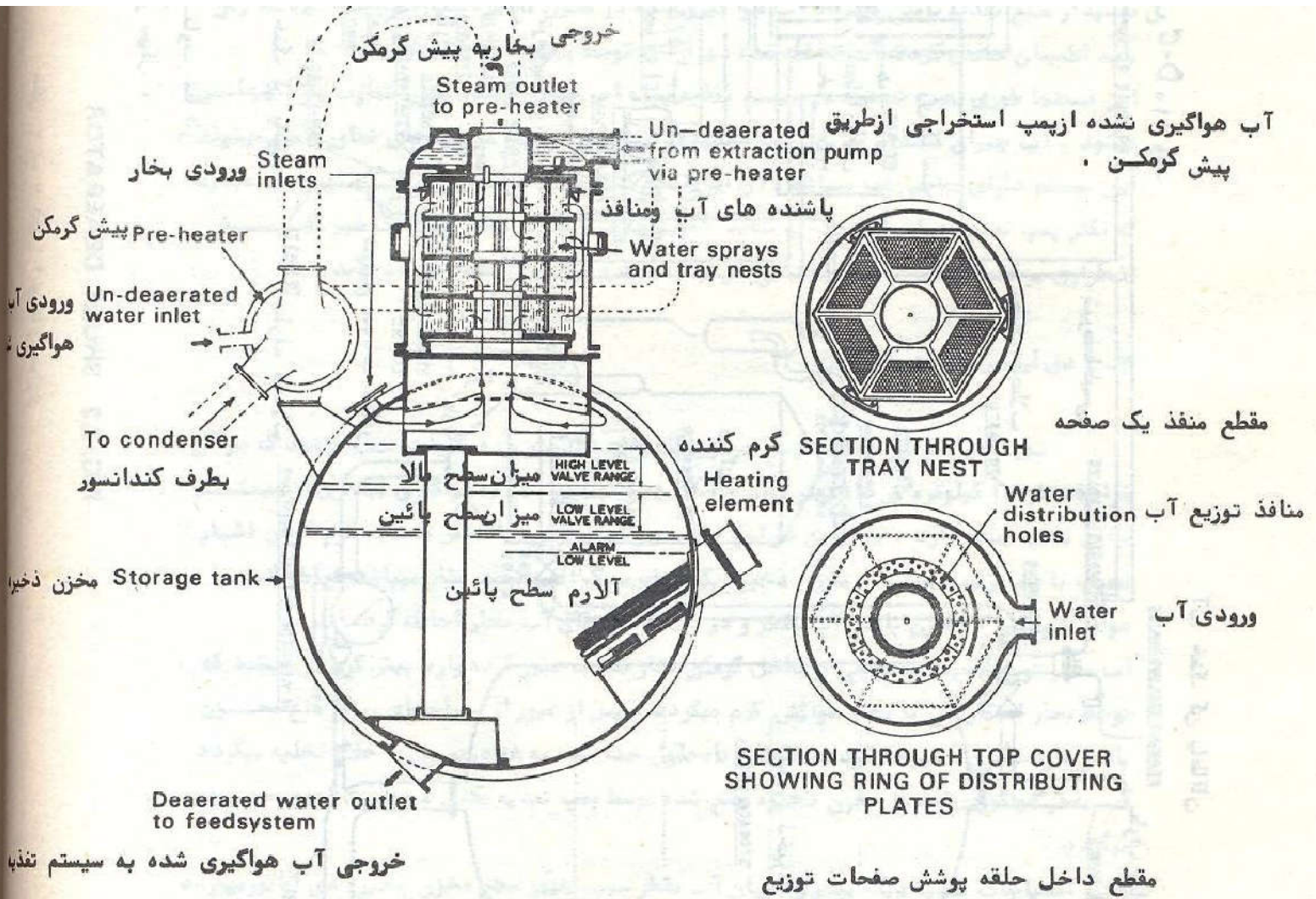
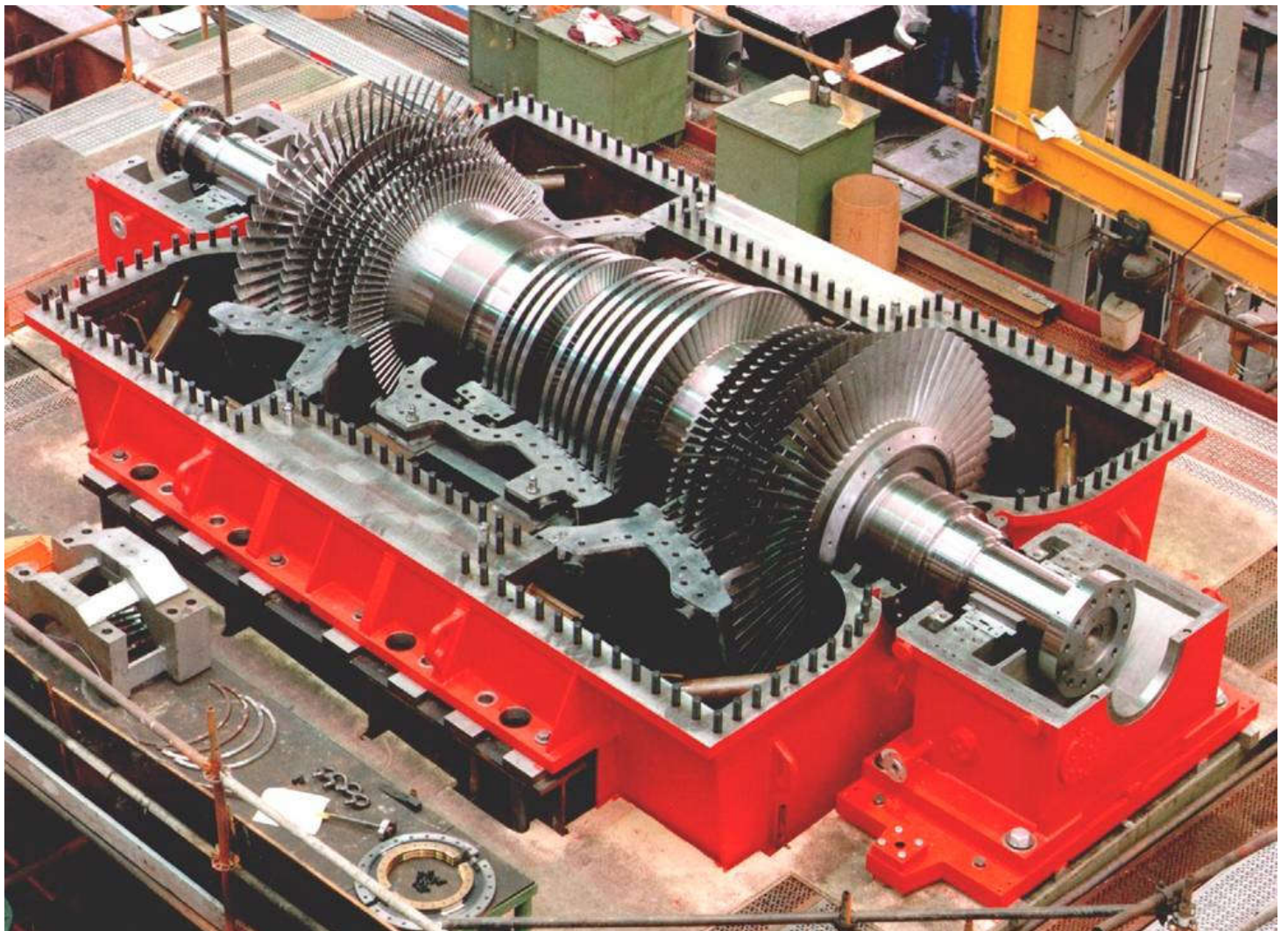
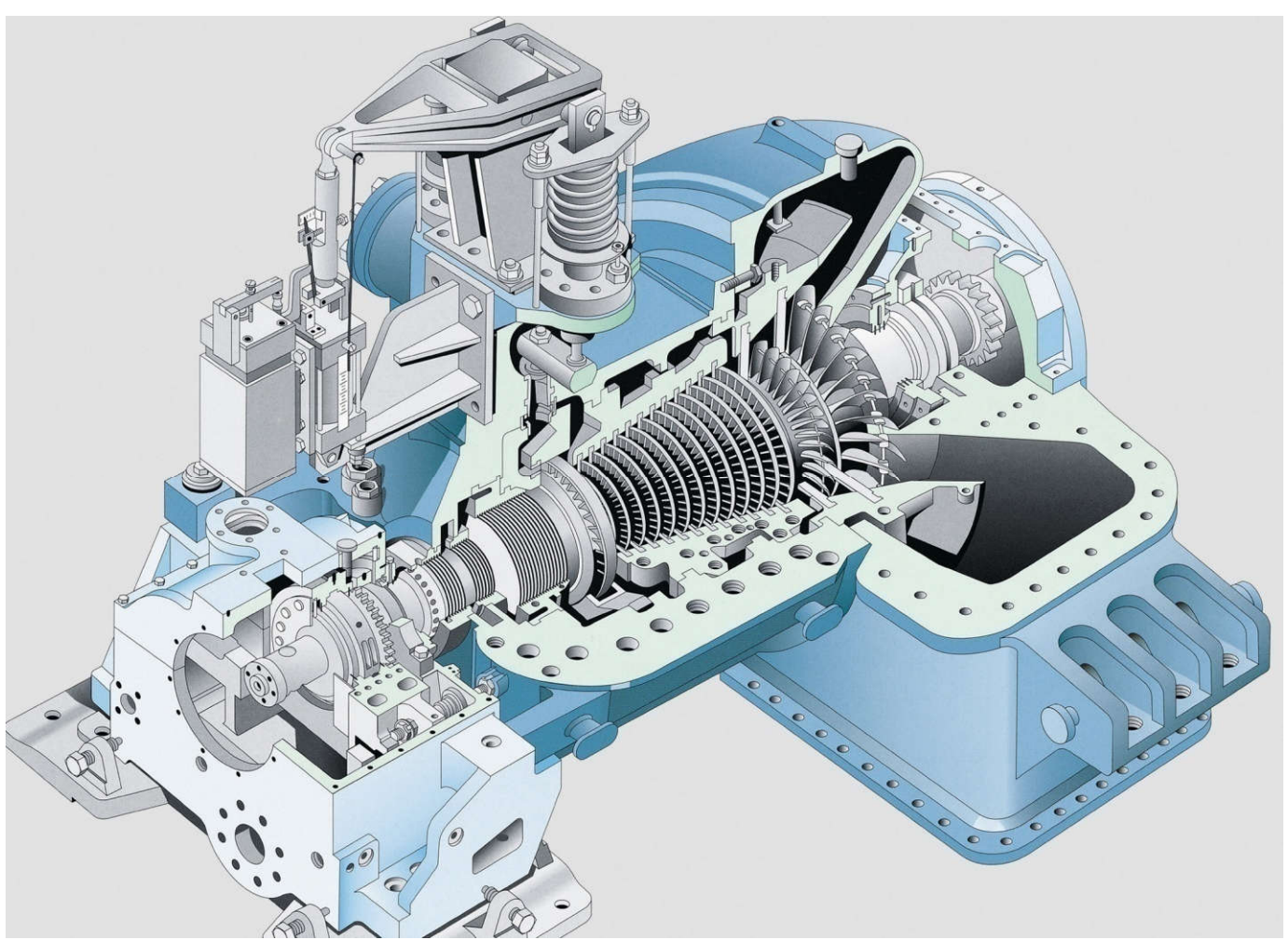


FIG. 7.3 FULL FLOW DEAERATOR



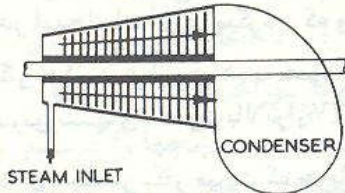


FIG 4.2A. SINGLE CYLINDER

شکل ۴-۲ A ، پوسته یک سیلندری

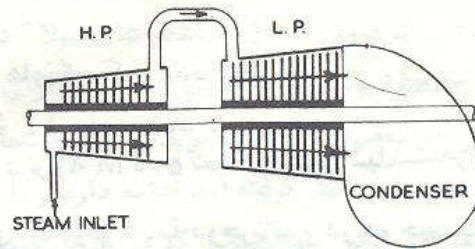
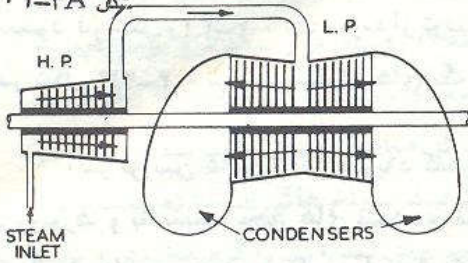


FIG 4.2B. TWO CYLINDER

شکل ۴-۲ B ، پوسته دو سیلندری



شکل ۴-۲ C ، پوسته دو سیلندری با L.P. دو جریان

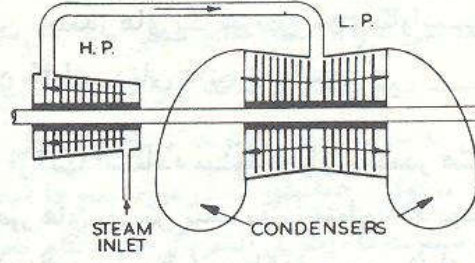
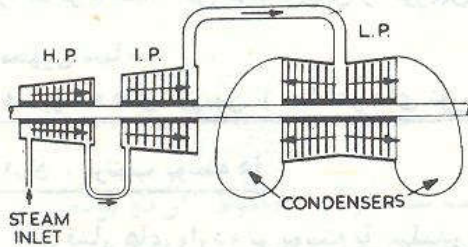


FIG 4.2D. TWO CYLINDER - DOUBLE FLOW L.P. AND REVERSE FLOW H.P.



شکل ۴-۲ E ، پوسته سه سیلندری با L.P. دو جریان

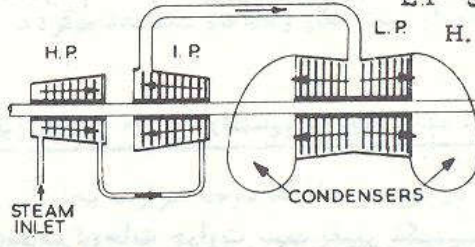
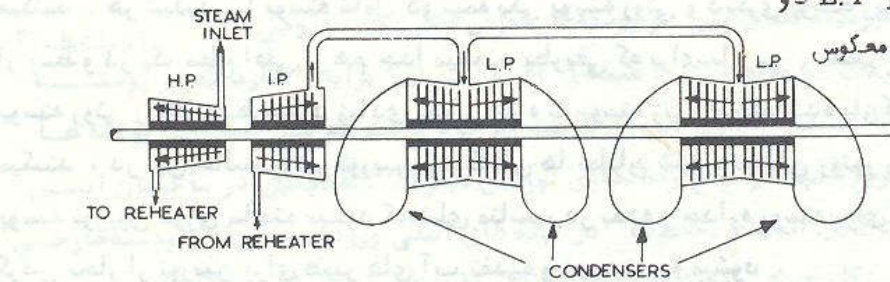


FIG. 4.2F. THREE CYLINDER - DOUBLE FLOW L.P. AND REVERSE FLOW I.P.

شکل ۴-۲ D ، پوسته دو سیلندری L.P. دو جریان و جریان عکس در H.P.

شکل ۴-۲ F ، پوسته سه سیلندری با سیلندر L.P. دو

جریان و I.P. با جریان معکوس



شکل ۴-۲ G ، پوسته چهار سیلندری با دو سیلندر L.P. دو جریان

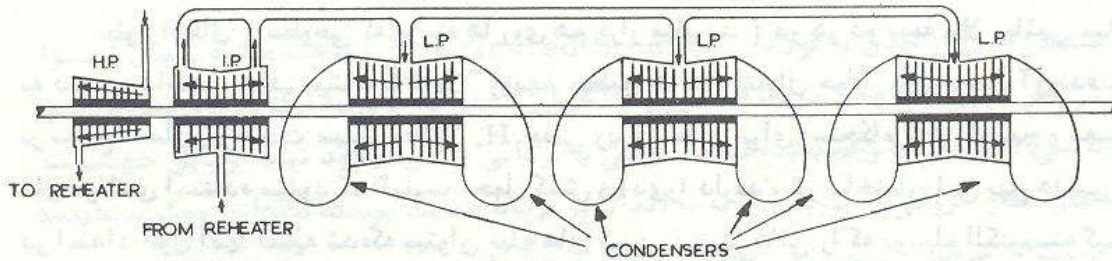
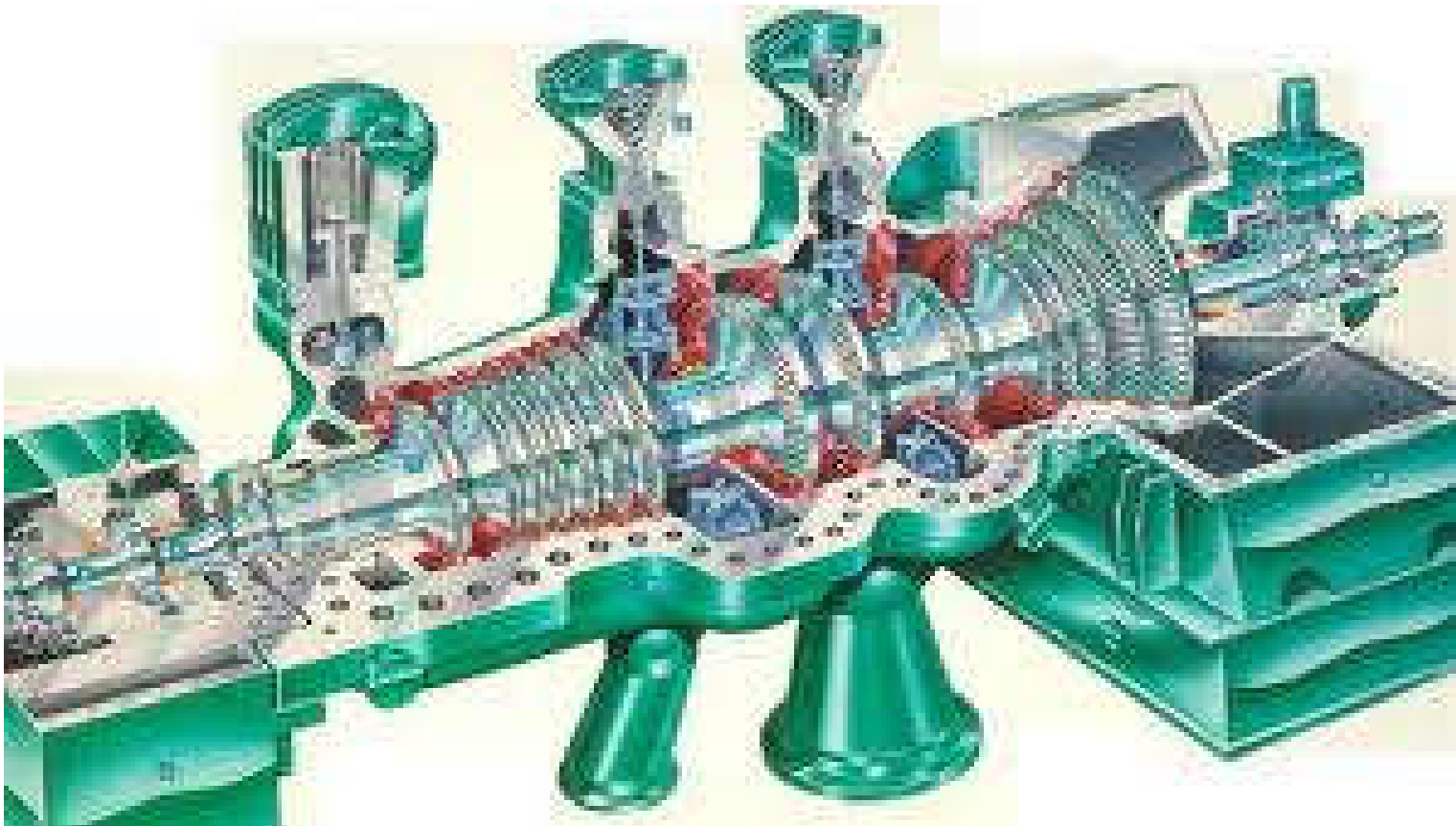
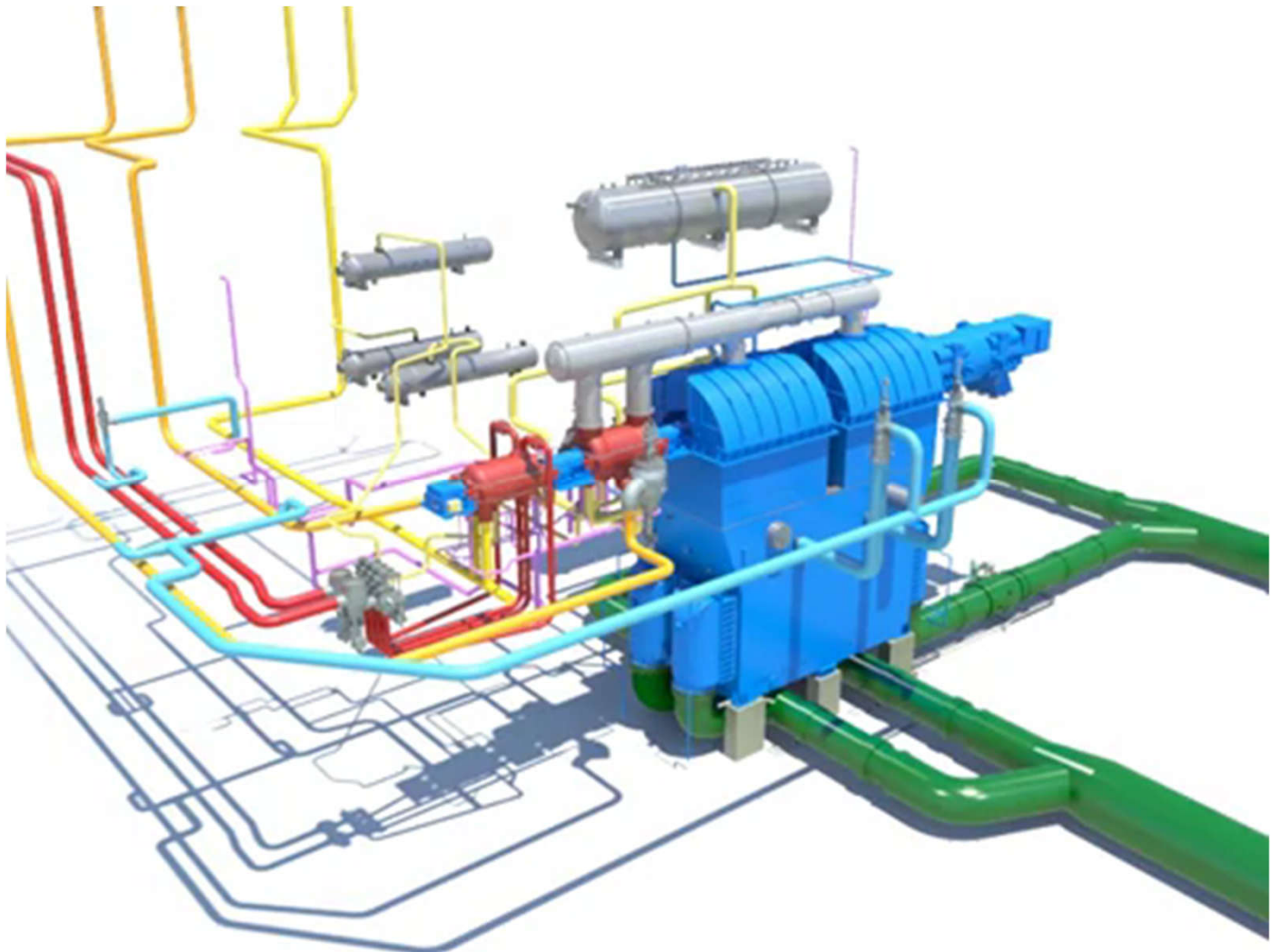
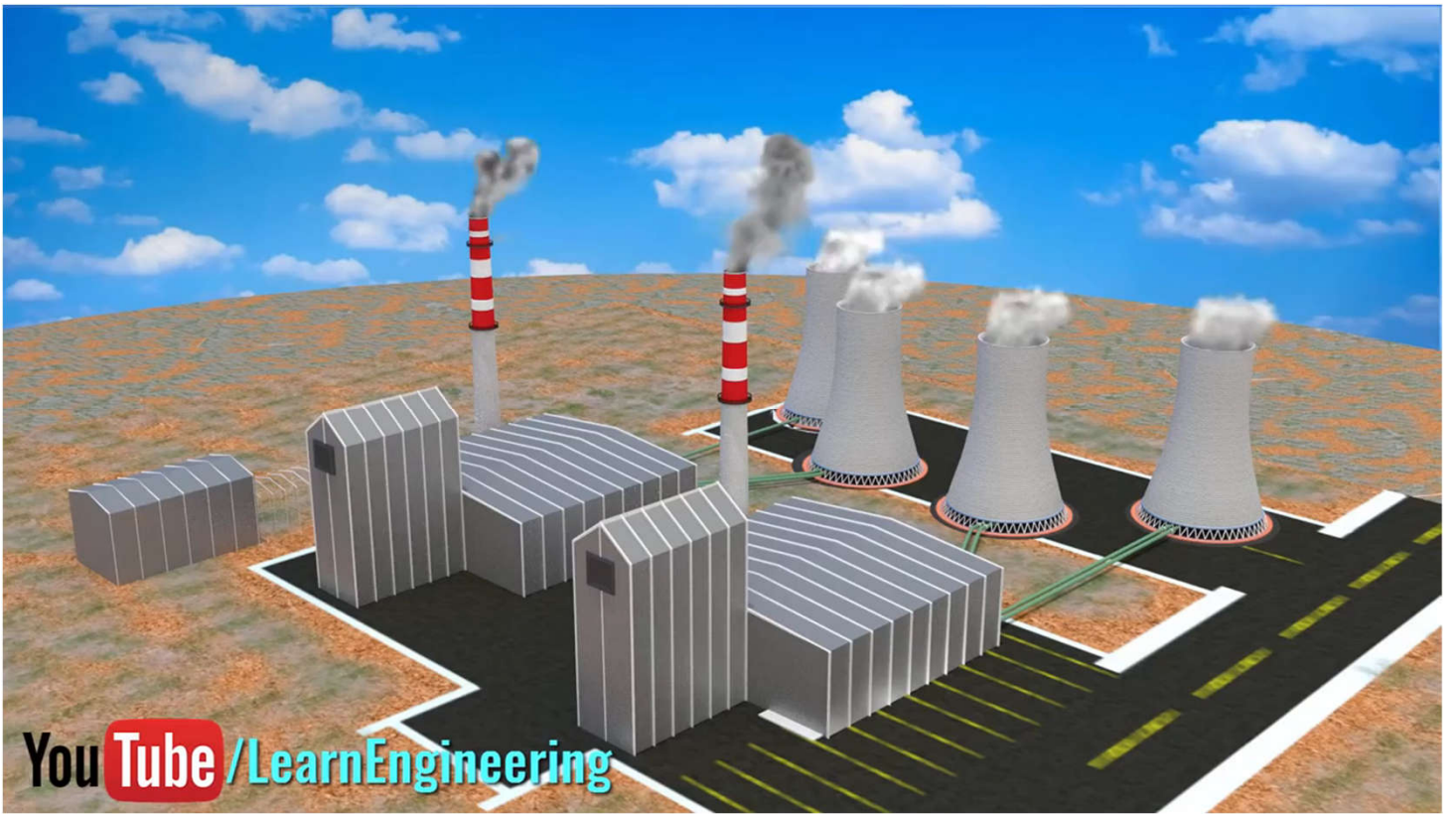


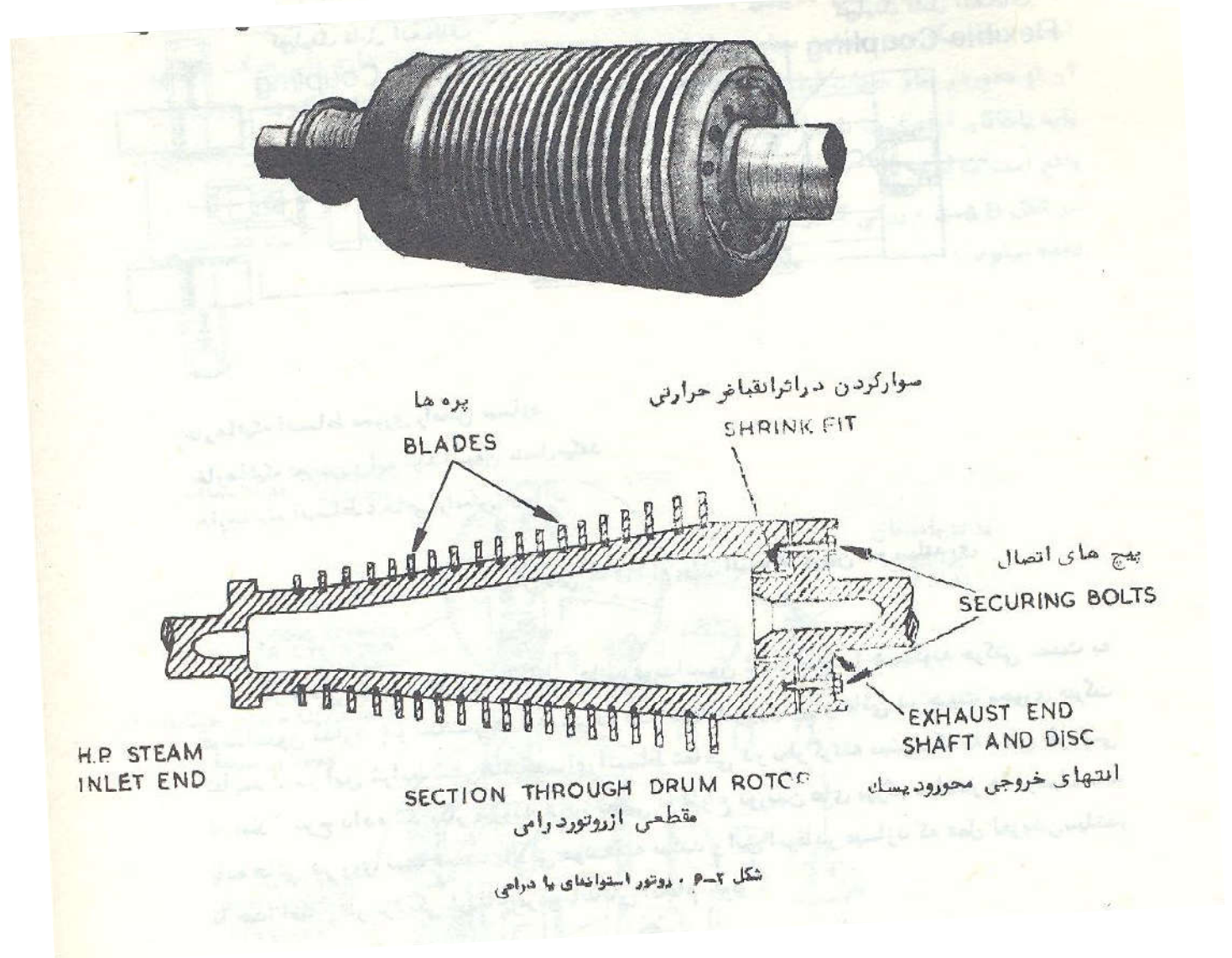
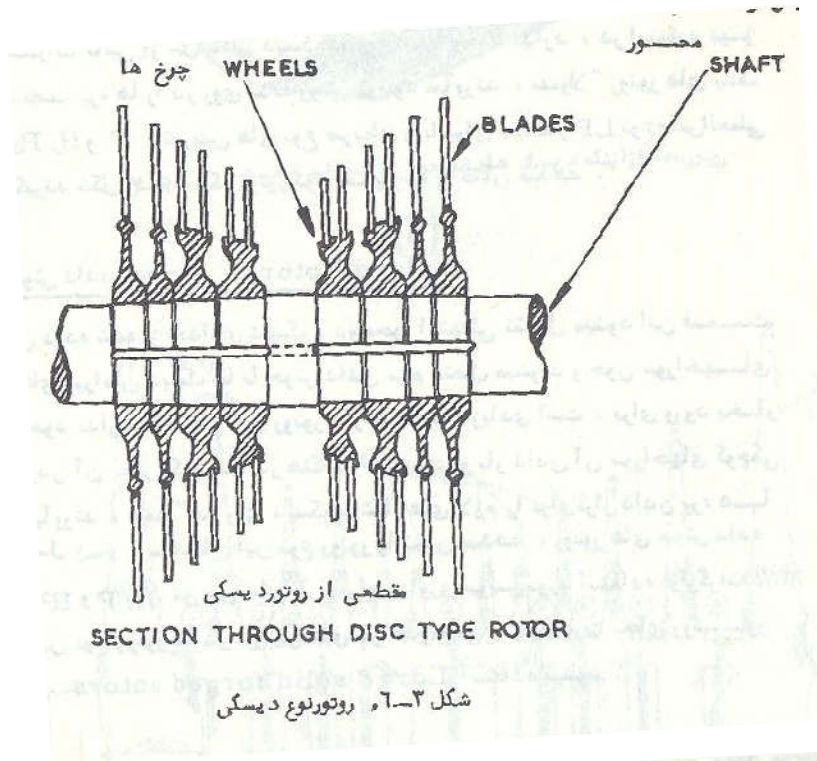
FIG 4.2H. FIVE CYLINDER - DOUBLE FLOW I.P. & THREE DOUBLE FLOW L.P.

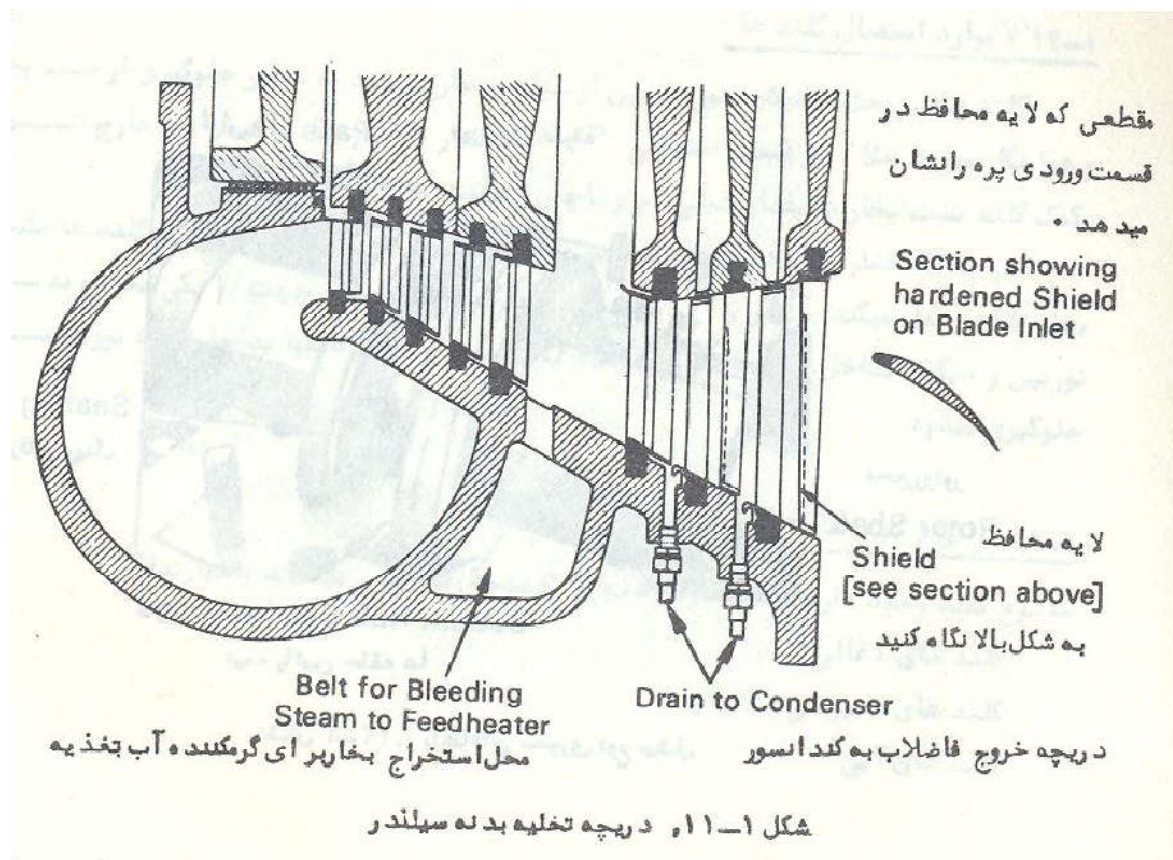
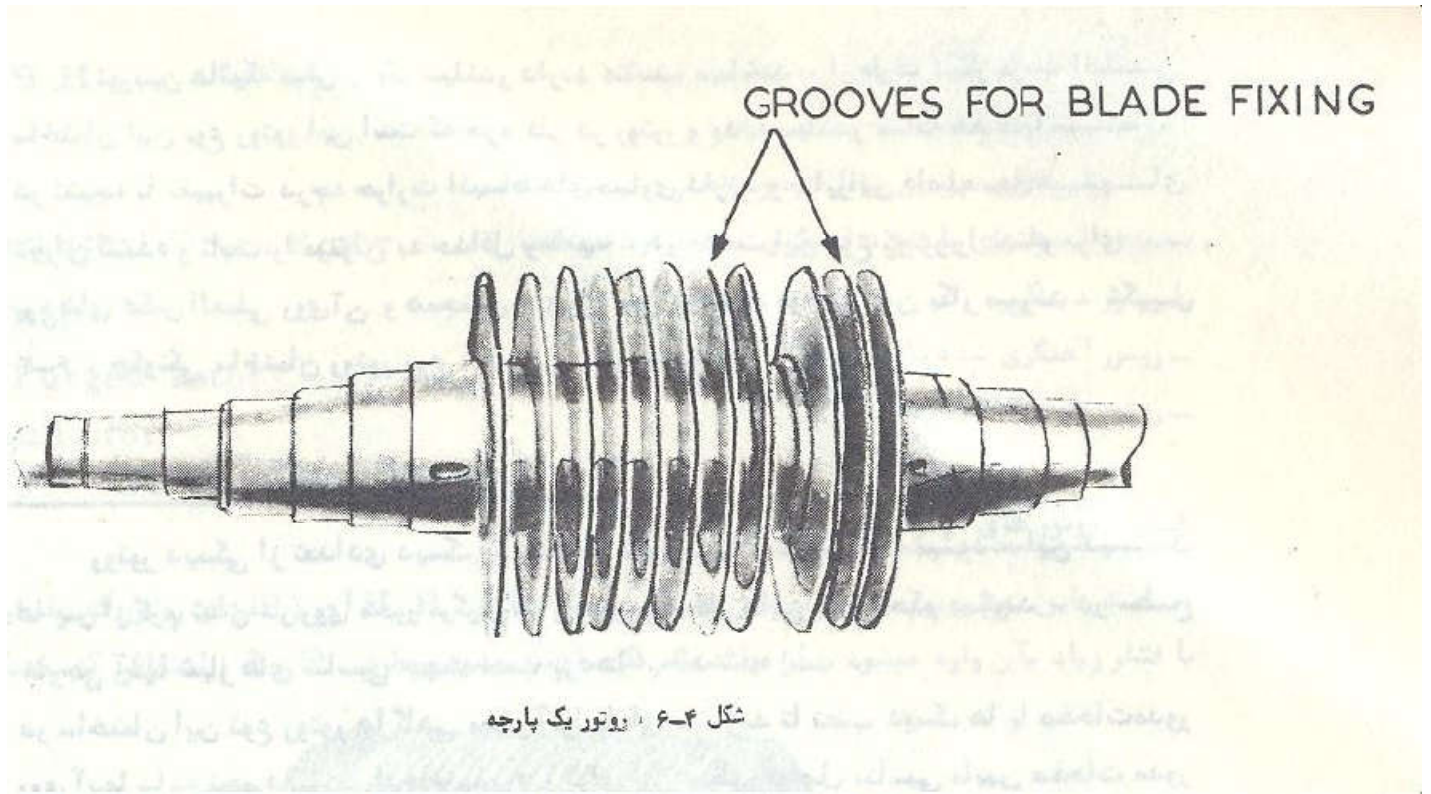
شکل ۴-۲ H ، پوسته پنج سیلندری با جریان دو طرفه I.P. و سه پوسته L.P. با جریان دو طرفه





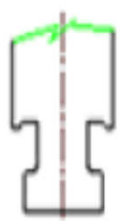








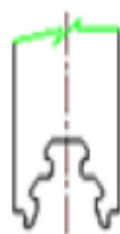
T-Root



Straddle
T-Root



Dovetail



Internal
Fir-Tree



External
Fir-Tree



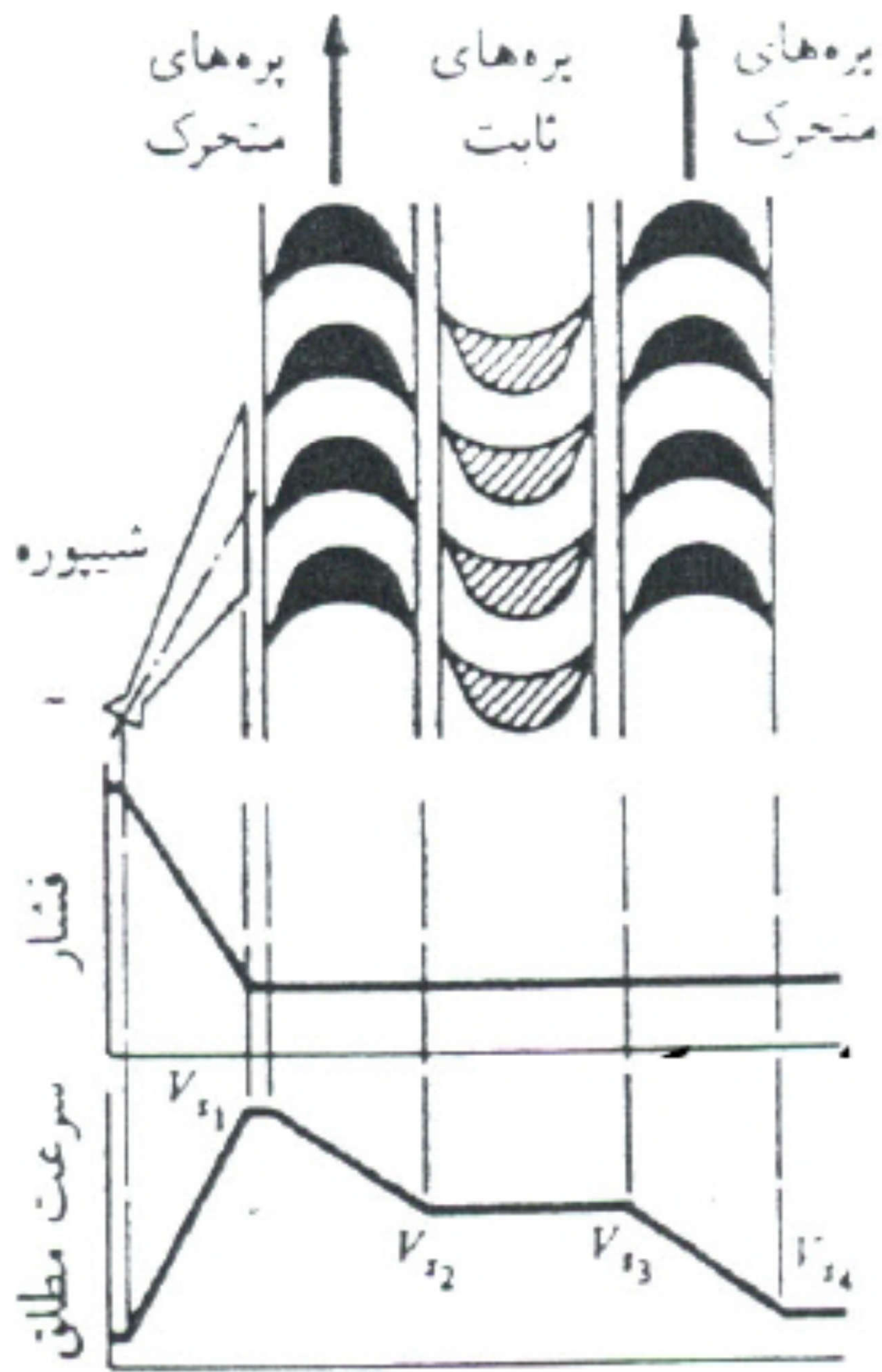
Finger

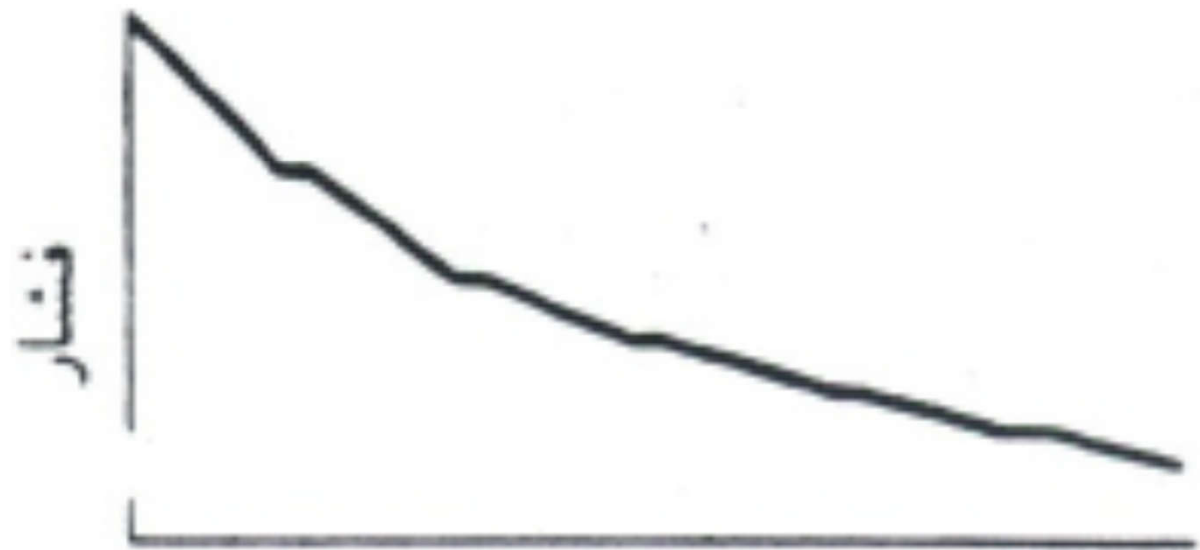
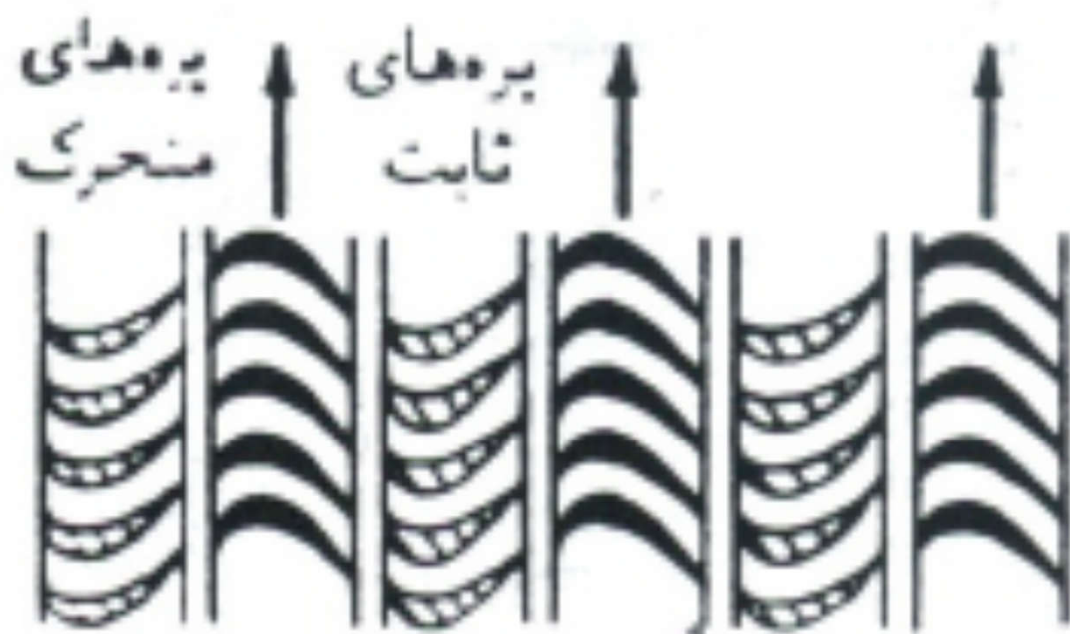


Bulb



Side
Notch





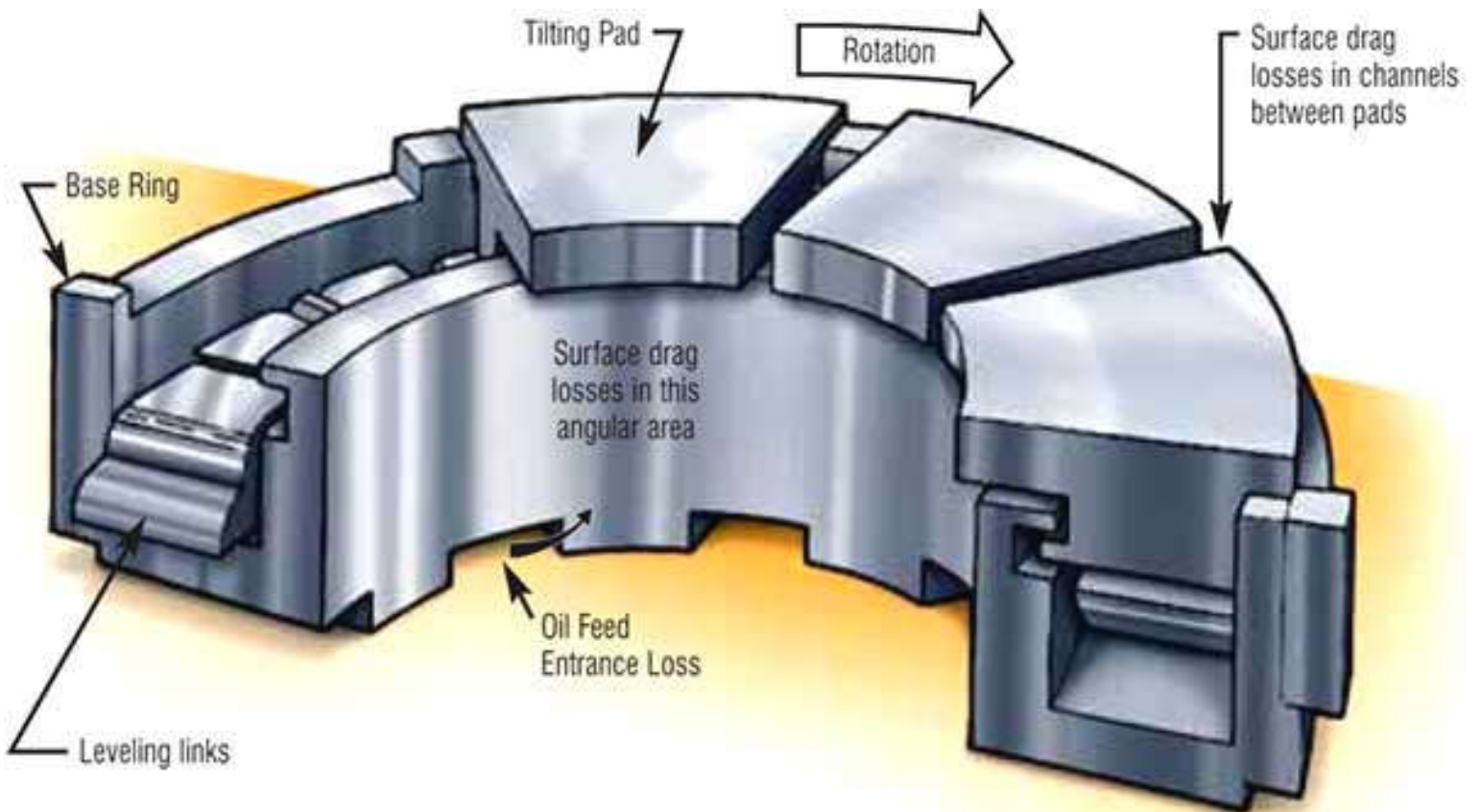
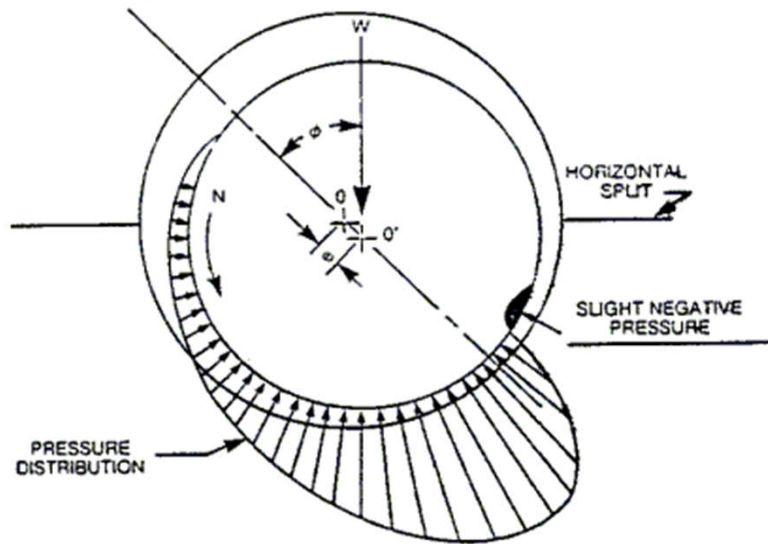
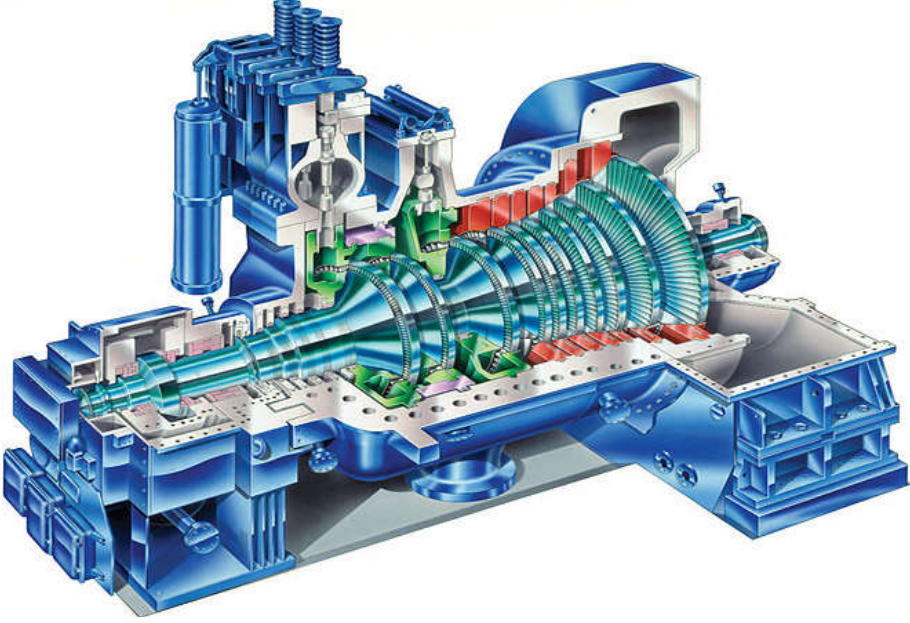
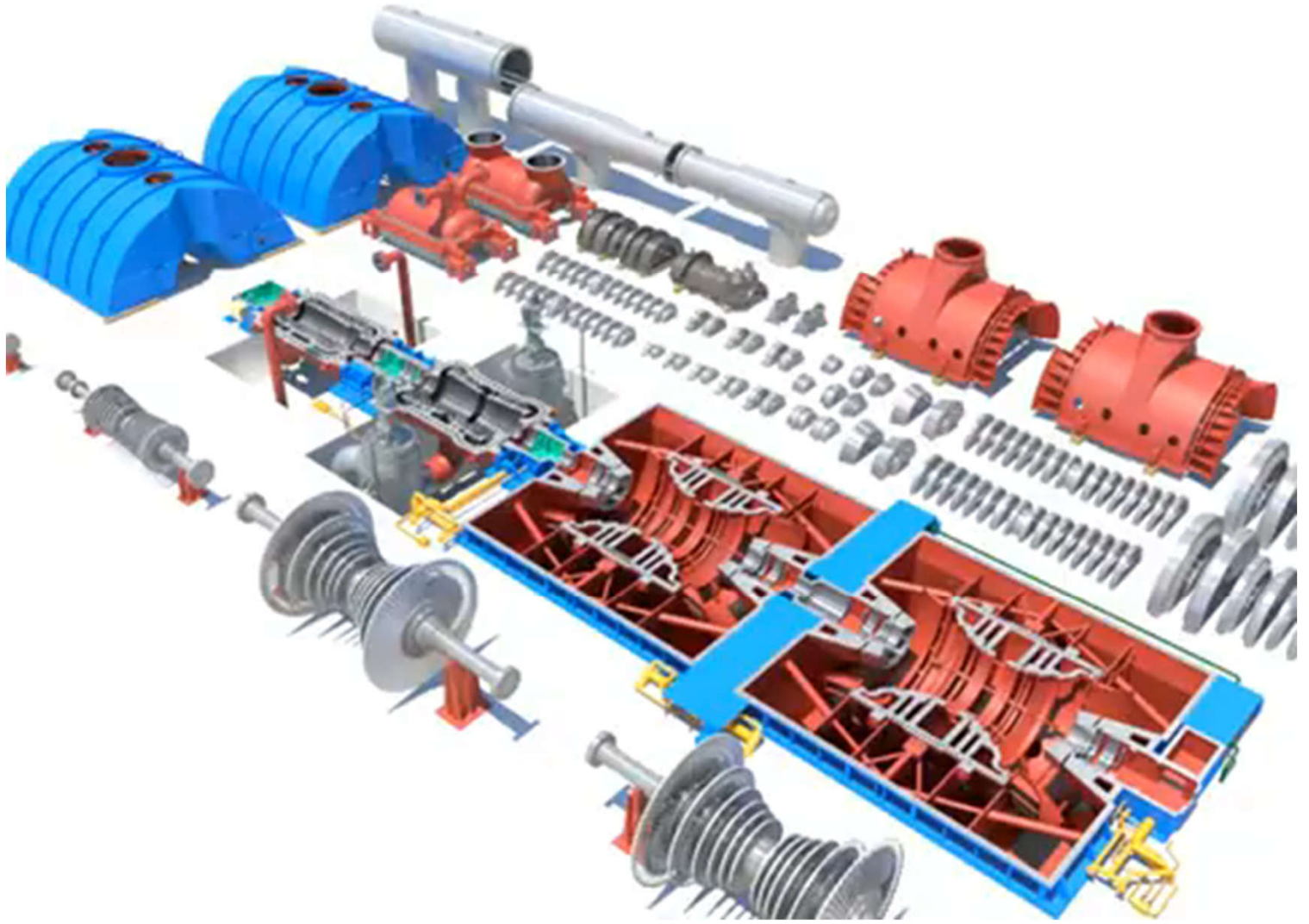


Figure 1. Parasitic Losses in a Pivoted-pad Thrust Bearing

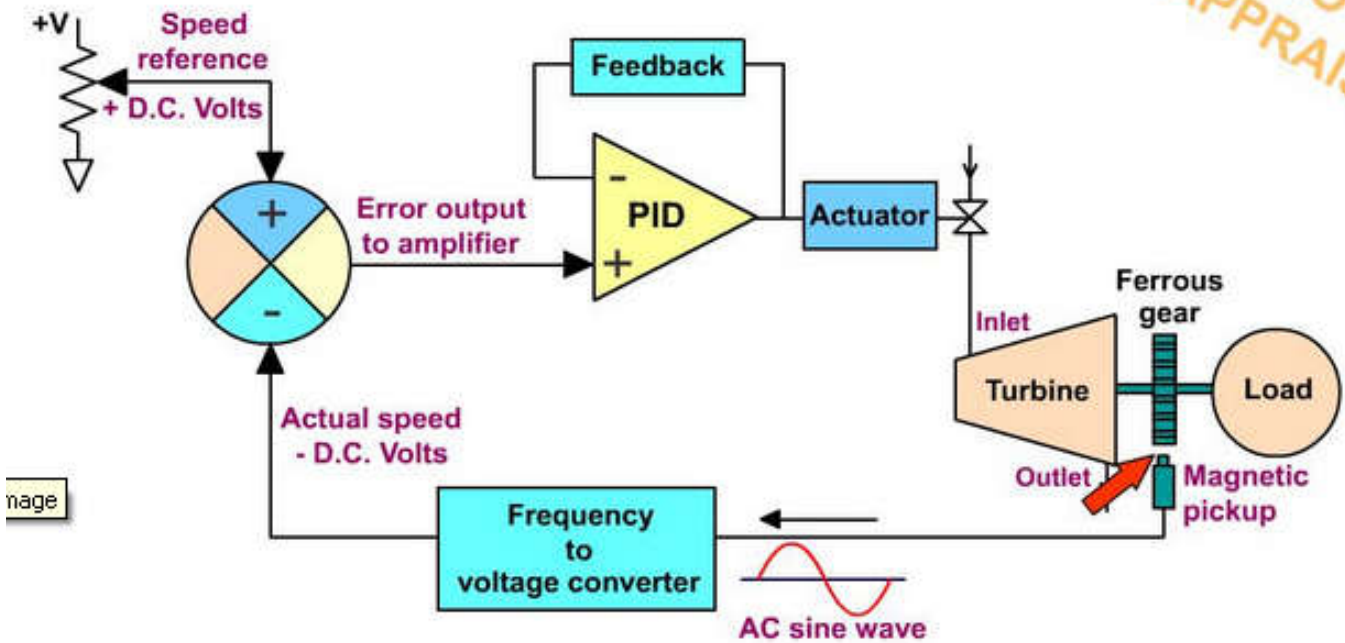






**GOVERNORS AND GOVERNING SYSTEM
ELECTRONIC - WOODWARD TYPE GOVERNOR**

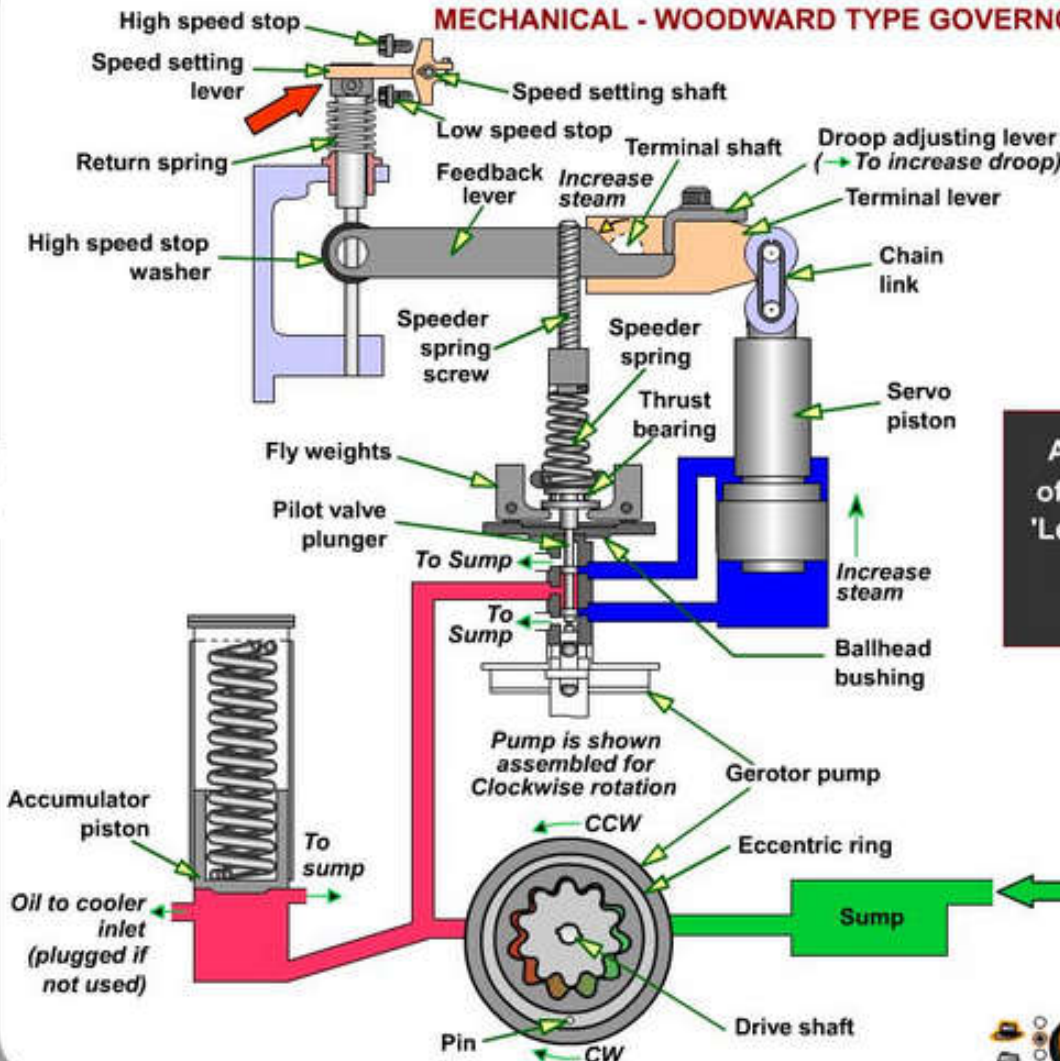
DEMO FOR APPRAISAL



nage

**GOVERNORS AND GOVERNING SYSTEM
MECHANICAL - WOODWARD TYPE GOVERNOR**

DEMO FOR APPRAISAL



Another variation to this type of governor, is the one using a 'Lever Speed Setting' where the speed adjustment is made using a lever mechanism.

- █ HIGH PRESSURE OIL
- █ CONTROL OIL
- █ SUMP OIL



Extraction Control Valve Ass'y

- 1. Online washing

Trip Throttle Valve Ass'y

- 1. Partial stroke test device

Governing Device Ass'y

- 1. electronic hydraulic governor

Gov. Side Bearing Ass'y

- 1. Thrust bearing (1)
- 2. Thrust bearing (2)
- 3. Sleeve bearing

Rotor Assembly

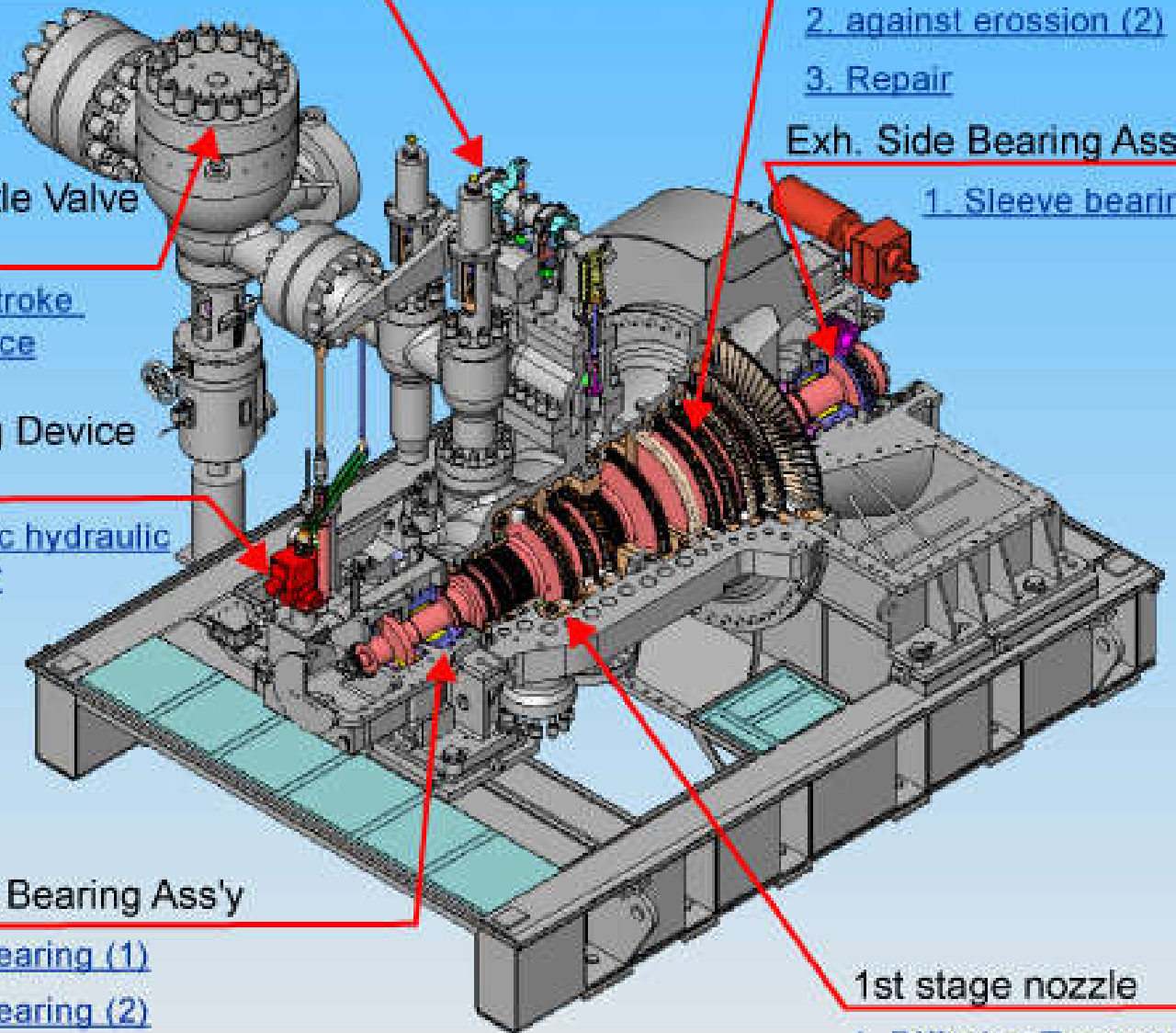
- 1. against erosion (1)
- 2. against erosion (2)
- 3. Repair

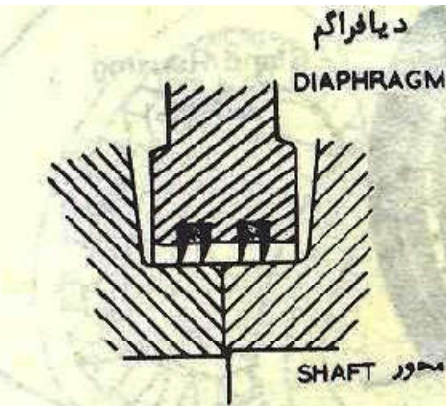
Exh. Side Bearing Ass'y

- 1. Sleeve bearing

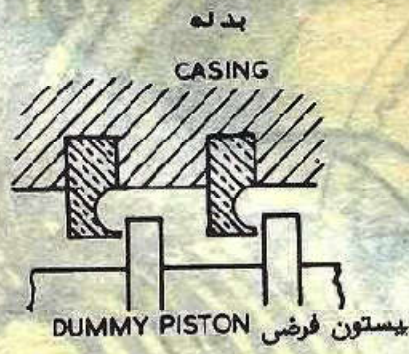
1st stage nozzle

- 1. Diffusion Treatment

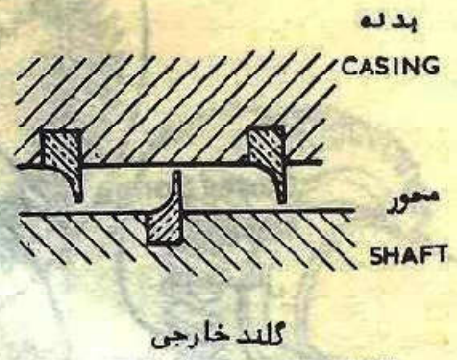




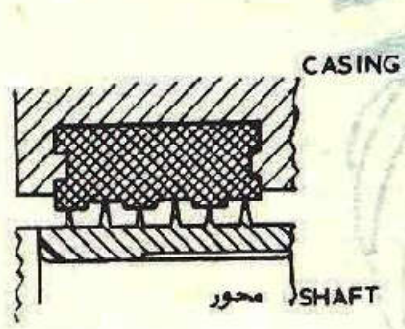
DIAPHRAGM GLAND
گلدن دیافراگمی



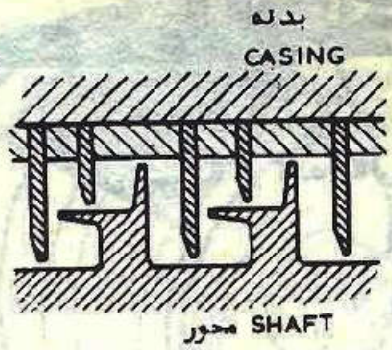
DUMMY PISTON GLAND
گلدن بیستونی فرضی



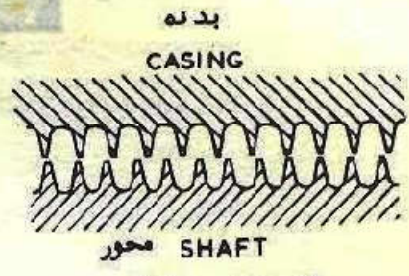
EXTERNAL GLAND



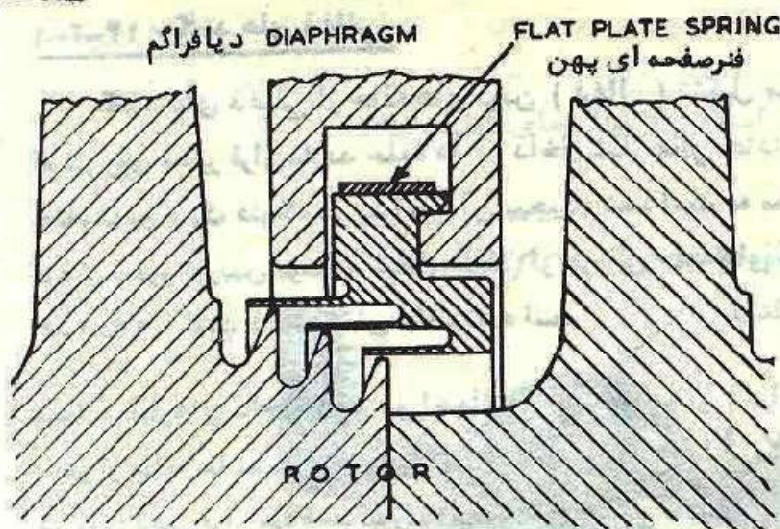
EXTERNAL GLAND
گلدن خارجی



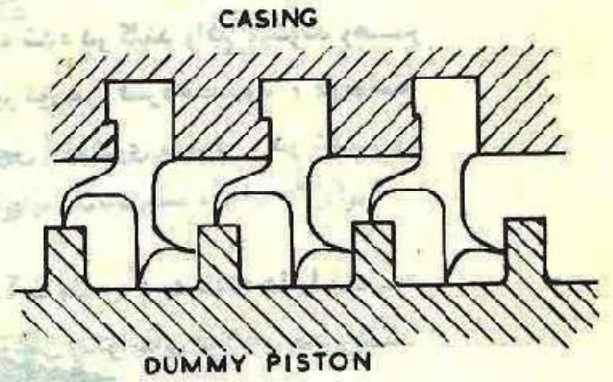
EXTERNAL GLAND
گلدن خارجی



EXTERNAL OR VERNIER GLAND

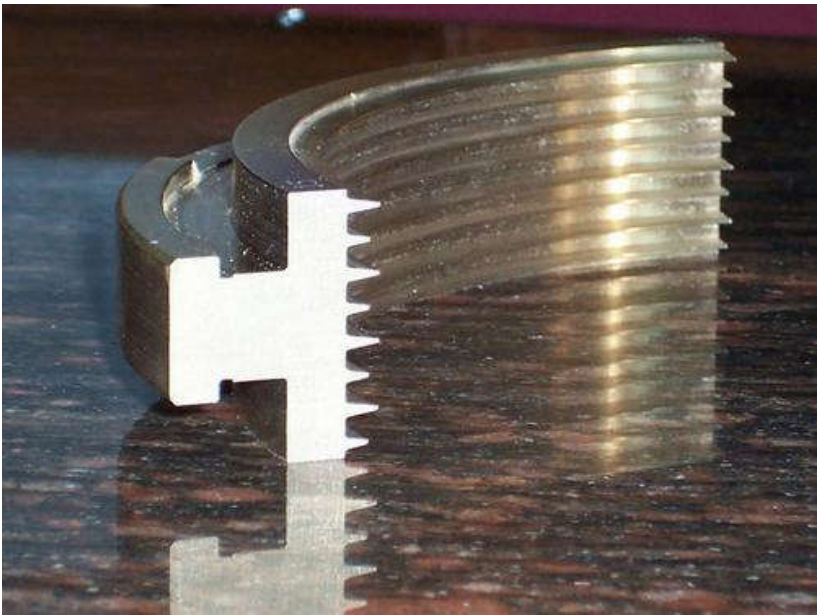


DIAPHRAGM GLAND
WITH ARRANGEMENT FOR EXPANSION
گلدن دیافراگمی با در نظر گرفتن انبساط

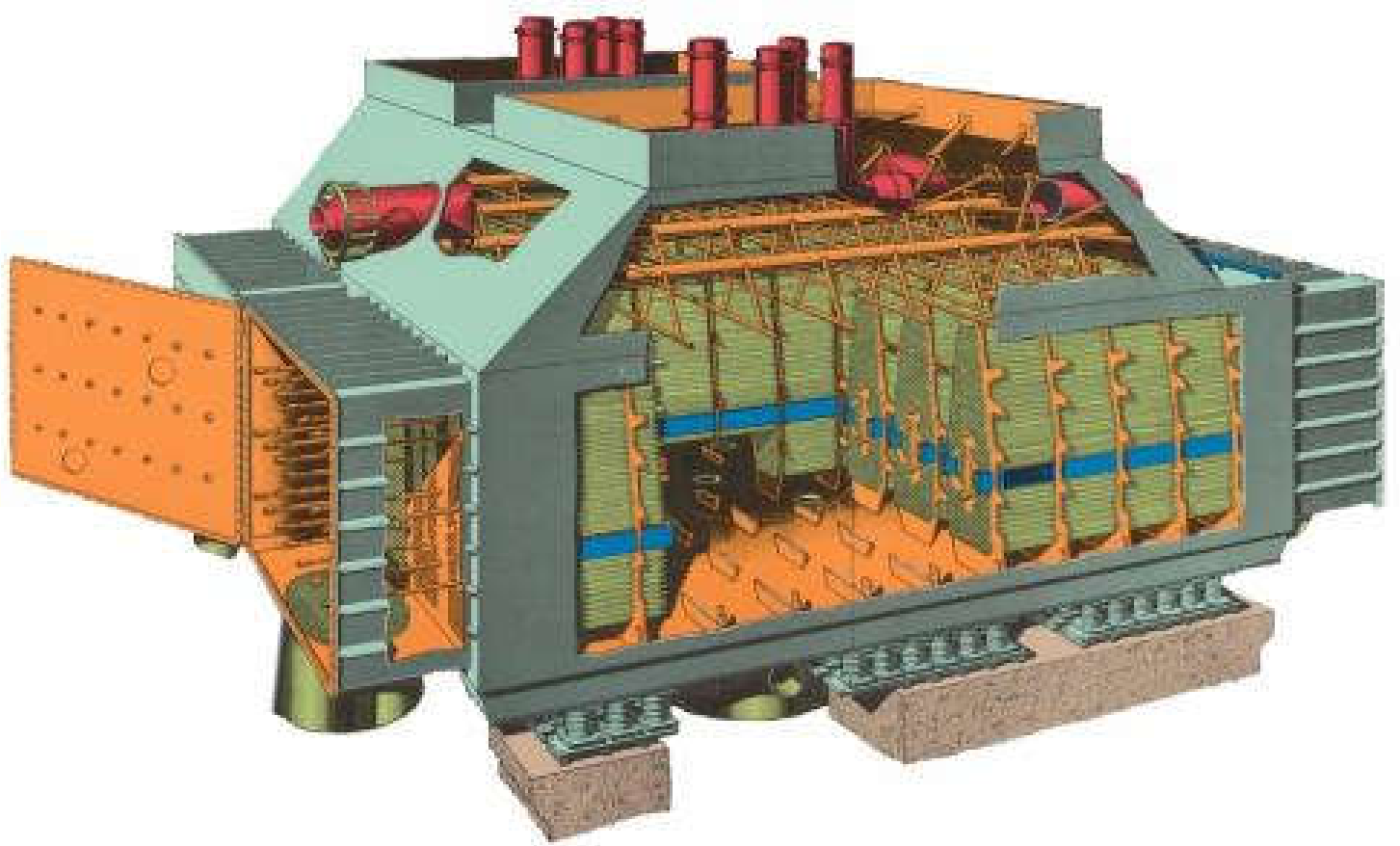


DUMMY PISTON GLAND

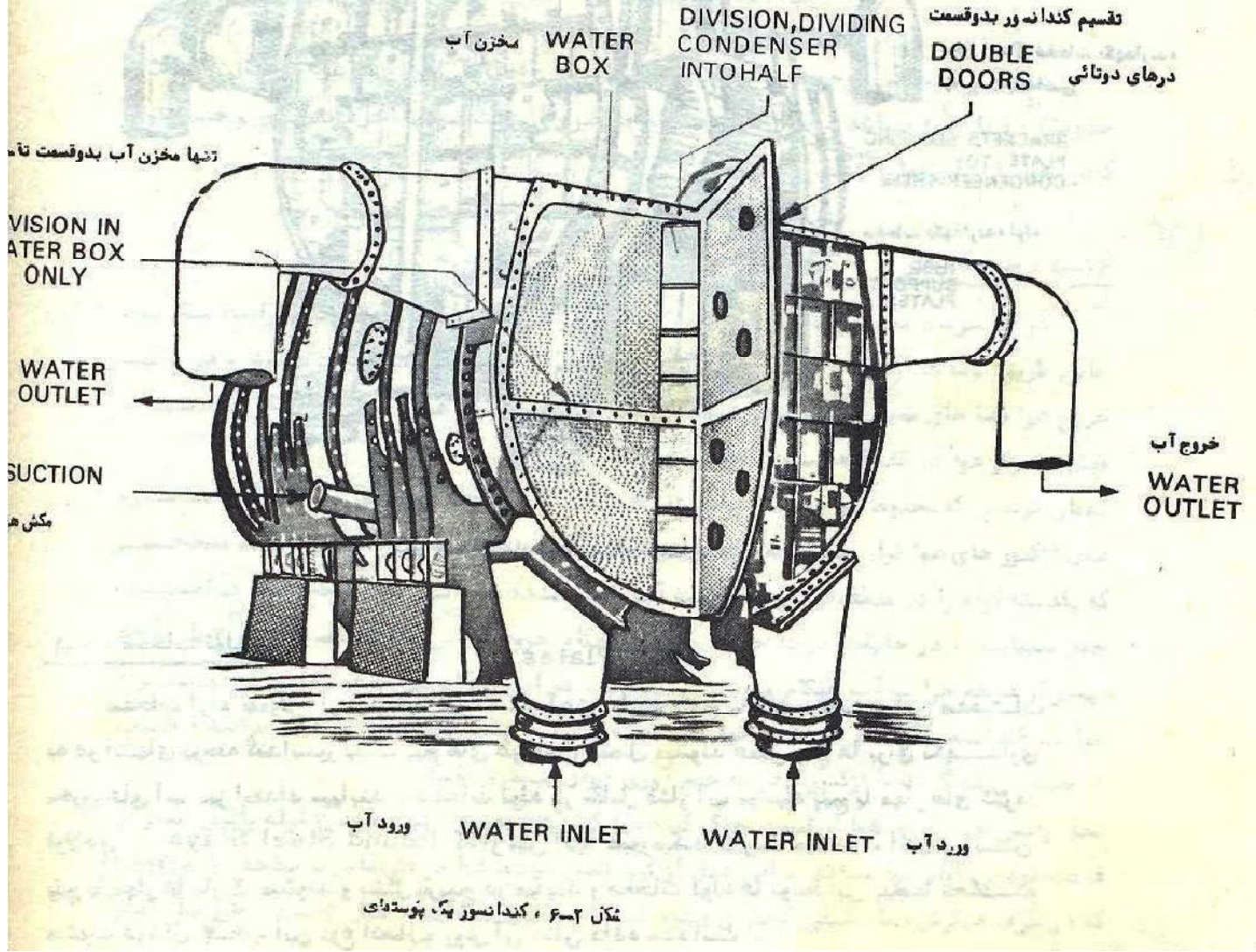
شکل ۲-۲-۱۴ انواع گلدن های لا بیرتی





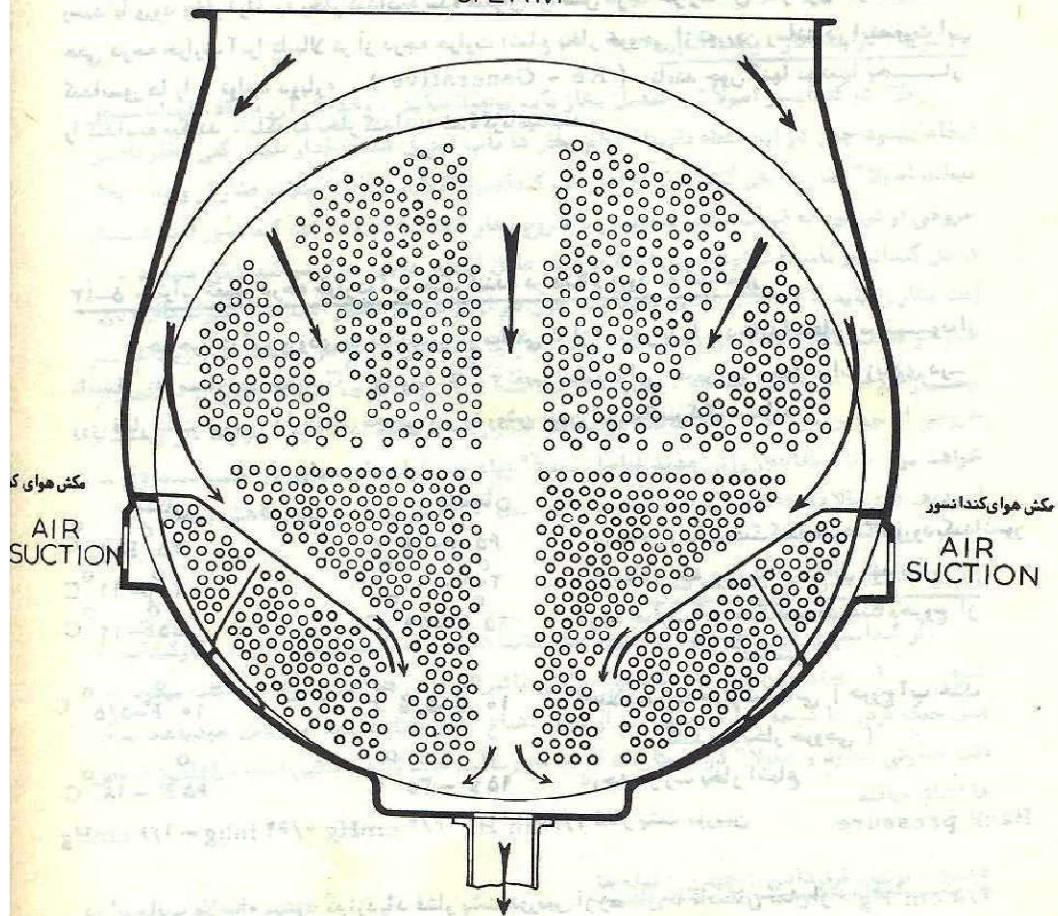








EXHAUST
STEAM



مکش هوای ک

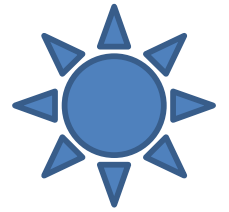
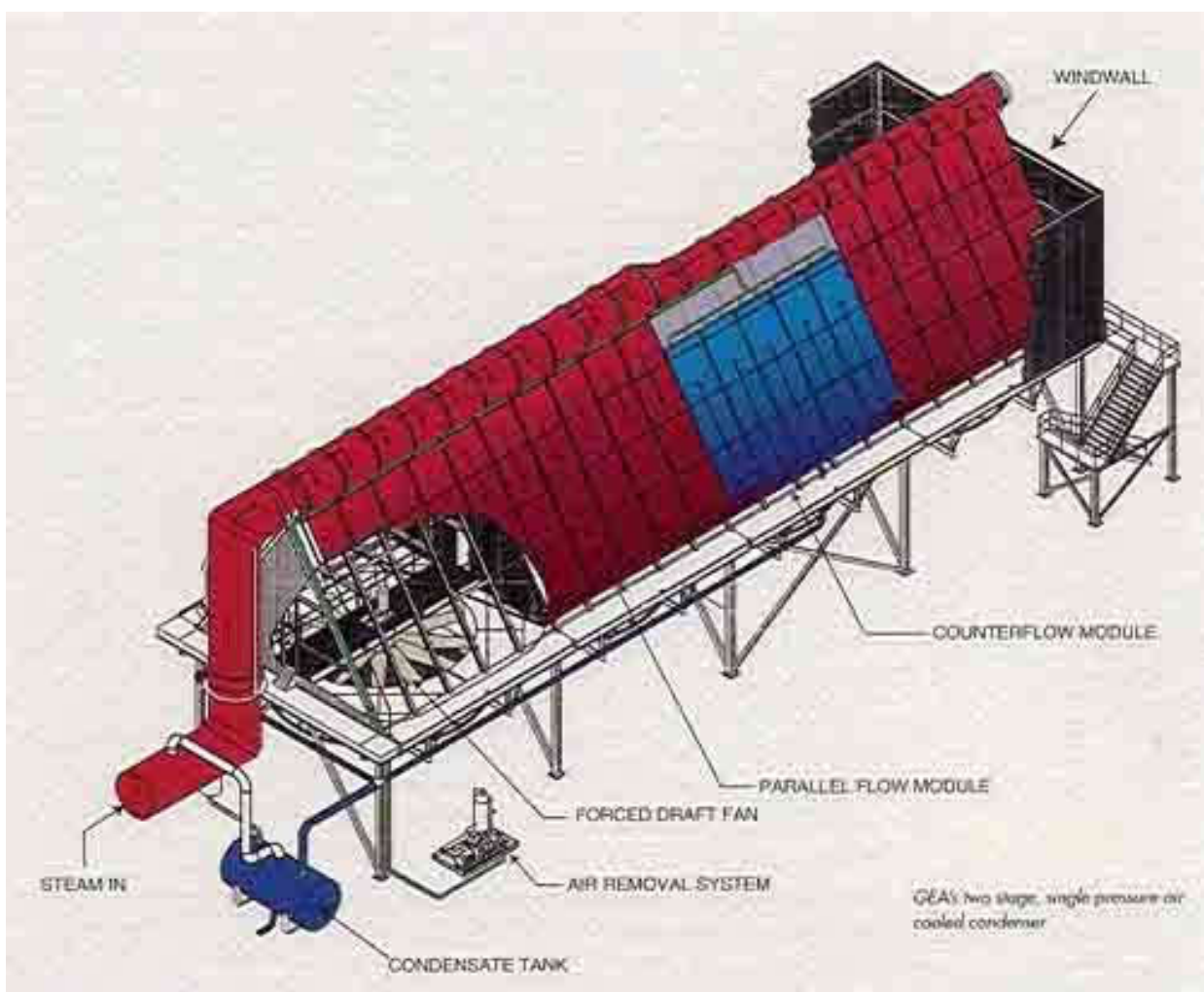
AIR
SUCTION

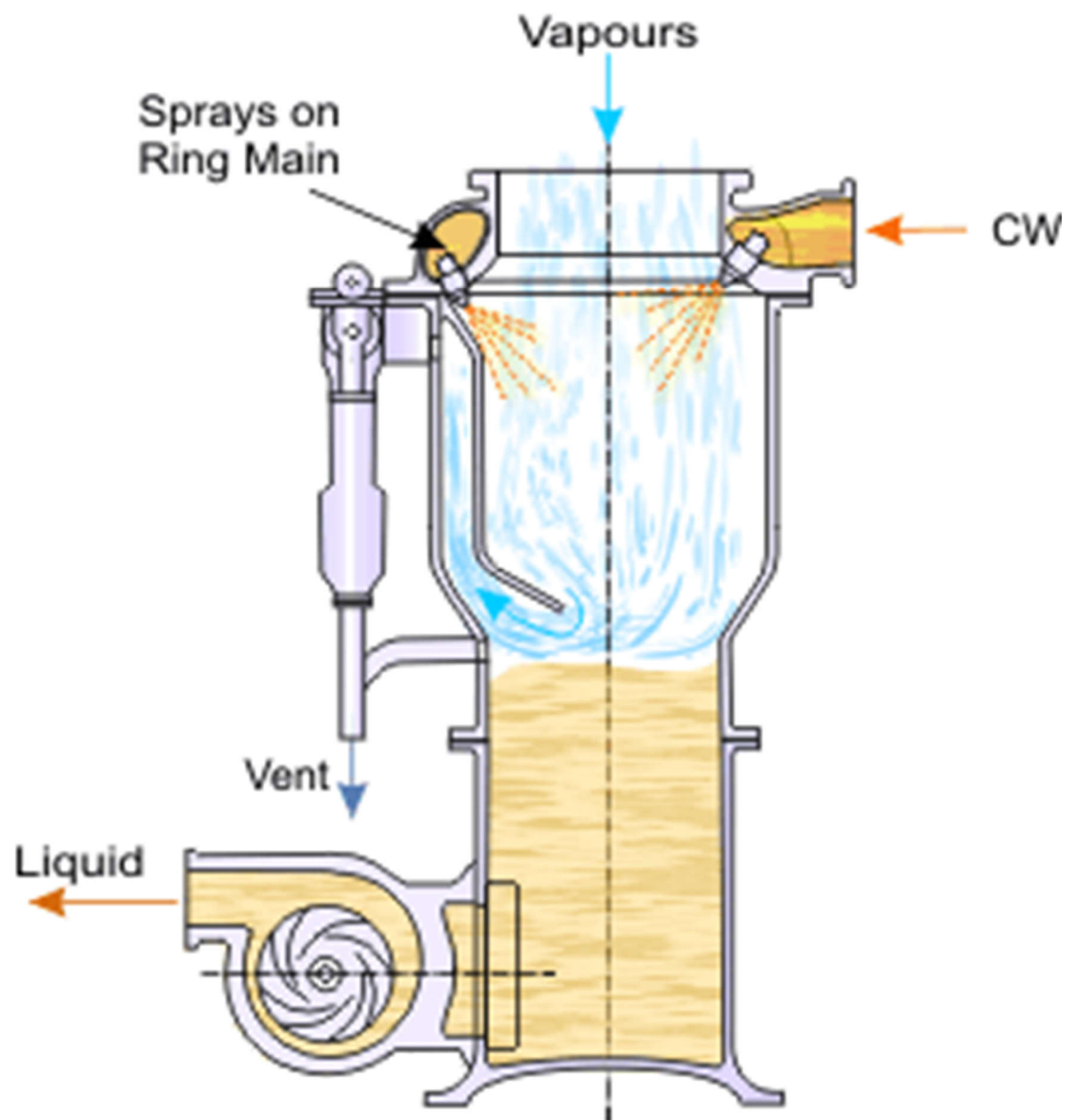
مکش هوای کندانه سور

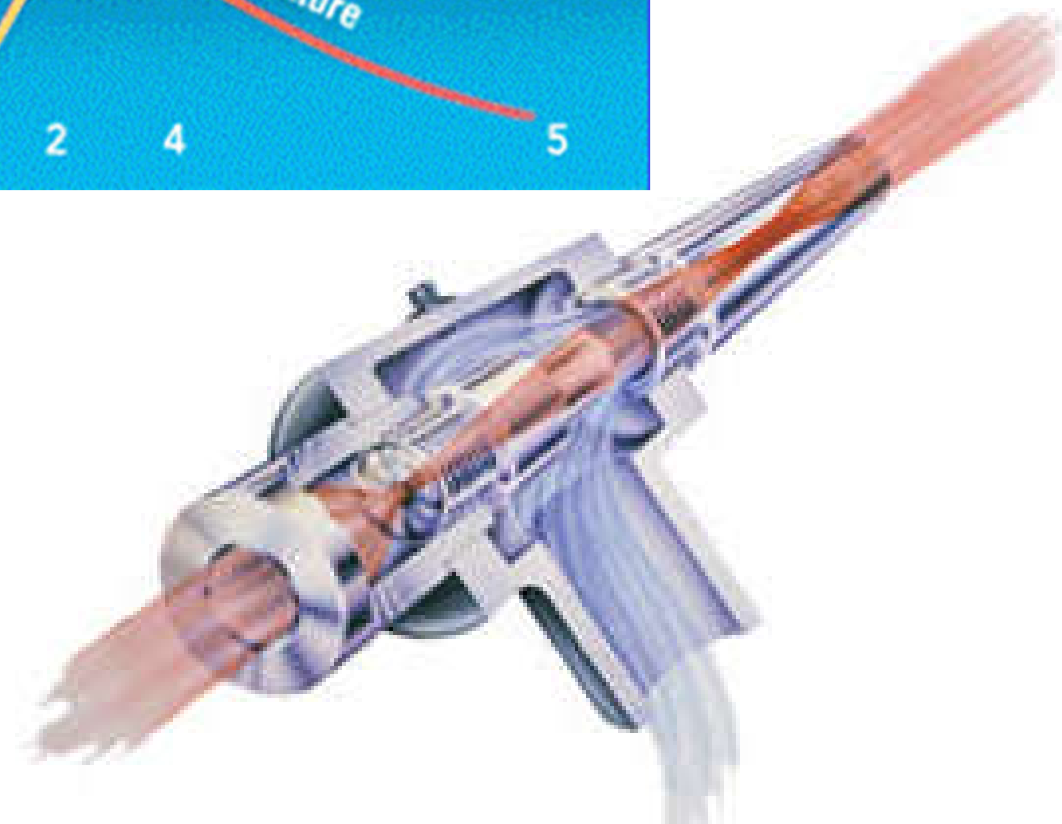
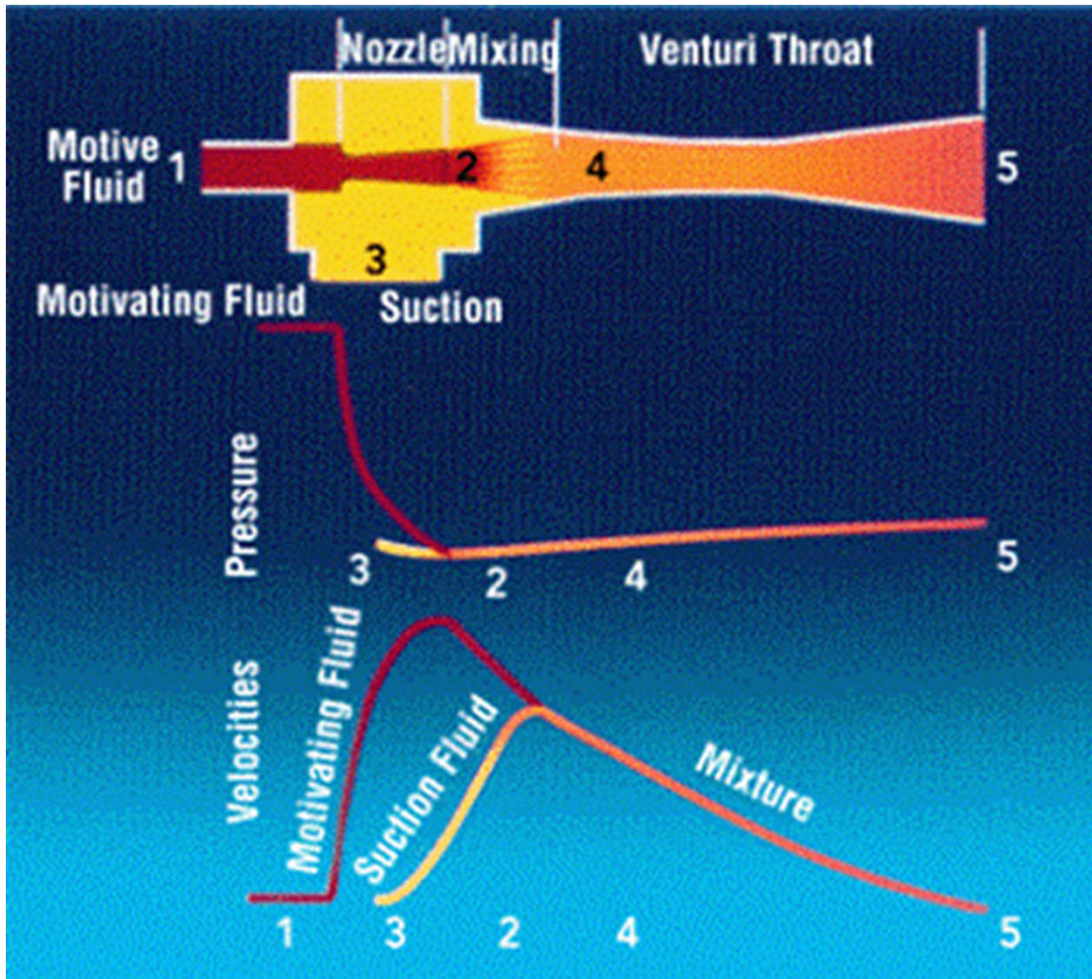
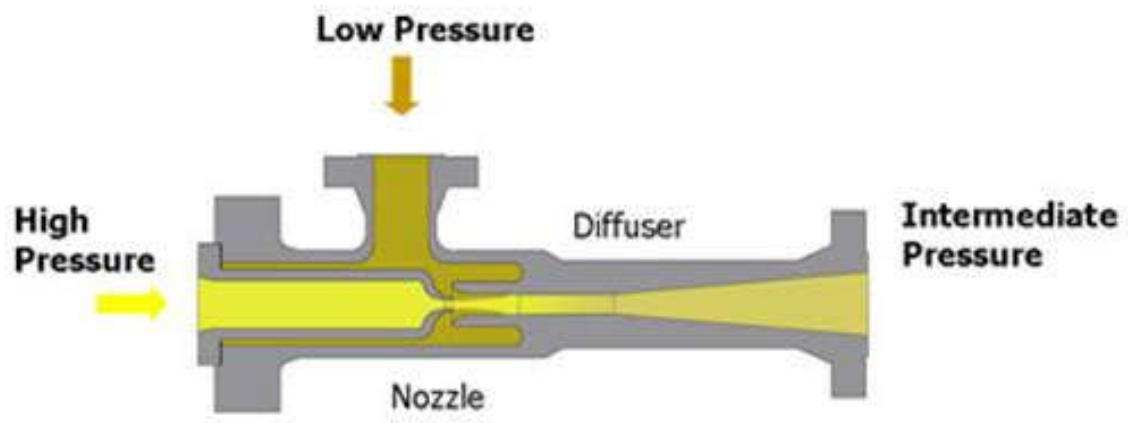
AIR
SUCTION

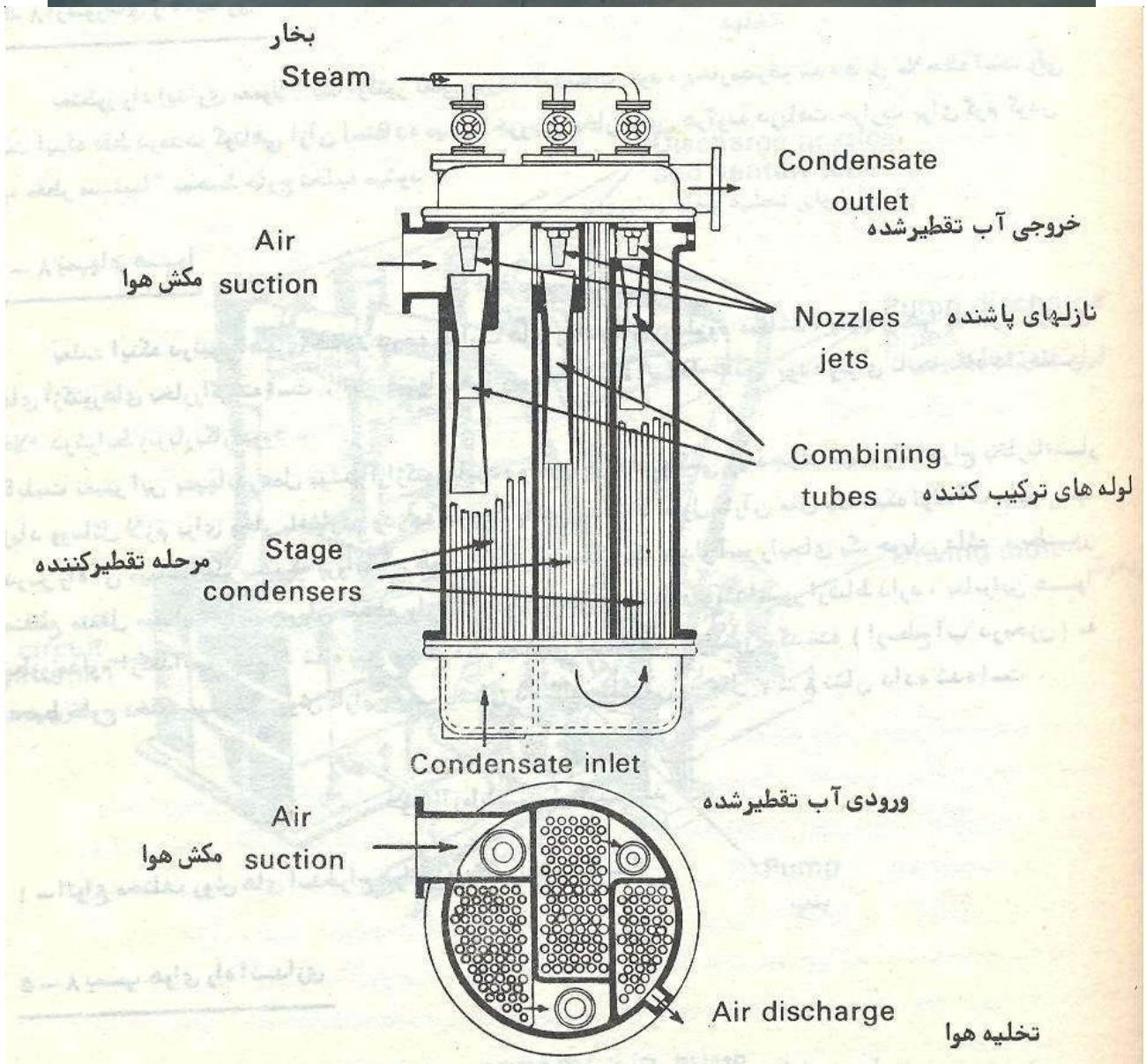
خروج بخار کندانه شده (تخلیص شده)

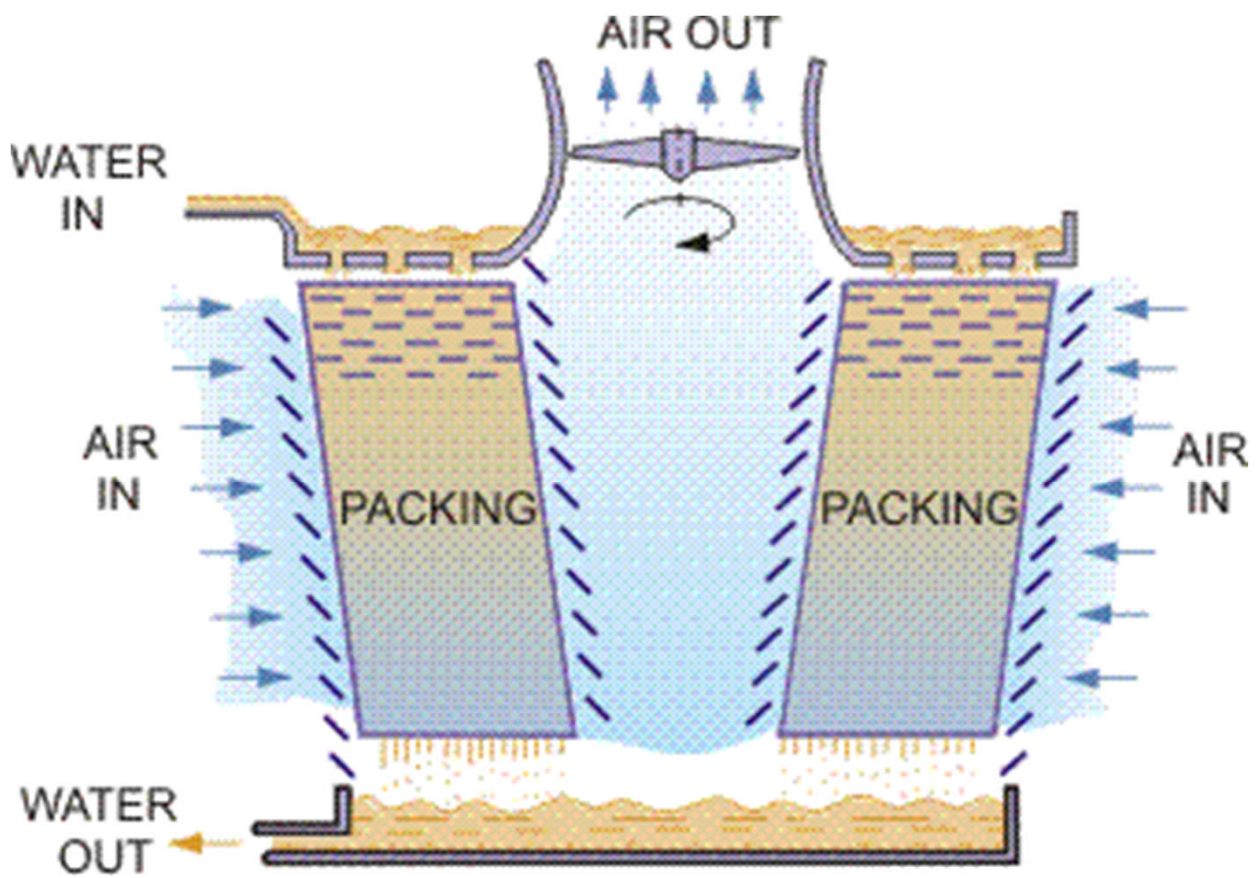




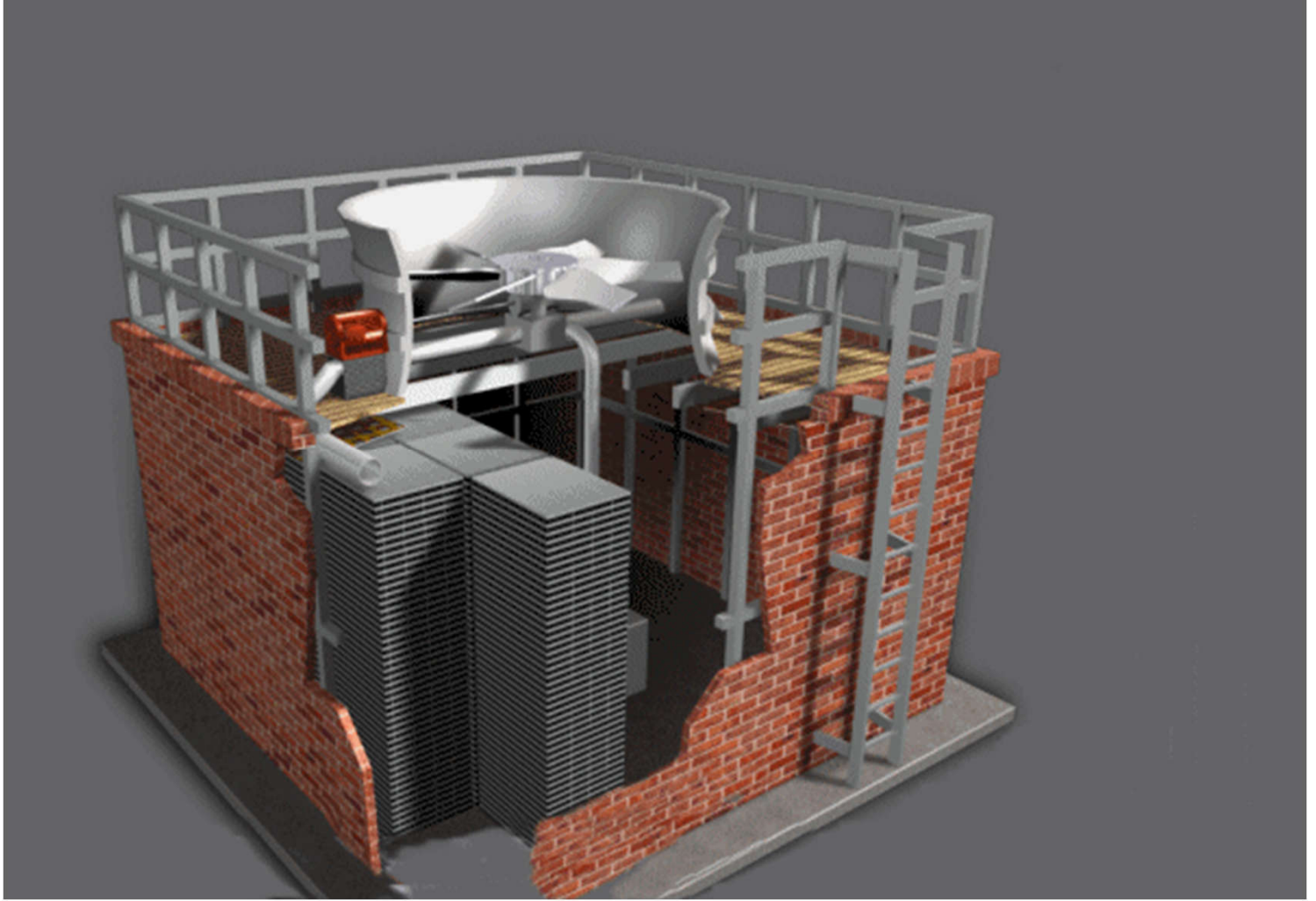


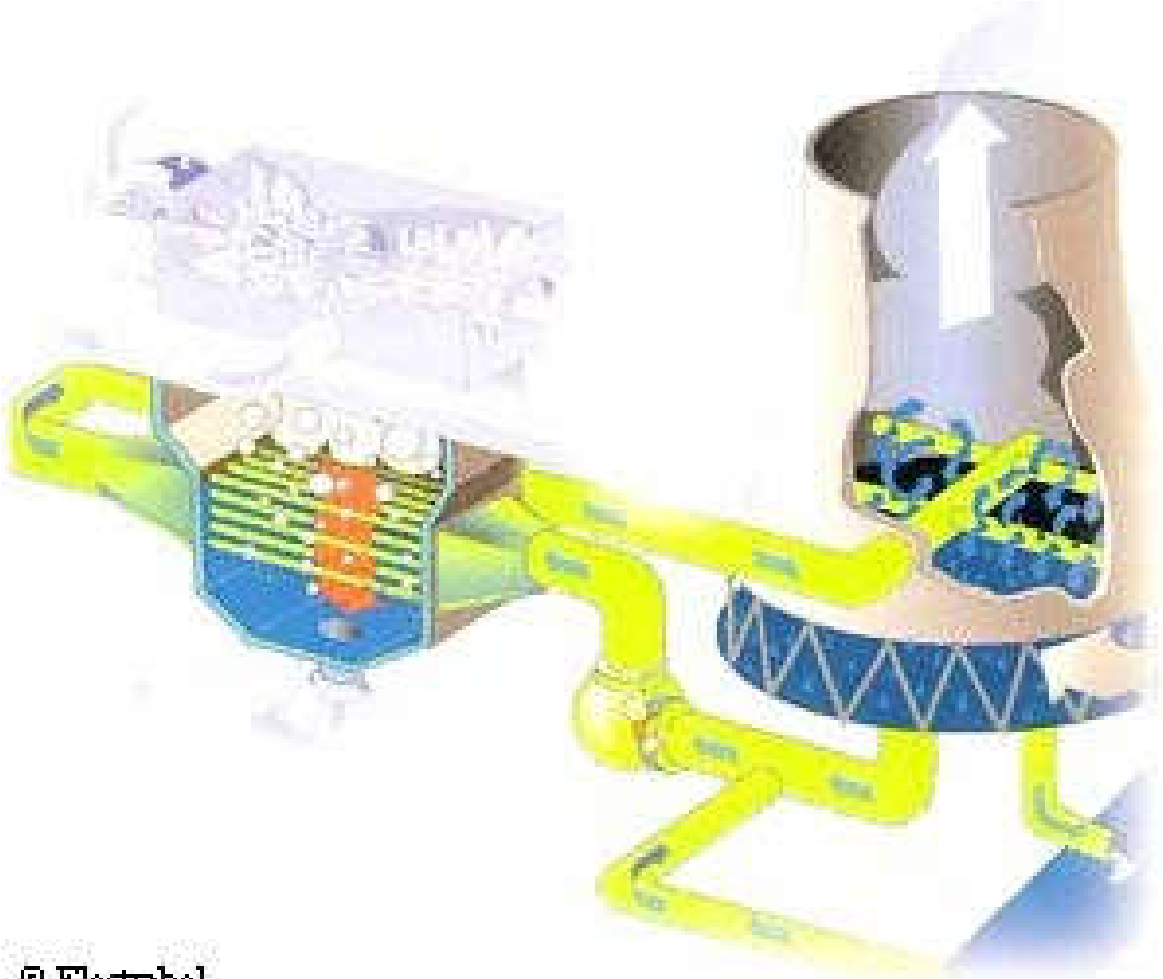


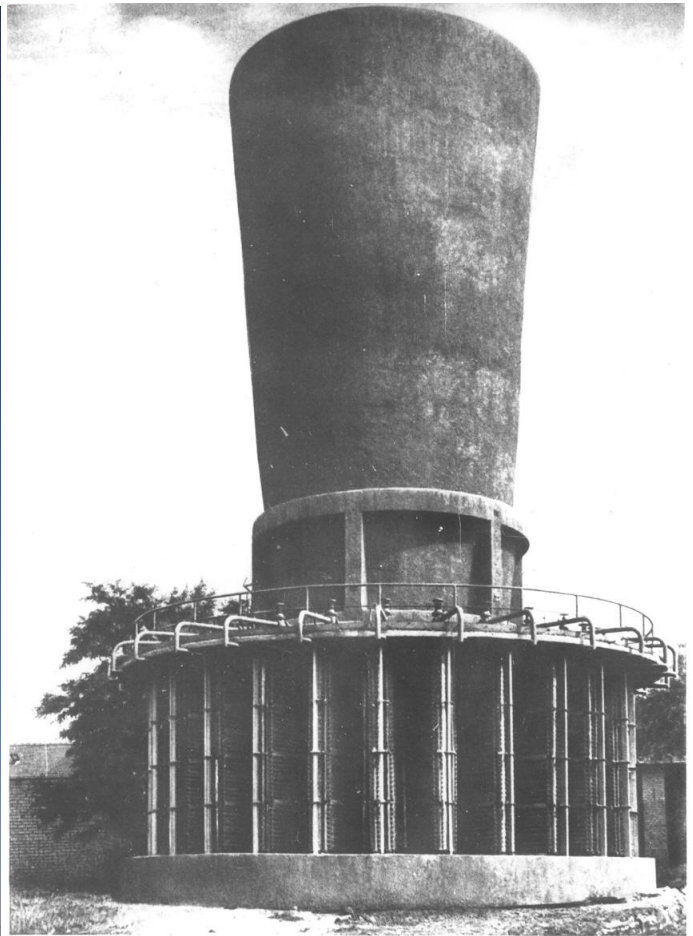




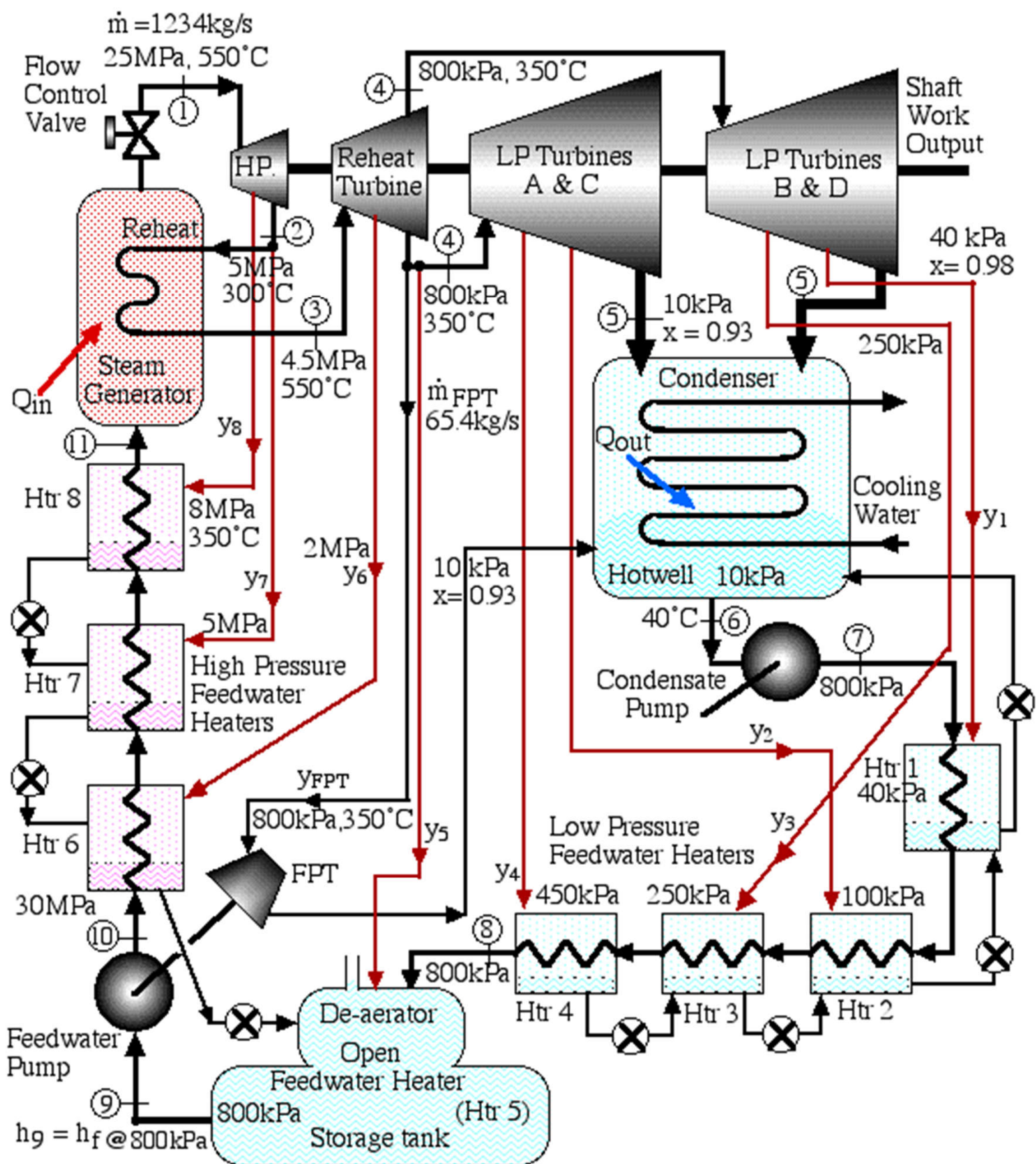
(c)



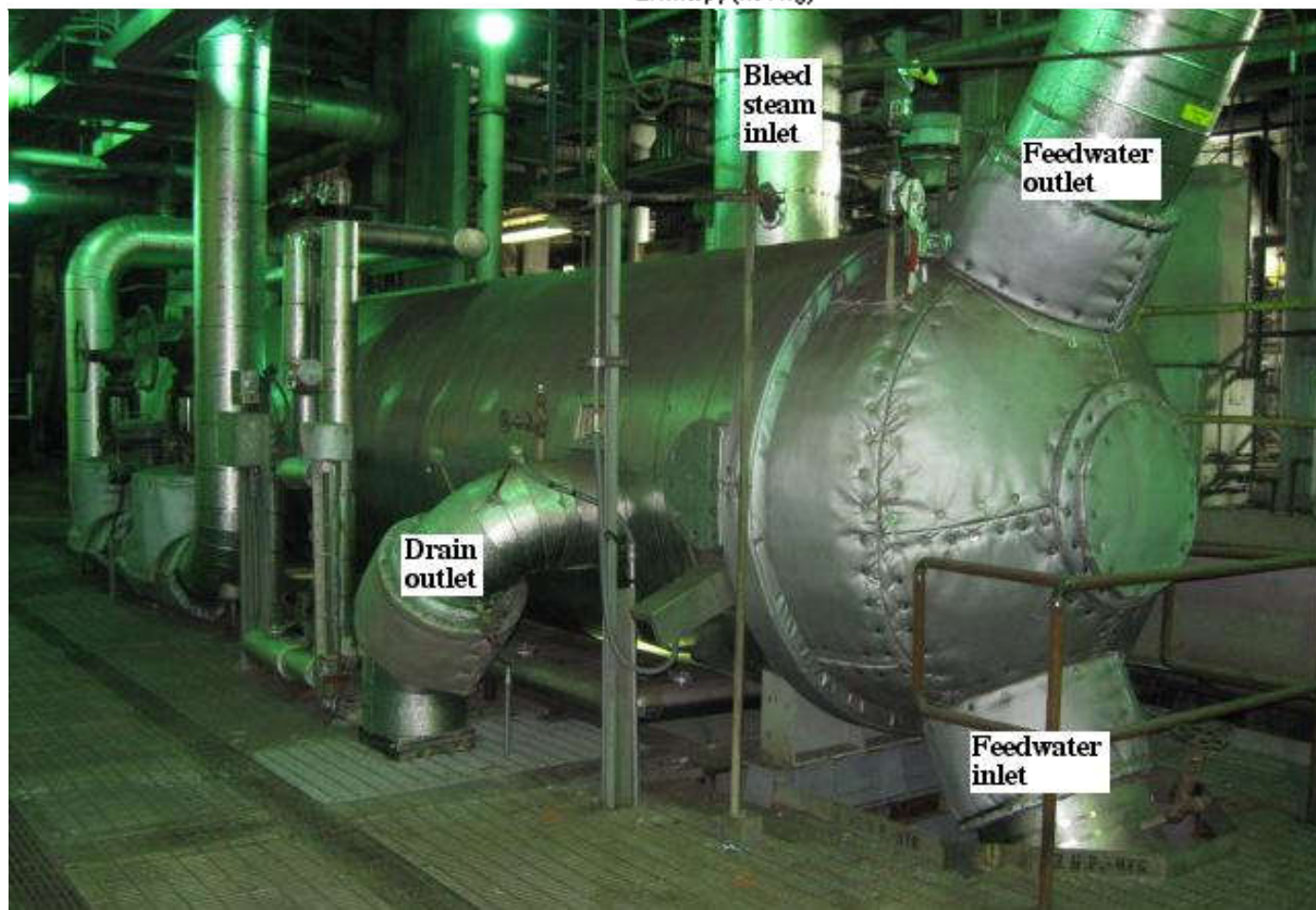
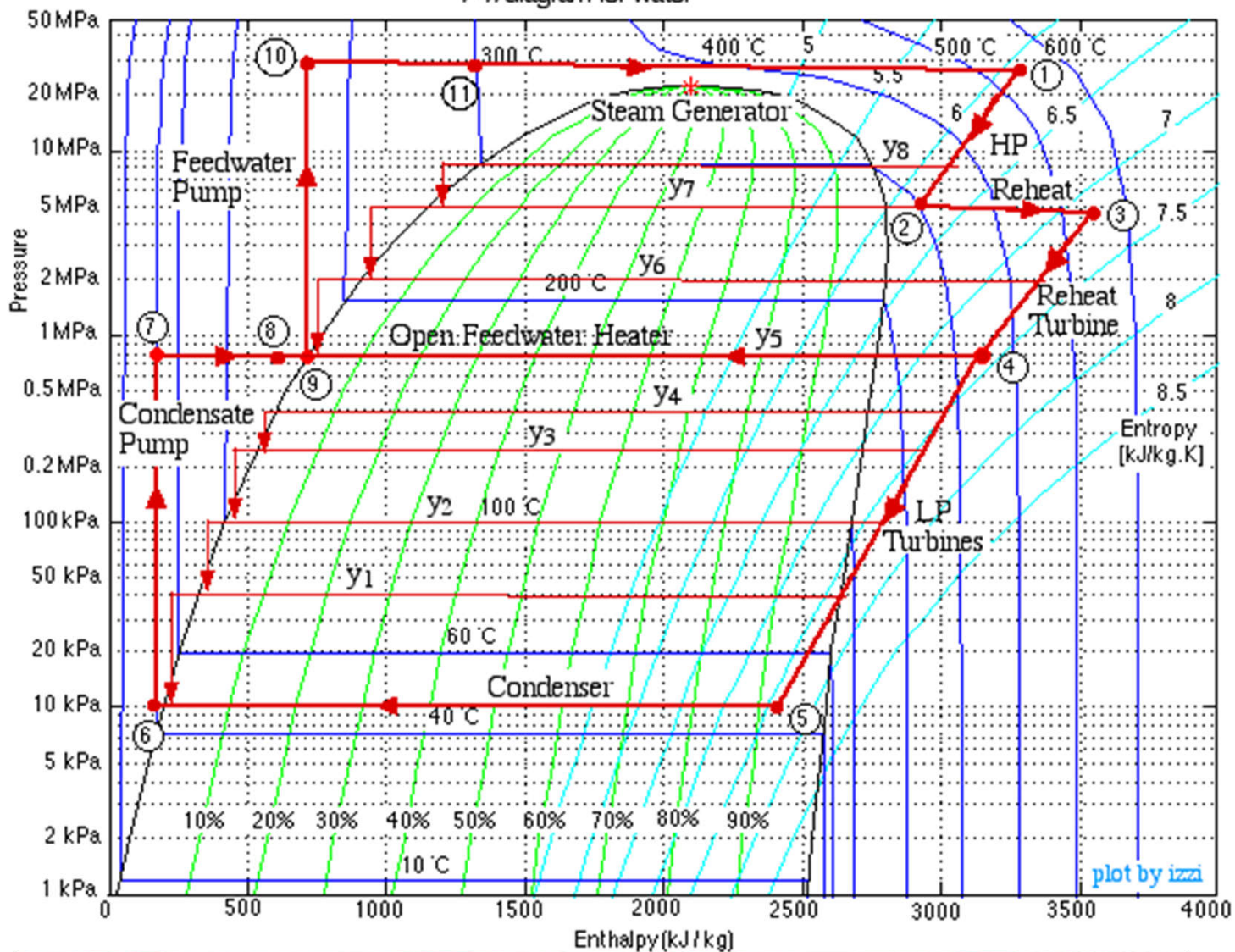




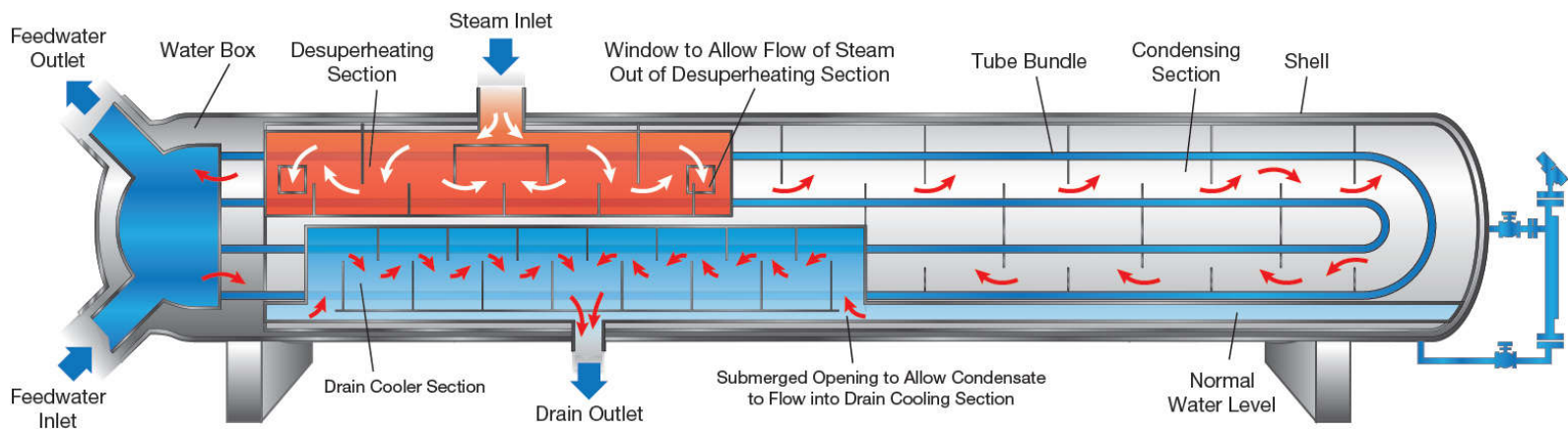
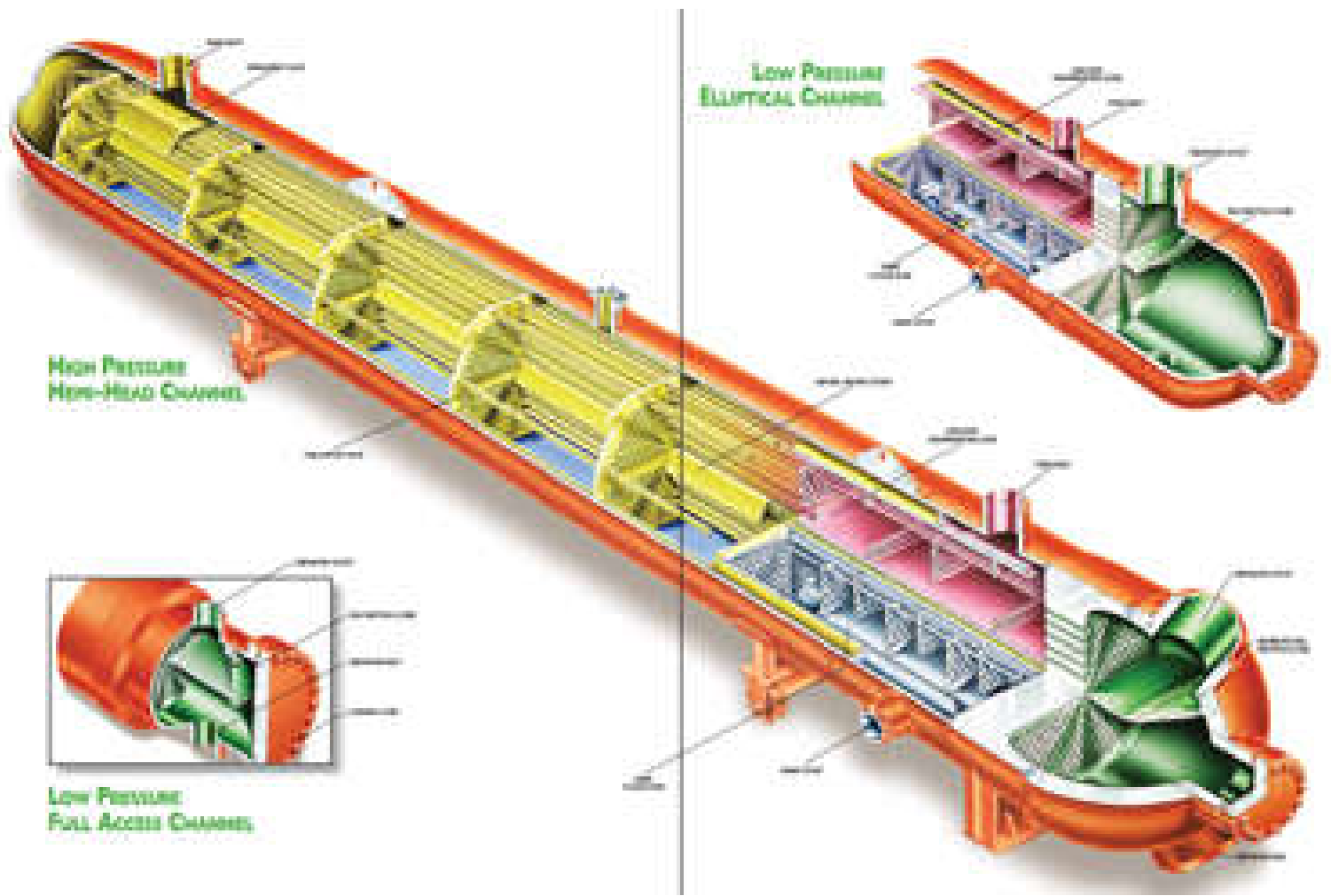
Prof Heller's
AIR-COOLED CONDENSATOR

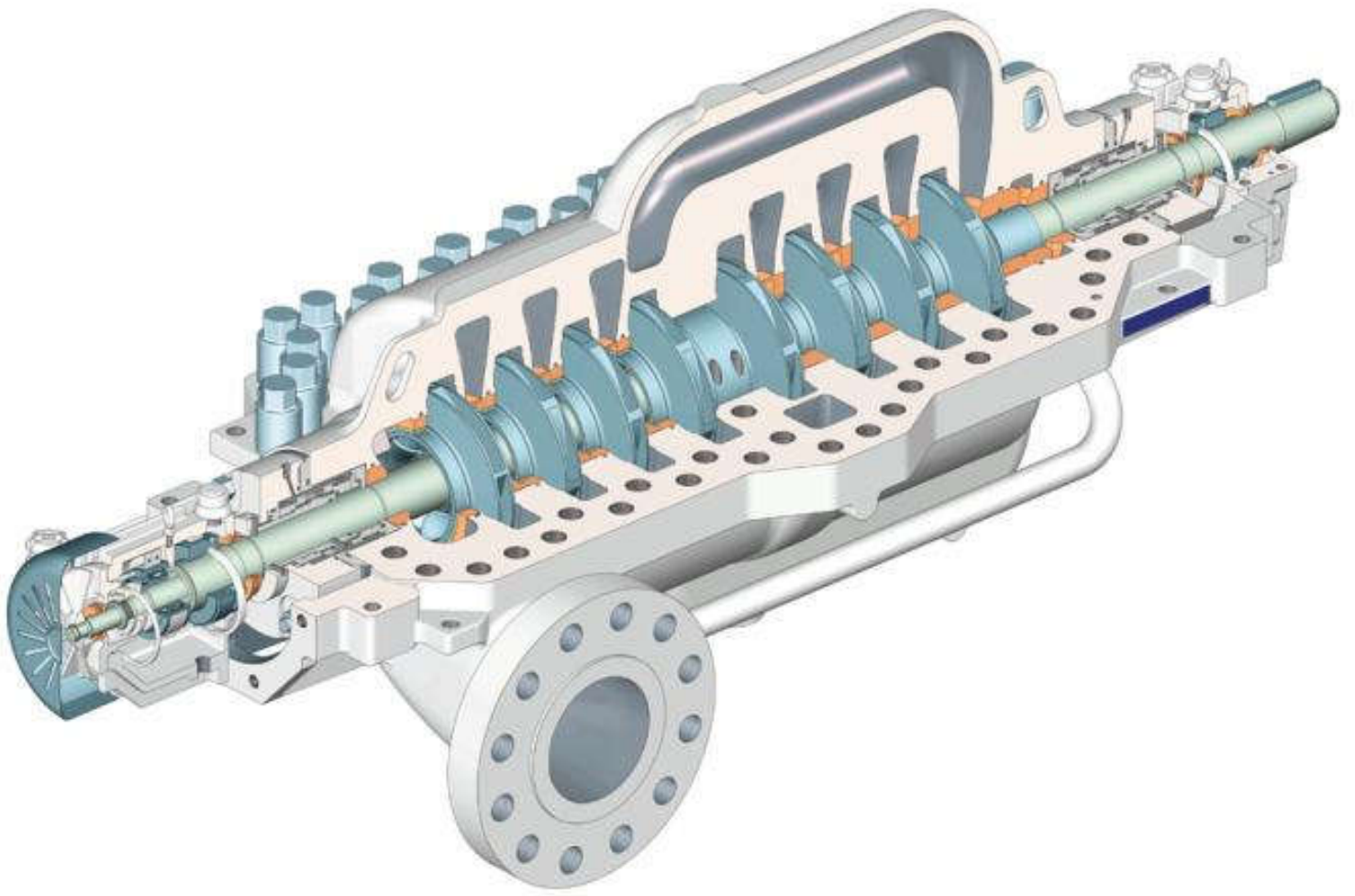


P-h diagram for water

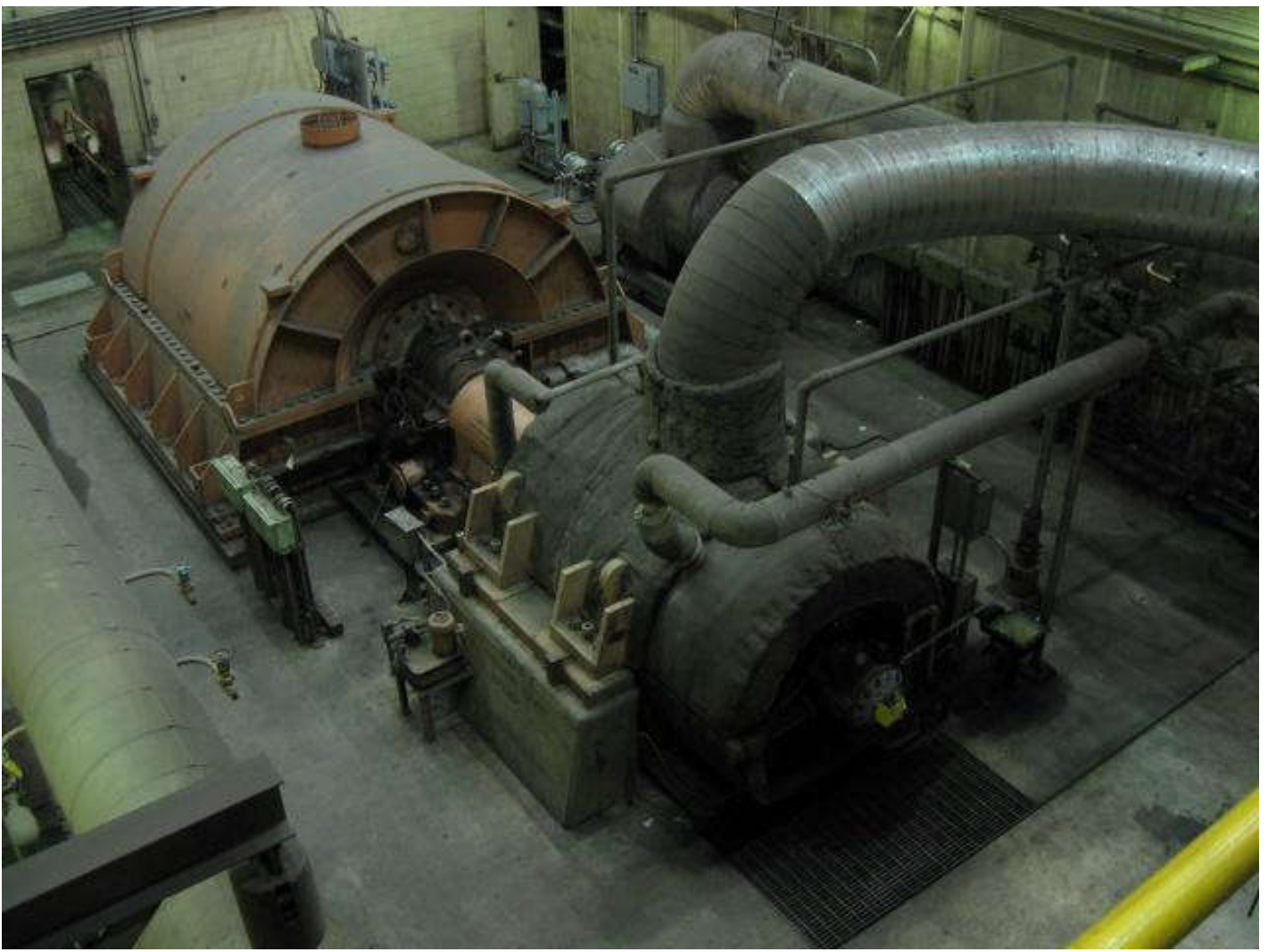
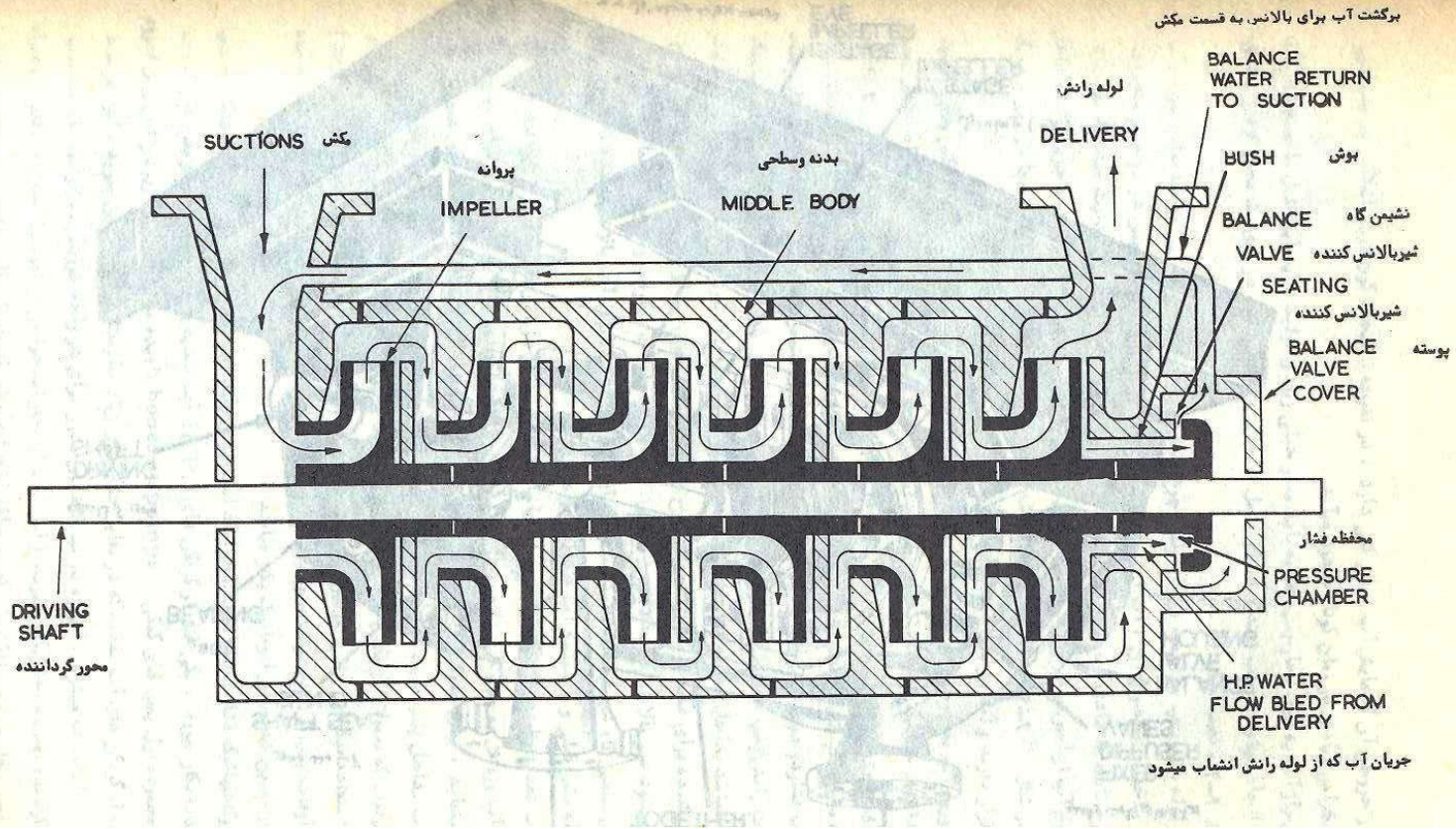




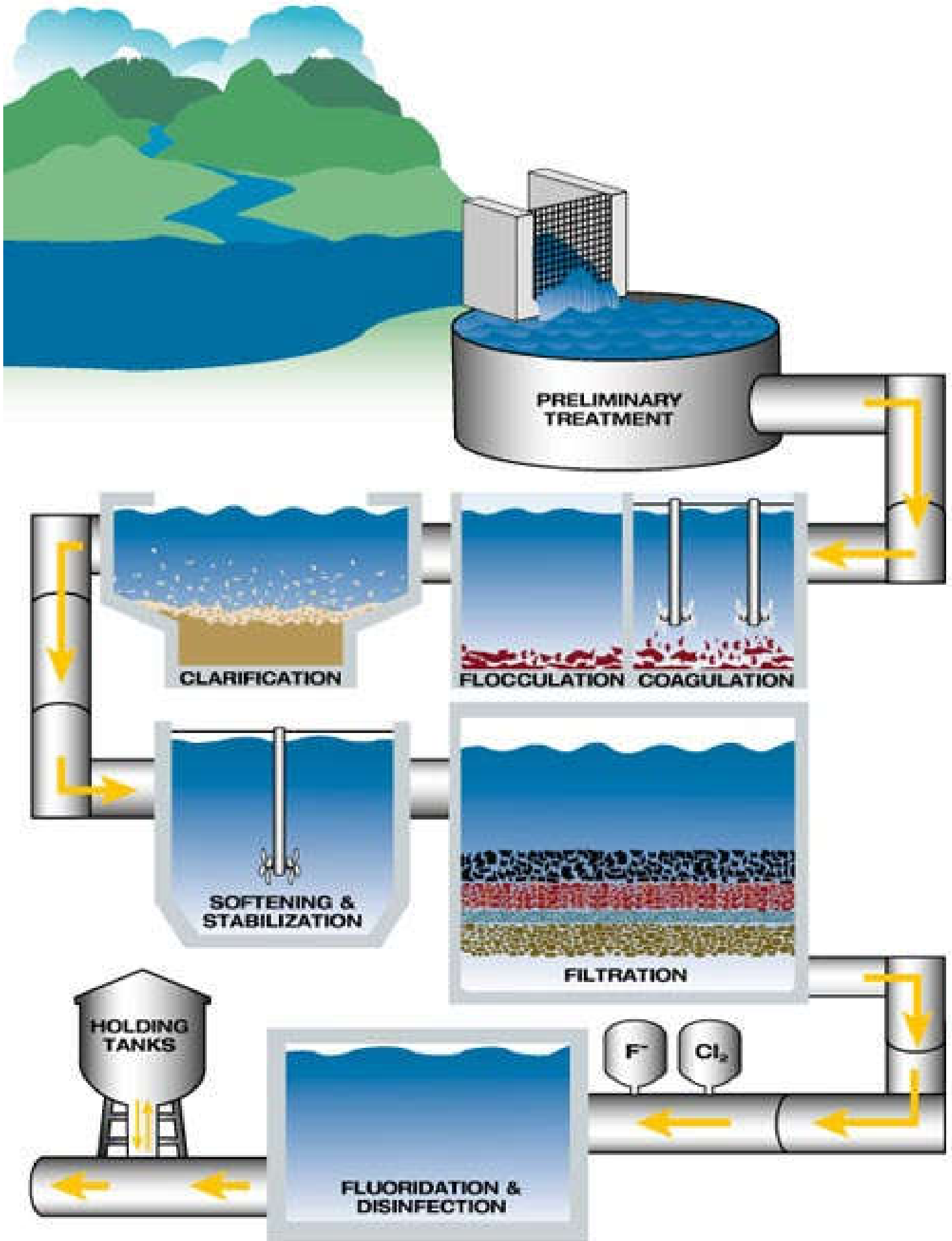


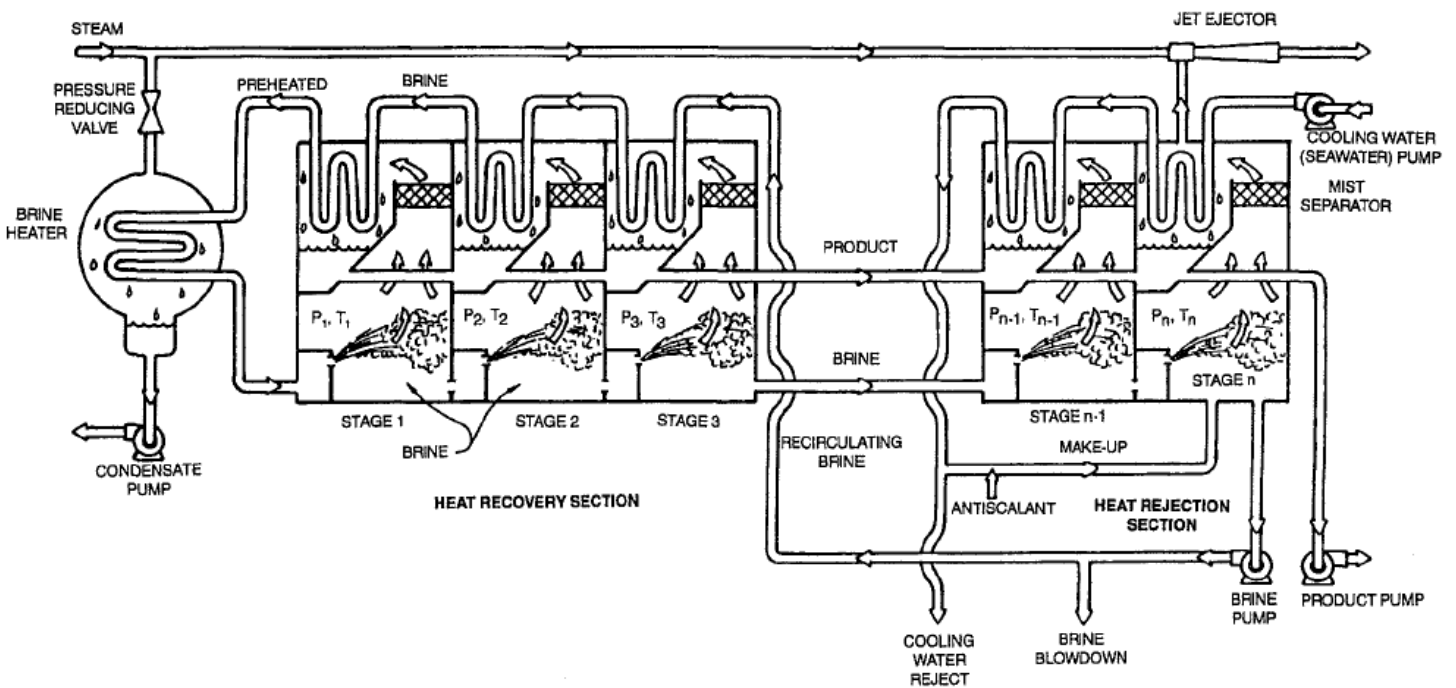
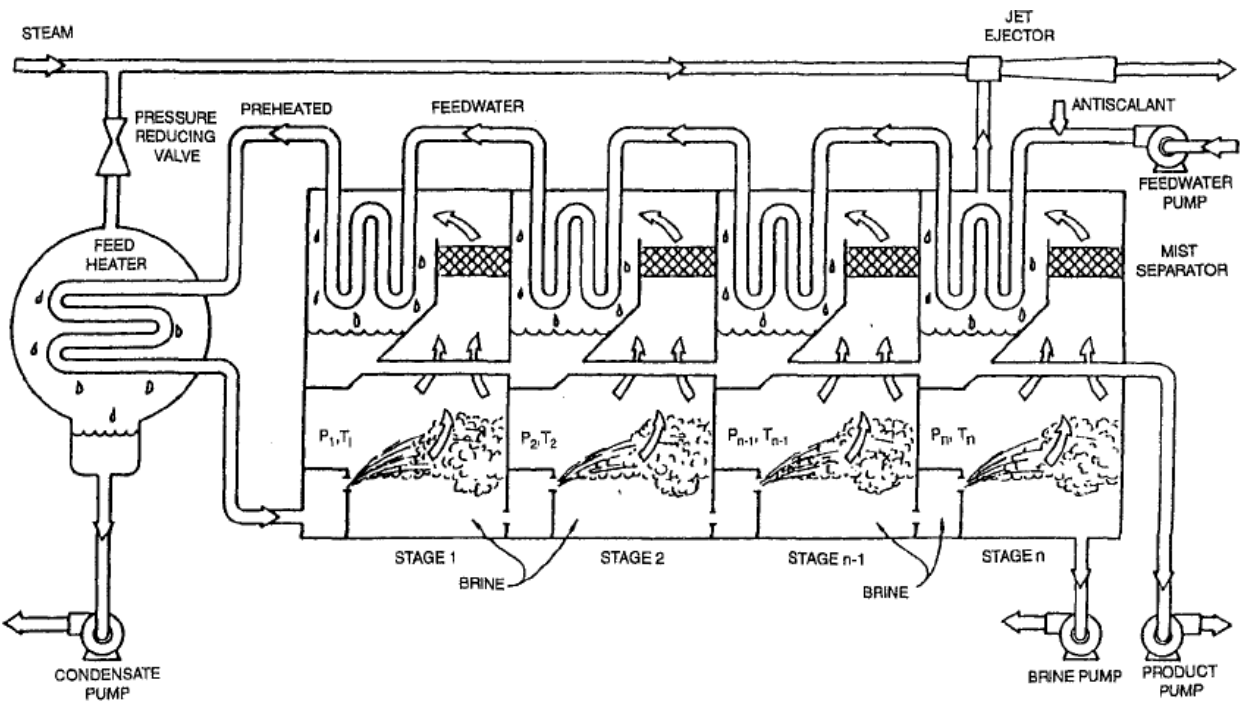


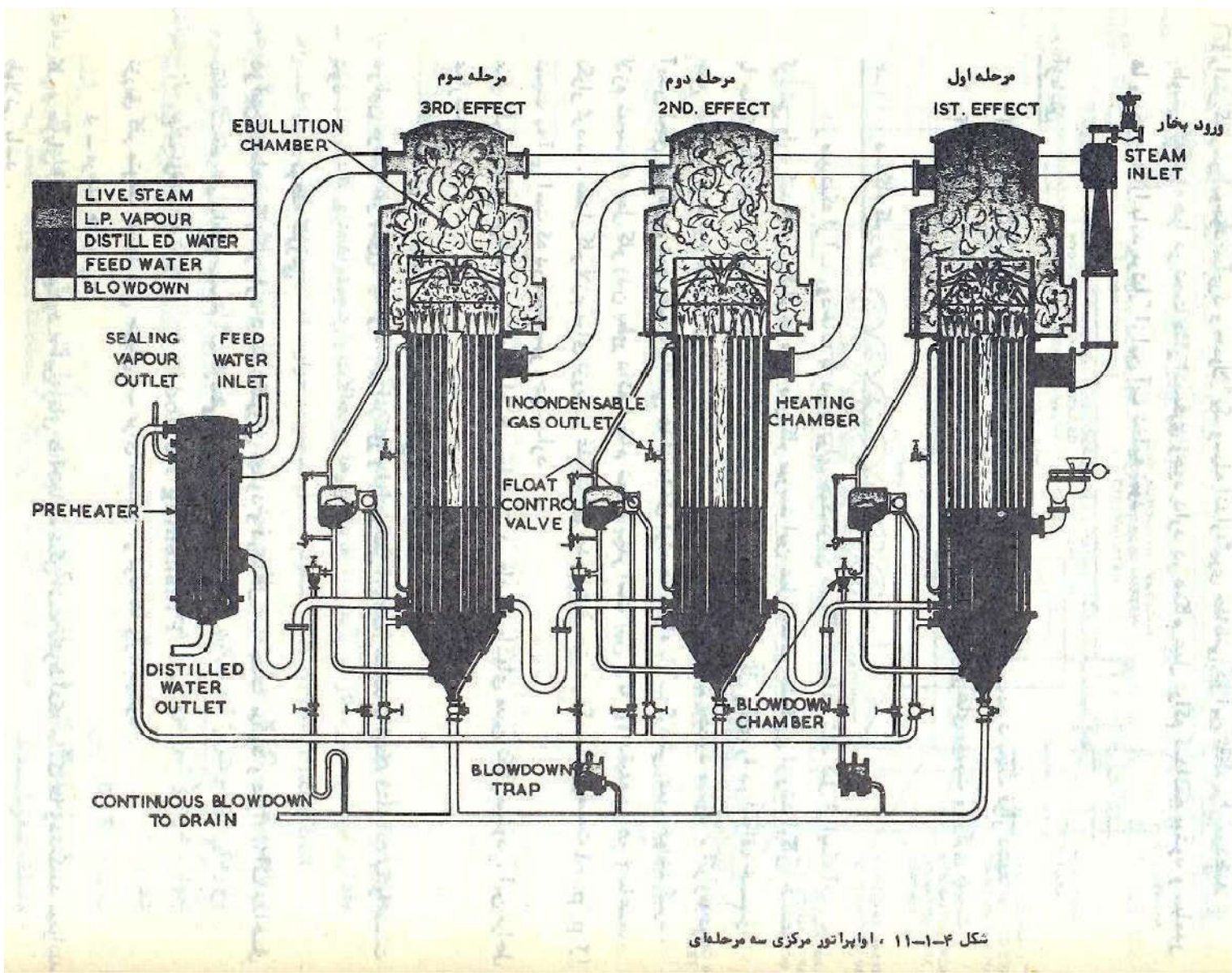
شکل ۲-۱-۲ - دی‌گرام ساده و پیمانه تقطیر بویلر به منظور نشان دادن مسیر جریان آب و شیر بالانس کننده





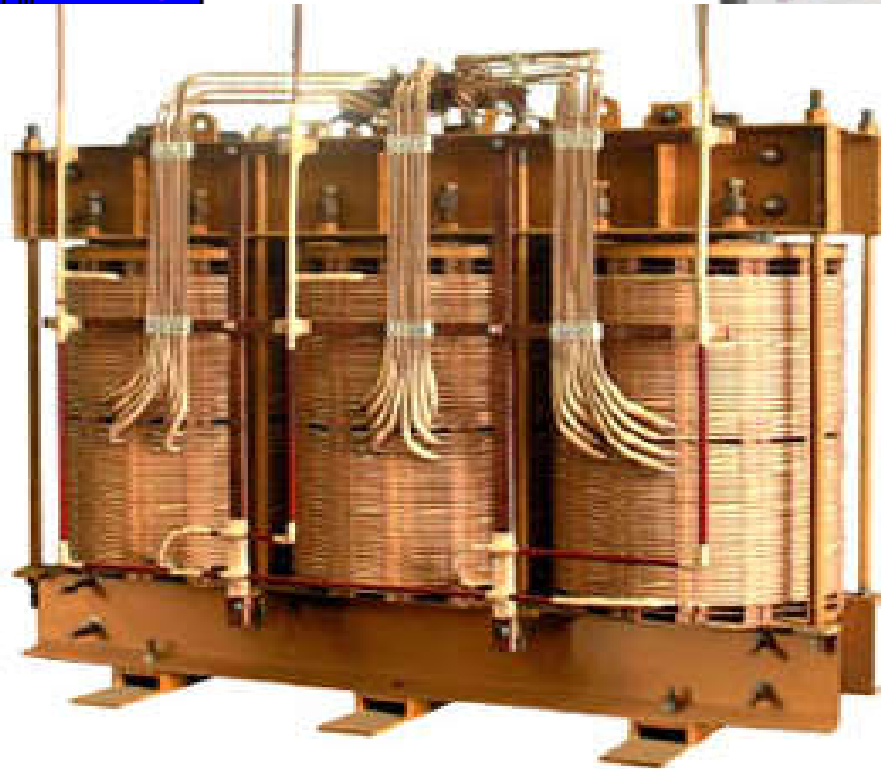
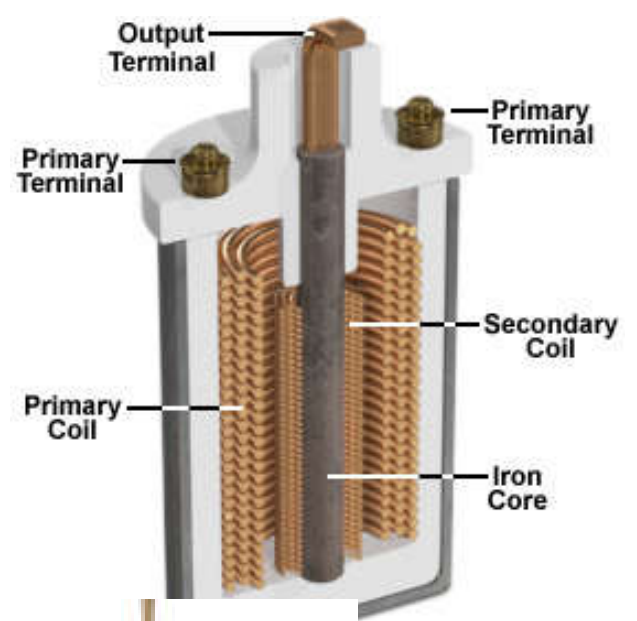
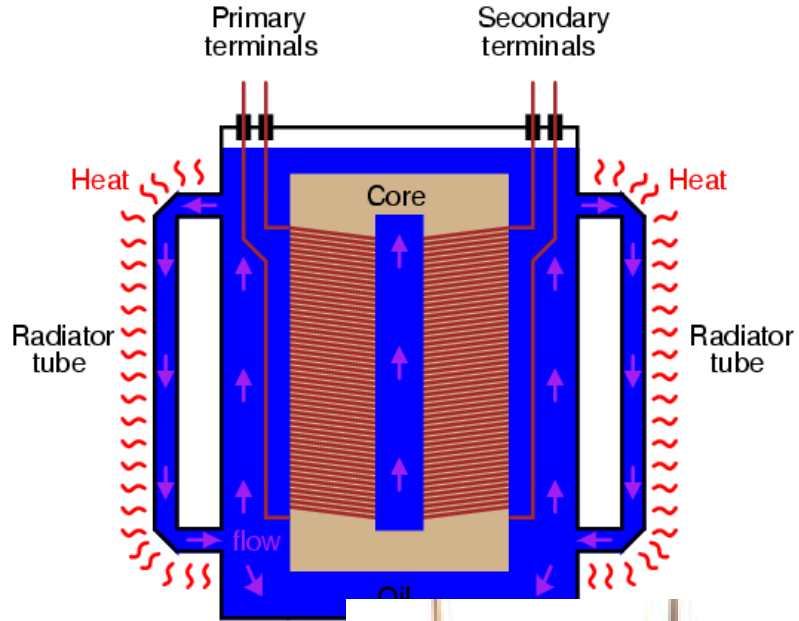






شکل ۴-۱۱. اواپراتور مرکزی سه مرحله‌ای

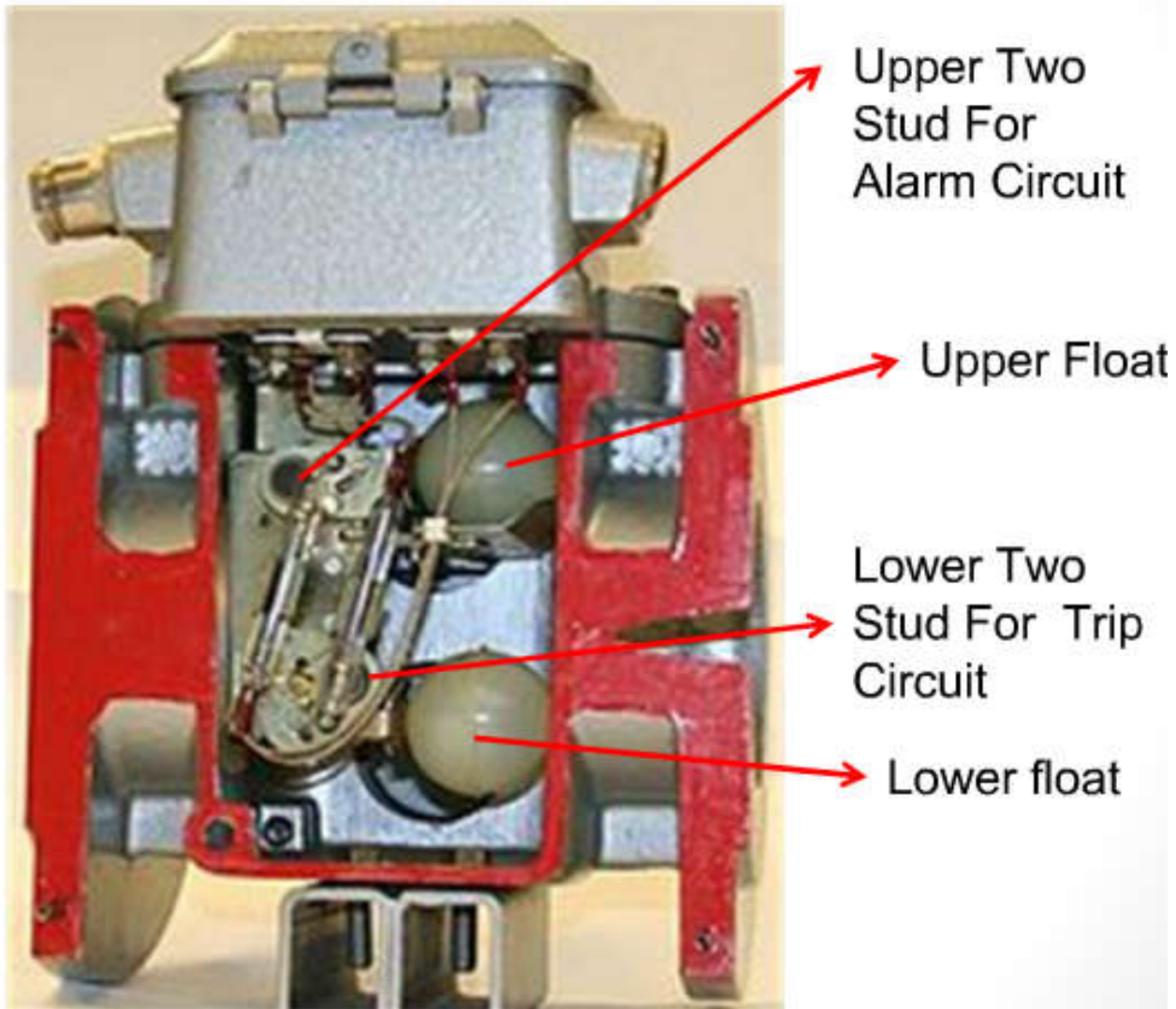
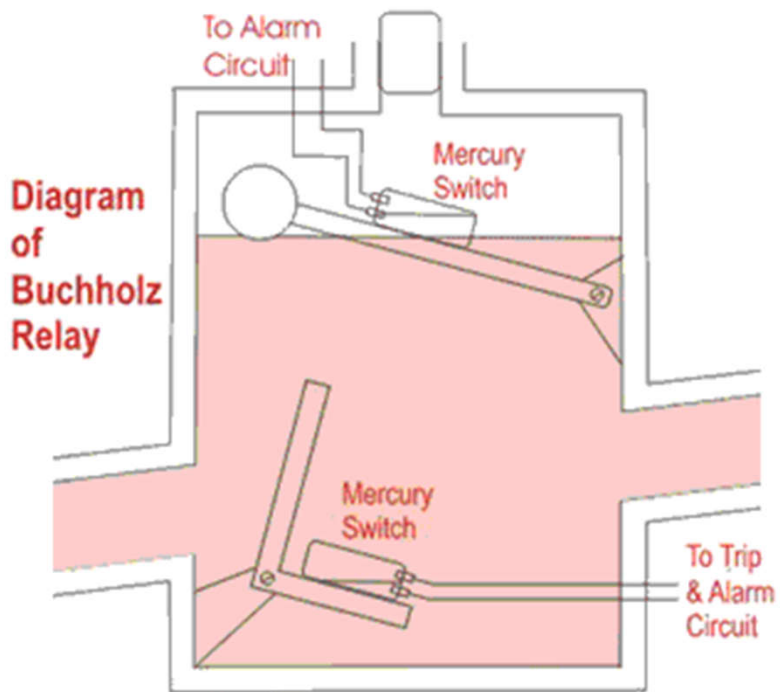




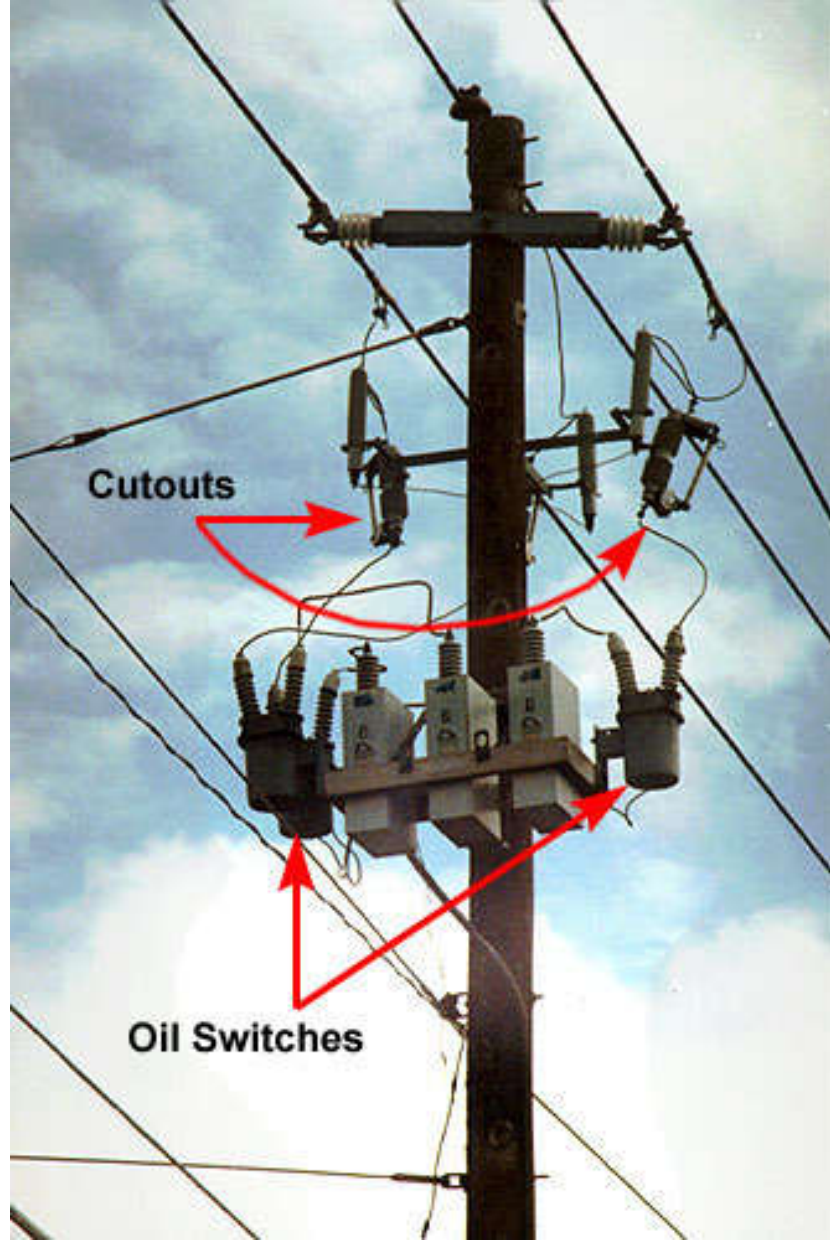
Inner View of Distribution Transformer

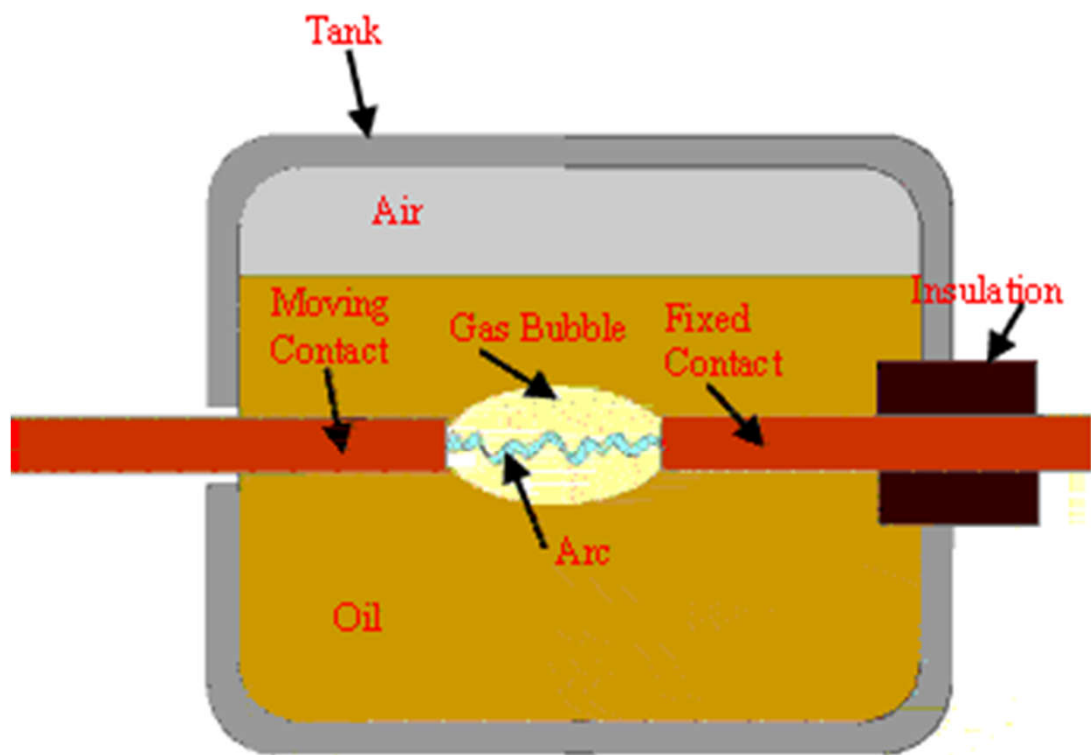












Conceptual view of Bulk Oil Circuit Breaker

