



大连海事大学
DALIAN MARITIME UNIVERSITY

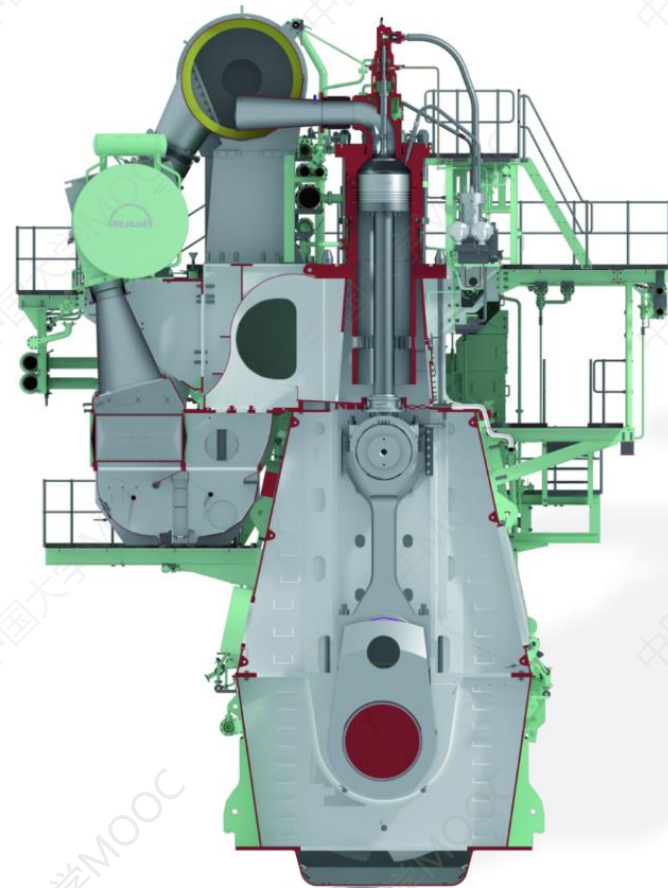
船舶电控发动机
数字课程

#4 柴油机系统

Acknowledgements: The technical contents of this presentation are mainly from the websites and training files of α -Laval, GEA and MAN Energy Solutions. Many thanks to them.
Contact us: dmumde@163.com

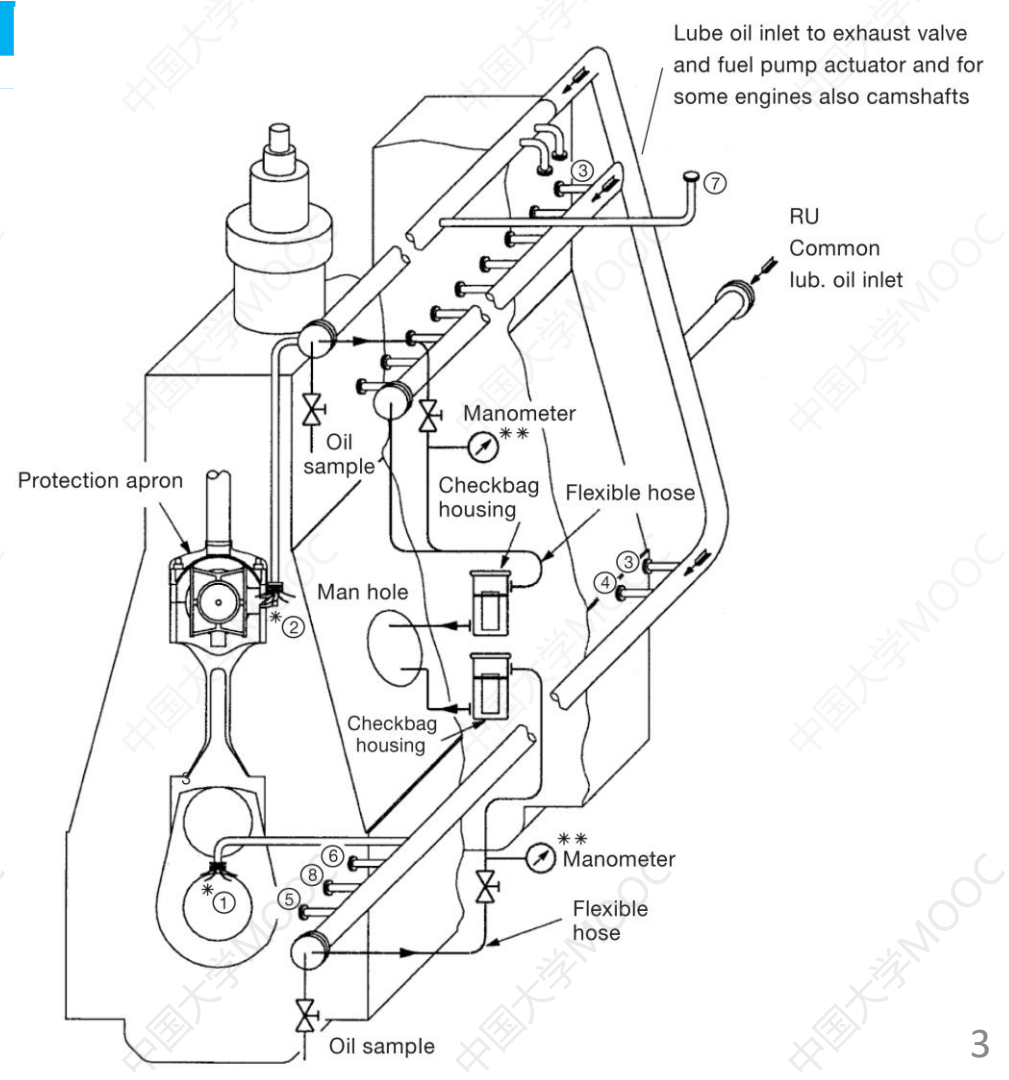
※ 内容提要

- 燃油系统
- 滑油系统
- 冷却系统



※ Lubricating Oil System

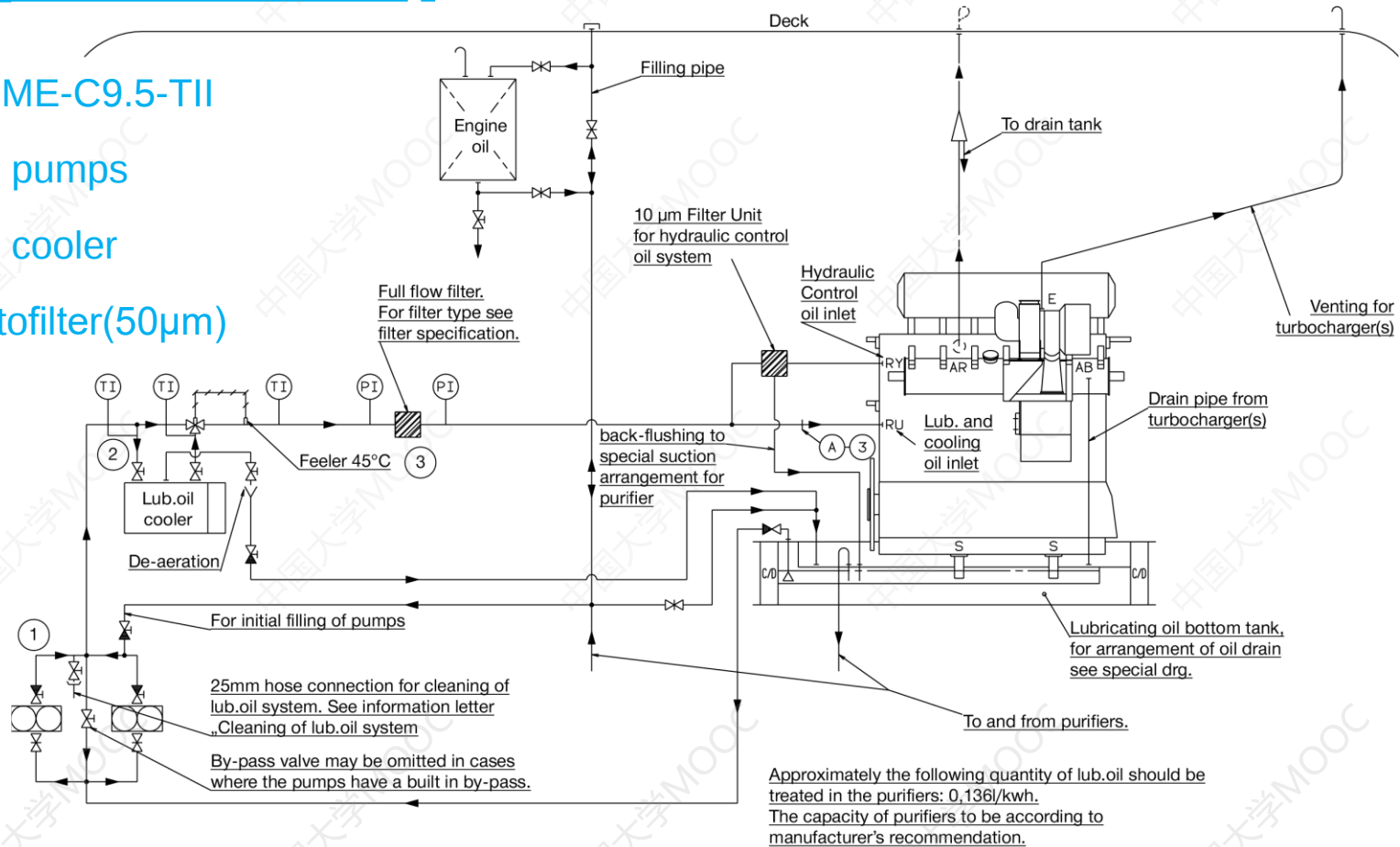
- Circulating Oil /System Oil
 - Bearing lubricating
 - Piston cooling
 - ❖ Servo oil for HPS/HCU
- Cylinder Oil
 - Cylinder lubricating



※ Circulating Oil System

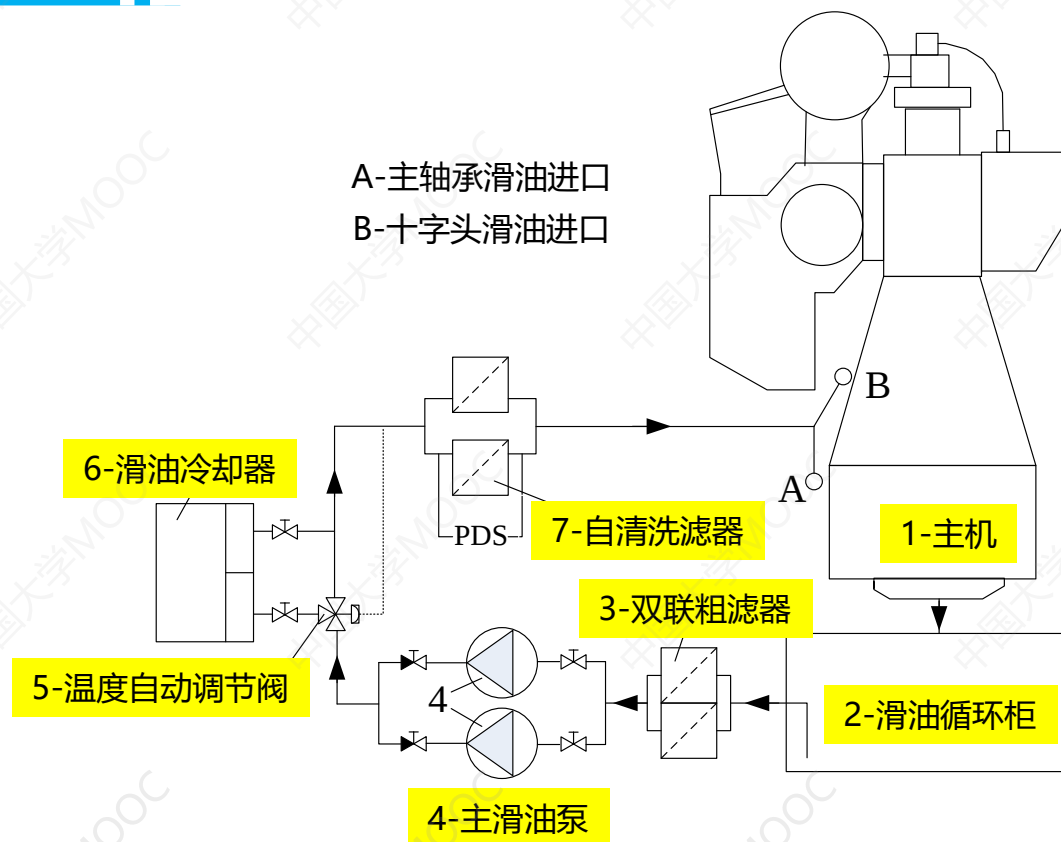
- MAN G50ME-C9.5-TII

- ①-LO pumps
- ②-LO cooler
- ③-Autofilter(50μm)



※ Circulating Oil System

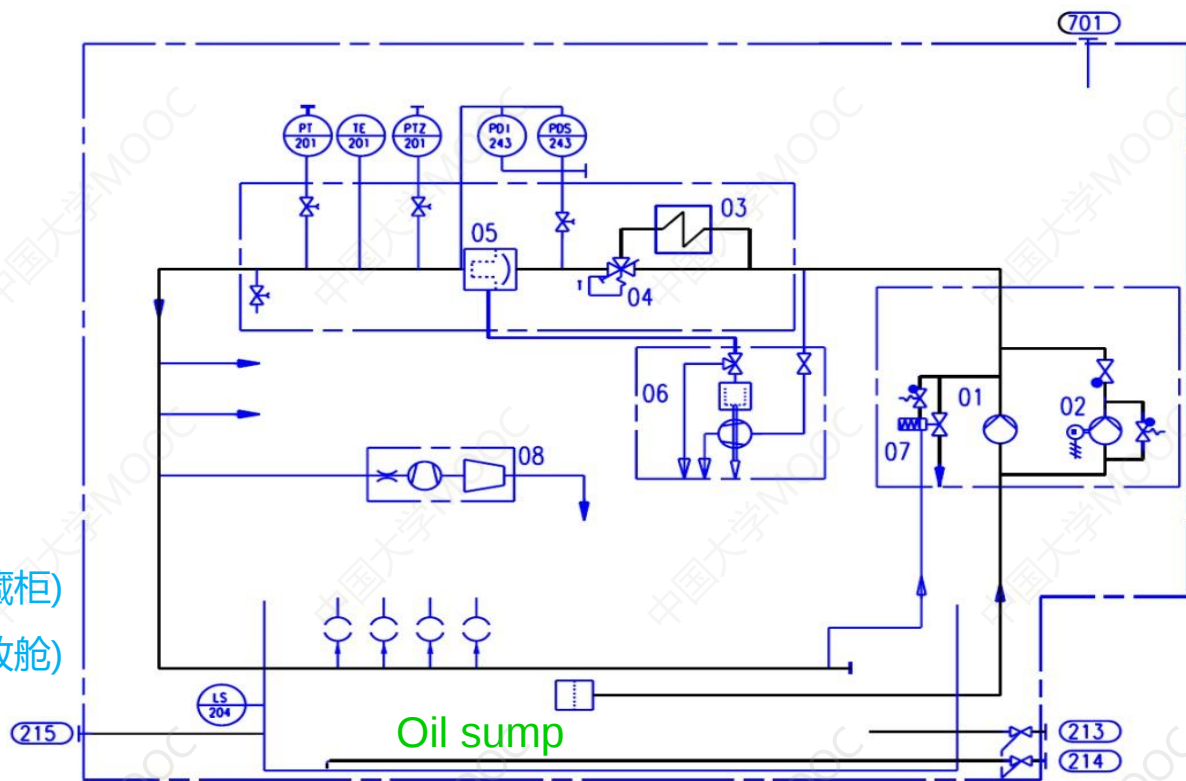
- LO pumps
- LO cooler
- Autofilter



干油底壳式曲轴箱油润滑系统

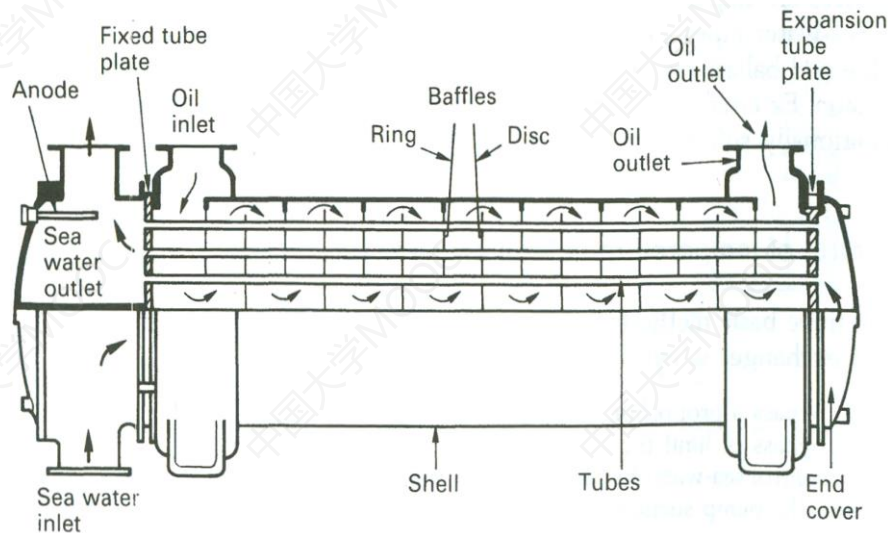
※ Circulating Oil System

- 01-机带滑油泵
- 02-电动滑油泵(预润滑油泵)
- 03-滑油冷却器
- 04-恒温阀
- 05-自清洗滤器
- 06-离心滤器
- 07-调压阀
- 08-增压器
- 213-滑油进口(自分油机或贮藏柜)
- 214-滑油出口(至分油机或泄放舱)
- 215-加油口
- 701-透气口



湿油底壳式曲轴箱油润滑系统

- LO cooler



Shell-and-tube type heat exchanger

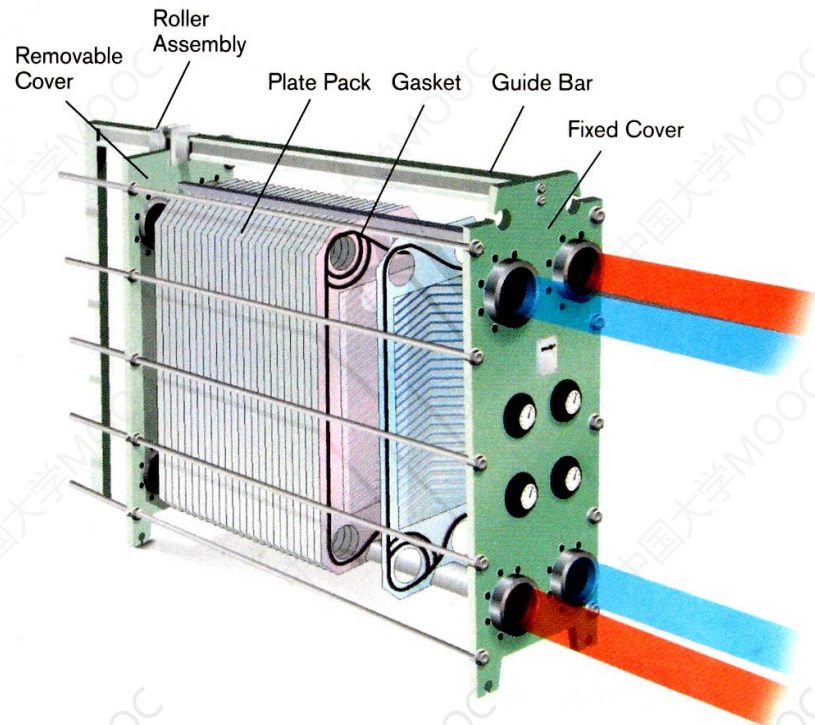


Plate-type heat exchanger

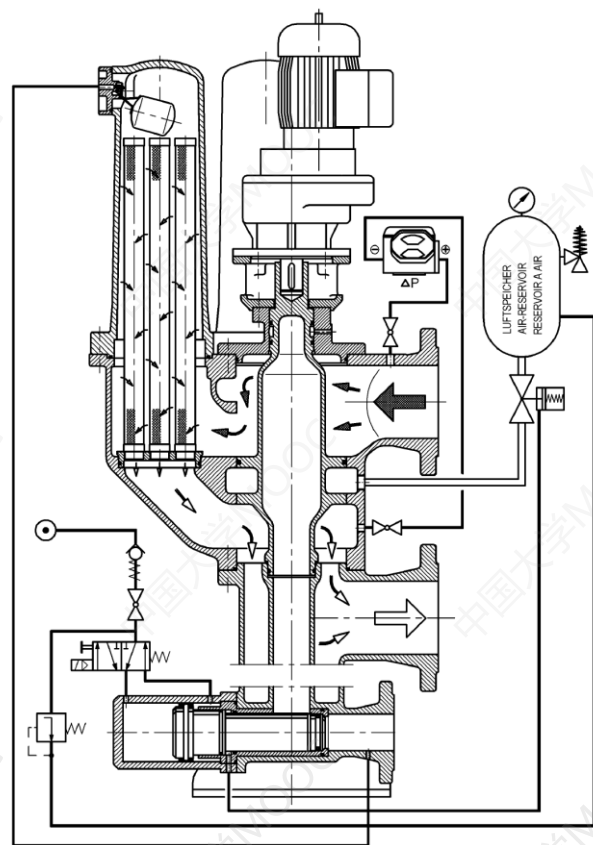
- Autofilter



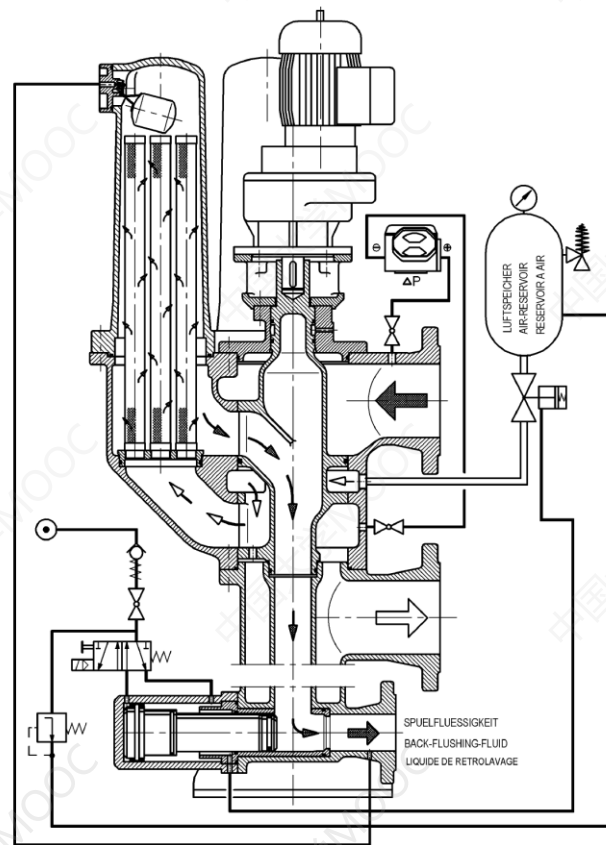
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※ Circulating Oil System, Autofilter

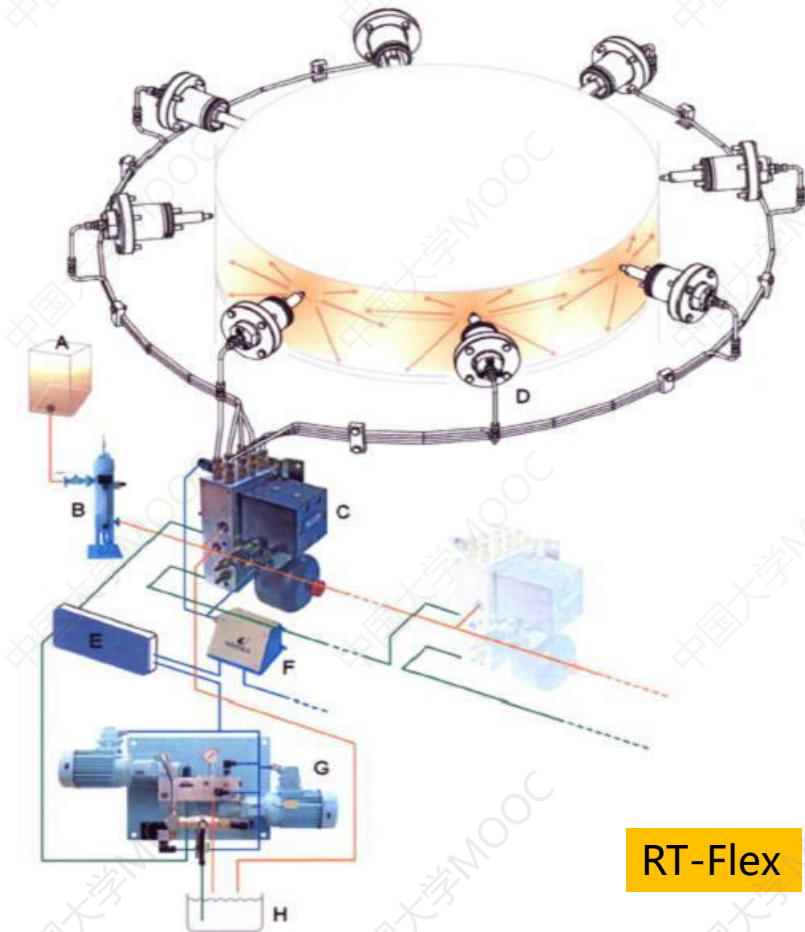
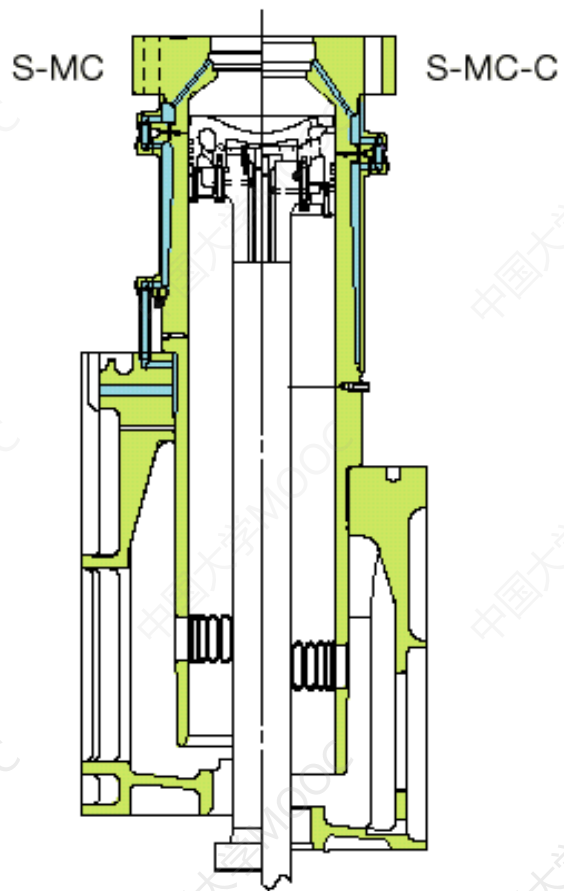


Filtering process



Back flushing process

※ Cylinder Lubrication



RT-Flex

• 气缸油系统图

- 1-主机
- 2-气缸油储存柜
- 3-气缸油驳运泵
- 4-手动泵
- 5-气缸油日用柜
- A-气缸油注油单元

