

盘式制动器，离心离合器在船舶的应用

Disc Brake & Centrifugal Clutch Wide-ranging Marine Uses

主要使用目的 Main applications

◎盘式制动器Disc brake

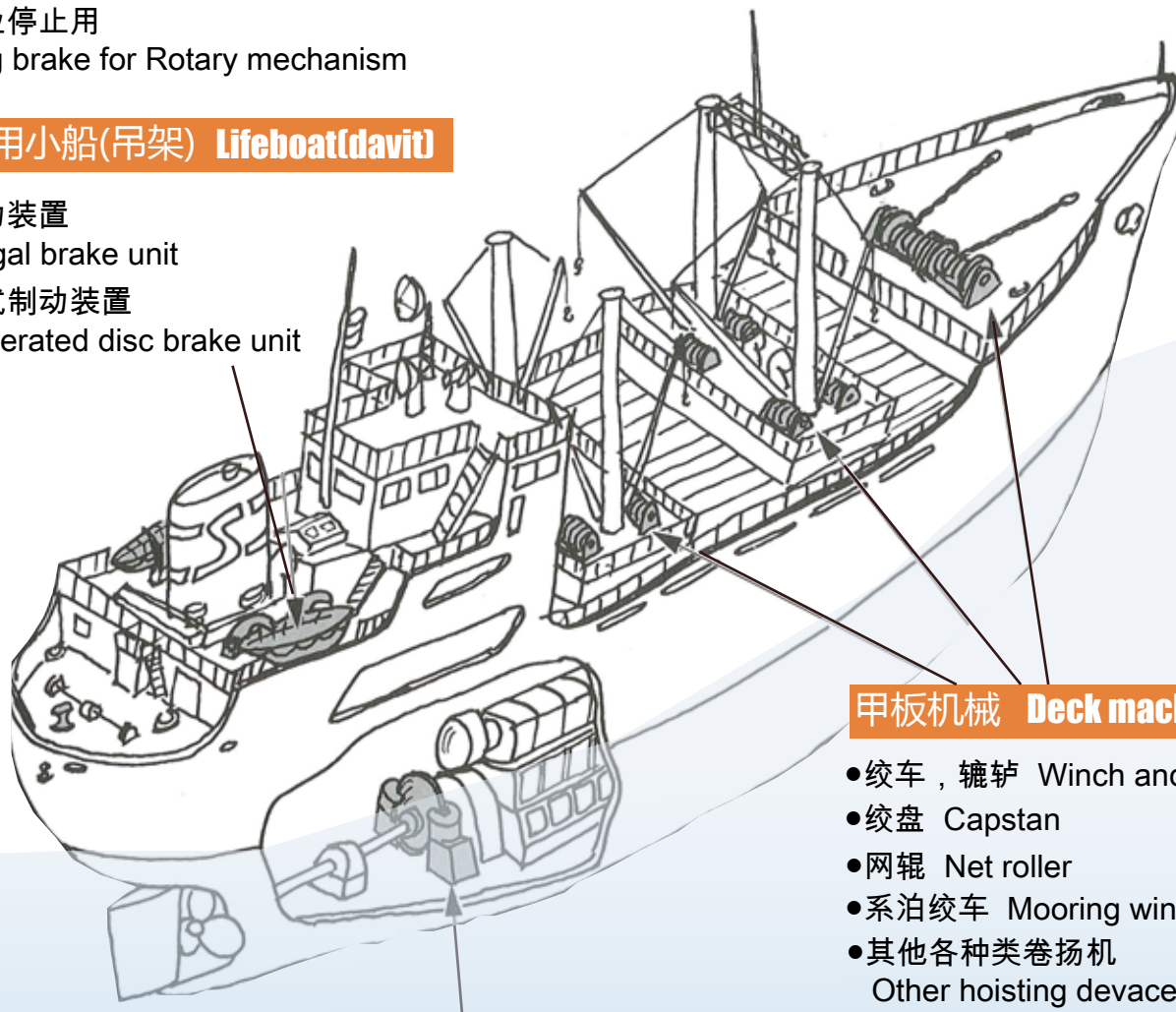
- 船舶操纵制动(张力)
Main control brake(tension)
- 失效保护制动
Fail-safe brake
- 绑扎制动
Locking brake
- 回转作业停止用
Stopping brake for Rotary mechanism

◎离心离合器Centrifugal clutch

- 柔性联轴器
Flexible coupling
- 软起动
Cushionstart
- 过载保护
Overload protection

紧急脱逃用小船(吊架) Lifeboat(davit)

- 离心制动装置
Centrifugal brake unit
- 手动盘式制动装置
Hand-operated disc brake unit



甲板机械 Deck machinery

- 绞车，辘轳 Winch and windlass
- 绞盘 Capstan
- 网辊 Net roller
- 系泊绞车 Mooring winch
- 其他各种类卷扬机
Other hoisting devaces

螺旋桨轴制动装置 Propeller shaft brake

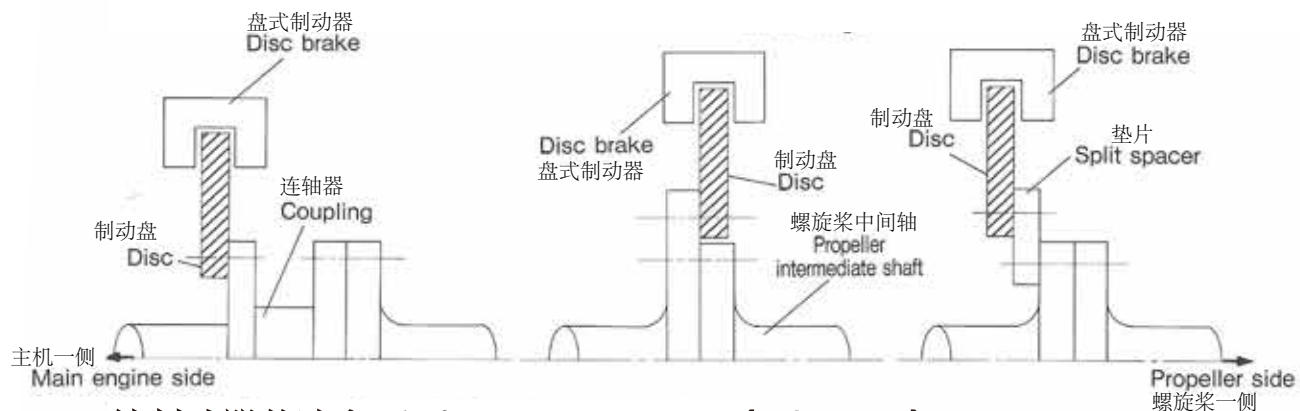
- 防止空转 Idle running prevention against
 - 螺旋桨 Propeller
 - 渔船经过渔网区域时 Fishing net entangling(fishing boats)
 - 潮流引起的空转 Idle rotation by tidal current
- 全速意外停止(紧急制动) Crash astem(emergency brake)
- 双引擎双轴单轴航行时空转防止
Idle running prevention for single-screw sailing in twin-engine,twin-screw drive

● 特征 Features (disc brake)

- 可承受高频度
Withstand high-frequency use
- 短交期，低成本
Speedy in delivery and moderate in price
- 扭矩控制简单，无需考虑安装位置
Easy for torque control, mountable anywhere
- 摩擦片(来令片)更换简单
Simple for pad (lining) replacement

● 制动盘安装方法(无需船级检查)

Disc installation (Survey of ship classification not required)



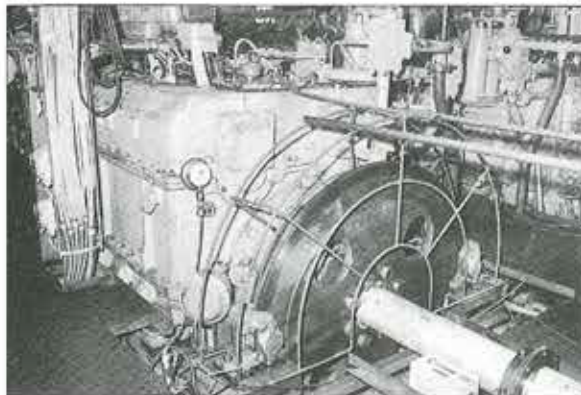
● 轴制动器的选定 (参考) Selection chart (reference)

	主机容量 Main engine capacity	液压制动器 Hydraulic brake type	气动制动器 Pneumatic brake type
小型 Small Type	~ 500PS	DB-2021	DB-3010, 3020
小中型 Small/Medium Type	~ 5,000PS	DB-2051	DB-3035
中型 Medium Type	~ 10,000PS	DB-3045	DB-3036
大型 Large Type	10,000PS以上	DB-3050	—

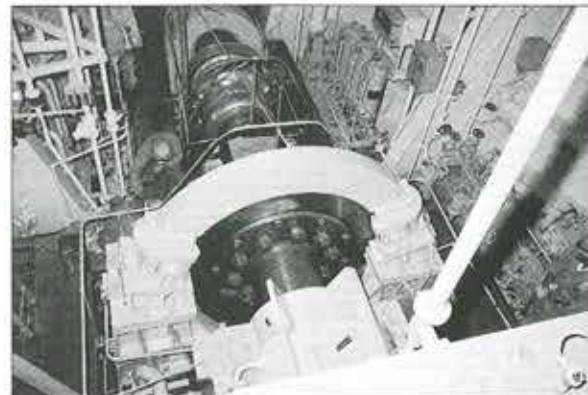
※控制系统(控制盘)另外商谈 Control system (Control panel) to be discussed separately

※如提供条件，可以通过能量，扭矩计算来协助选定制动器 Energy and torque calculations for brake selection are available upon your request

● 使用案例 Application examples



主轴 Main engine: 2,000PS
 轴扭矩 Axial torque: 4,000kgf-m
 使用制动器 Brake used: DB-2051, 2 units
 制动盘 Disc: 1,300(dia.) × 38 (t) mm



主轴 Main engine: 13,000PS
 轴扭矩 Axial torque: 50,000kgf-m
 使用制动器 Brake used: DB-3050, 4 units
 制动盘 Disc: 2,300 (dia.) × 50 (t) mm