ABSTRACT

DAMAGE ANALYSIS AND CHARACTERISTIC’S PUMP CALCULATION
OCCURRED IN CENTRIFUGAL’S SEA WATER PUMP TYPE VNF 7 / 300

Oleh
Bima Septian A.R.
NRP : 6308030043

Centrifugal pump is a pump type most widely used in industry. In a
cursory view of the centrifugal pump have ample use of the area. Briefly
centrifugal pumps are used in various fields, such as the engine power or heating
installations, chemistry, and in the field of shipbuilding. In the field of shipping,
centrifugal pumps can be used as a pump to empty and fill the oil on the tanker
and can be used to pump sea water into the system bilga and ballast in the ship.

In bilga and ballast systems, these pumps can be used to pump sea water
that serves as a conduit of stability on ships and can be used to munyuplai
seawater as cooling water machines and the need to clean some places inside the
ship. According to the process of energy transfer and liquid as the material flow is
the centrifugal pumps including hydraulic fluid flow machinery. This can be
known from the energy transfer process in the blades or the impeller pump wheel
and the road as a result of the deflection of the fluid flow stream.

Centrifugal pumps belonging to the type of dynamic pressure pump, which
has an impeller type pump that serves to lift the fluid from a lower to a higher or
lower pressures than to the more tinngi teknan. The workings of this pump is the
fluid from the outside coming in through the suction pump and deliver power to
the pump shaft to rotate the impeller into the pump house, then the fluid around
the impeller will also be spun as a result of the impeller drive. The emergence of
centrifugal force contained on this pump cause fluid to flow from the center of the
impeller and out through the channel between the impeller blades. Fluid coming
out of the impeller housed inside the pump house (volute) and channeled toward
the discharge pump.

Characteristics of centrifugal pumps is determined by quantities such as
capacity, high-pressure fluid, the power needed to rotate the pump, and efficiency.