



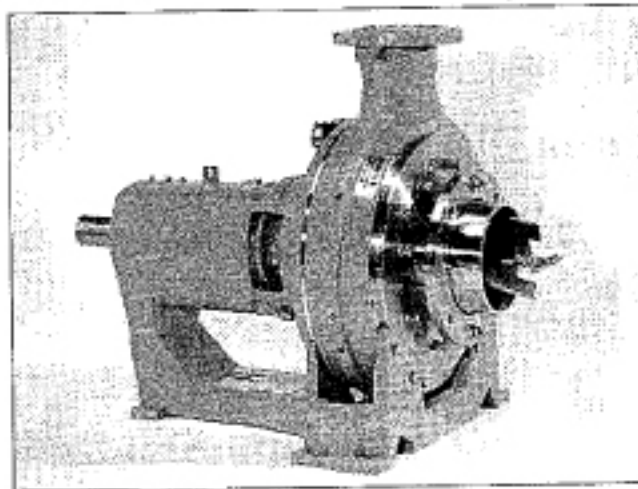
Technical Discussion

Design Operating Conditions	
Pulp Type	Softwood Kraft Pulp
Pulp Tonnage Rate – Design	880 ADST/d.
Pulp Tonnage Rate - Minimum	660 ADST/d.
Consistency	12% O.D.
Pulp pH	10-11
Pulp Temperature	185°F

DUFLO™ Pump

The new generation of the DUFLO™ Pump will meet expectations for all types of pulp. The integrated vacuum pump is a significant technical advantage and is widely appreciated by our customers.

Kvaerner Pulping (Now GL&V) introduced the DUFLO pump into the market during the PulPaper exhibition 1995 in Helsinki in Finland. The introduction was very positive and so far after we have sold 550 – 575 units of different sizes worldwide.

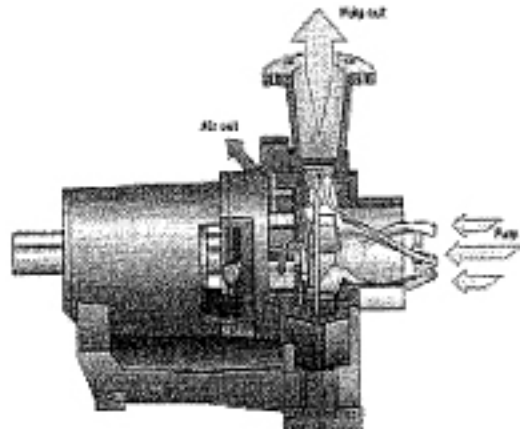


The new generation of Medium consistency pumps type DUFLO™ is equipped with a new type of Impeller, which improves the efficiency and reduces the electrical power consumption. The built-in vacuum system has been equipped with a new vacuum impeller to increase the vacuum pressure and improve degassing capacity.



Technical Discussion

The main component in the DUFLO™ pump is the impeller. Typical for this one is the splitter flow in the pump housing. The impeller is equipped with blades both on the front side and the back, and a flow communication between the front and the back.



This unique design gives the DUFLO™ pumps both better efficiency and also lower mechanical loads of the bearing unit. The adjustable vacuum pump increased also the installation flexibility. The high efficiency of the new DUFLO™ pump is well proven. With the use of modern variable frequency control motors, further improvements in energy efficiency are now available. These improvements in pumping efficiency are especially dramatic when compared to early designs of medium consistency pumps.

Degassing system

The built-in vacuum pump system has been equipped with a new vacuum pump impeller to increase the vacuum pressure and improve the degassing capacity.

Mechanical features in addition to the integrated vacuum pump include modular design, good installation flexibility, and the well-balanced DUFLO™ Impeller. These features provide the technical basis for the success of the DUFLO™ Pump



Commercial Offer

Pricing

Item No. 101 Second O₂ Stage Booster Pump - One (1) DUFLO™ Model 38/25 Medium Consistency Pump in CG8M wetted parts construction complete with internal vacuum system. Less motor, instruments and controls.

Price : FCA (Manufacturing Facility)..... \$144,500.00 (US\$)



Equipment Specifications

Item No. 101

38/25 DUFLO™ Medium Consistency Pump

Design	Medium consistency Type DUFLO™
Metallurgy	All surfaces in contact with stock in CG8M construction.
Degassing system --	Prefabricated degassing system with pipes, pressure gauge, suction hose mounted on a panel with flow meters and valves for the internal degassing system.
Coupling --	Spacer coupling with coupling guard.
Sealing --	Mechanical seal
Motor Base --	Fabricated base frame, common support for pump and the next size motor.
Motor Requirement --	Motor By Customer
Type:	Standard foot mounted induction motor, suitable for vertical shaft down installation. Motor to have NEMA Design "B" torque characteristics.
Size:	700 HP.
Speed:	1800 RPM.
Supplied By:	Customer.