

Modular Pump Design

Product / Project	Rotary Lobe Pump – Circumferential Piston Pump
Objective	Design of New product Development for new series of Pump combining features from RLP & CPP. Modular in construction
Customer Inputs	<ul style="list-style-type: none"> • New Pump Specifications • Existing pump details and specification • Competitors foot print
Challenges	<ul style="list-style-type: none"> • Understanding the Design Intent • Dynamic Inputs/Requirements changes with feedback from Prototype, Alfa testing in-house, Beta testing at customers • Meeting the requirement of precision & Hygiene Standards.
Our Approach	<ul style="list-style-type: none"> • Understanding the scope of the Work clearly & precisely. • Understanding the Product (Function & Feature) & developing concepts • Engineering calculation for Bearing life, Shaft strength, Gears • Part assembly modelling & drawings for manufacturing. • Motions study, Tolerance study done at part & assembly level
Benefits	<ul style="list-style-type: none"> • Implemented PDM-Works to handle file revision control • Best practices of 3D modelling and assembly implemented • Best practices for Top down design methodology & advanced assembly techniques (Casting-Part/Full Machining) developed.