

# Energy Saving Reciprocating Pump

This pump series employs patented self-alignment technology to ensure concentricity and minimize wear. With synchronous isolation technology, the pump efficiency reaches 92.2%, exceeding national standards.



## Overview

### High-Efficiency Reciprocating Pump Technology

The 3ST series reciprocating pump is engineered for high-performance industrial applications, featuring patented self-alignment technology to ensure precision and reliability. By maintaining perfect concentricity between the plunger, filler, and guide sleeve, this pump significantly reduces frictional energy loss and minimizes component wear. This energy-saving design is ideal for demanding sectors such as oil and gas, chemical processing, and water treatment, where operational efficiency and durability are paramount.

## Performance Metrics

### Operational Efficiency

**92.2 %**

Pump Efficiency

**7 %**

Above National Standard

### Testing Certification

Hefei General Electromechanical Testing • National Pump Valves Quality Supervision

## Patented Technologies

### Core Innovations

- Double flow-way combination valve
- Synchronous isolation technology
- Hollow plunger assembly
- Double clamp rings assembly
- Automatic alignment device

## Technical Features

### Self-Alignment Technology

Patented technology ensuring concentricity of plunger, filler, and guide sleeve during assembly.

### Compliance Standard

GB/T9234-2008

## Applications

### Target Industries

Oil and Gas, Chemical Processing, Water Treatment, Industrial Fluid Delivery

## Design Benefits

### Reliability & Durability

- Elimination of excessive plunger wear
- Minimized energy loss from stuffing friction
- Robust construction for demanding environments
- High-precision reciprocating mechanism