

REQUEST FOR QUOTATION (RFQ)

Supply, Installation, Testing and Commissioning of a High-Pressure Dairy Homogenizer

Ref No.: LDFCS/04/RFQ/2026

Purchaser: LIMURU DAIRY FARMERS COOPERATIVE SOCIETY LTD

Country: KENYA

Issued on: 04/08/2026

Submission: limurudairy@gmail.com / engldfcs@gmail.com

Closing: 10/08/2026 at 10:00 AM

1. Introduction

LMPL invites quotations for the supply, installation, testing and commissioning of one hygienic high-pressure dairy homogenizer for continuous milk processing.

2. Design Conditions

Parameter	Requirement
Product	Milk
Capacity	5,000 Litres/Hour
Operating Pressure	200 bar
Design Pressure	250 bar
Homogenization	Two-Stage
First Stage Pressure	Adjustable up to 150 bar
Second Stage Pressure	Adjustable up to 50 bar
Particle Size	Average ≤ 1 micron
Product Inlet Temperature	50–65°C
Product Contact Parts	AISI 316L Stainless Steel
Homogenizing Valves	Tungsten Carbide or Stellite
Plungers	Solid Technical Ceramic or Hard Chrome-Plated Stainless Steel
Pump	Three-cylinder Reciprocating Piston
Lubrication	Forced Oil Splash with Oil Cooling
Machine Frame	AISI 304 Stainless Steel
Electrical Supply	415V, 3 Phase, 50Hz
Motor	37–45 kW IE3 or Better
Automation	PLC Controlled
Cleaning	Fully CIP Compatible
HMI Language	English
PLC Documentation	English
O&M Manuals	English

3. Scope of Work

A. High Pressure Homogenizer

- 5,000 LPH capacity.
- Two-stage homogenizer.
- 200 bar operating pressure.
- Automatic pressure regulation.
- Preferred manufacturers: GEA, SPX Flow (APV), Tetra Pak, Bertoli, FBF Italia, Hommak or approved equivalent.

B. Pump Assembly

- Three-cylinder reciprocating piston pump.
- Ceramic plungers.
- Forged crankshaft.
- Forced oil lubrication.
- Heavy-duty bearings.

C. Homogenizing Head

- Forged stainless steel block.
- Tungsten carbide/Stellite valves.
- Adjustable pressure stages.

D. Electrical & Control

- PLC (Siemens, Allen-Bradley, Schneider or equivalent).
- Colour HMI.
- Pressure monitoring.
- Alarm diagnostics.
- All software and documentation in English.

E. Installation

- Installation.
- Testing.
- Commissioning.
- Performance testing.
- Operator training.

4. Schedule of Supply and Prices

Item	Description	Qty	Unit	Unit Price	Total	Make/Model	Country	Remarks
1	5,000 LPH High-Pressure Dairy Homogenizer	1	No.					
2	Two-Stage Valve Assembly	1	Set					
3	Electric Motor	1	No.					
4	PLC/HMI Panel	1	No.					
5	Pressure	1	Set					

	Instrumentation							
6	Installation, Testing & Commissioning	1	Lot					
7	Operator Training	1	Lot					
8	O&M Manuals (English)	3	Sets					
9	One-Year Spare Parts	1	Lot					
10	24-Month Warranty	1	Lot					

5. Performance Guarantee

- 5,000 LPH capacity.
- 200 bar operating pressure.
- Average particle size ≤ 1 micron.
- Full CIP compatibility.
- 24-month warranty.
- English documentation.

6. Documentation

- Technical Datasheets
- GA Drawings
- Electrical Schematics
- P&ID
- PLC Backup
- HMI Backup
- Operation & Maintenance Manuals (English)
- Spare Parts Catalogue (English)
- Warranty Certificate

7. Commercial Requirements

- Equipment Cost
- Installation Cost
- Commissioning Cost
- Delivery Period
- Warranty
- Quotation Validity
- After-sales Support

8. Completion

The project shall be deemed complete after successful installation, testing, commissioning, operator training and acceptance by LMPL.