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PART 1
INTRODUCTION OF KALERM

Company Profile



- Private Company Established in 2010
- Located in Suzhou, **1 hour to Shanghai** Hongqiao Airport
- 340 employees/13,500sq.m plant
- Authorized as China National High-Tech Company, dedicated in design and produce of automatic coffee machines







National High-Tech

Mission & Vision



Mission

To create the greatest degree of pleasure and good coffee experience.

Vision

To be the most professional coffee machine designer & manufacturer in China.



R&D Capability

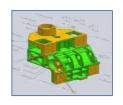


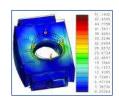


Advantage- 1

--Kalerm has full skills R&D team, all design works done in house except Industrial Design.

Experienced R&D Teams 63 staff

















Technical Research Team Mechanical Design Team Electronic Hardware Team

Software Team

Interface Design Team

IOT Team

Product Test Team

Patent Team

R&D Capability



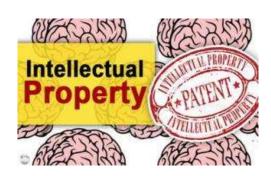


Advantage- 2

--Kalerm values intellectual property and develops own technologies without patent conflict globally.



Temperature Control, User Interface, IOT Applications ···

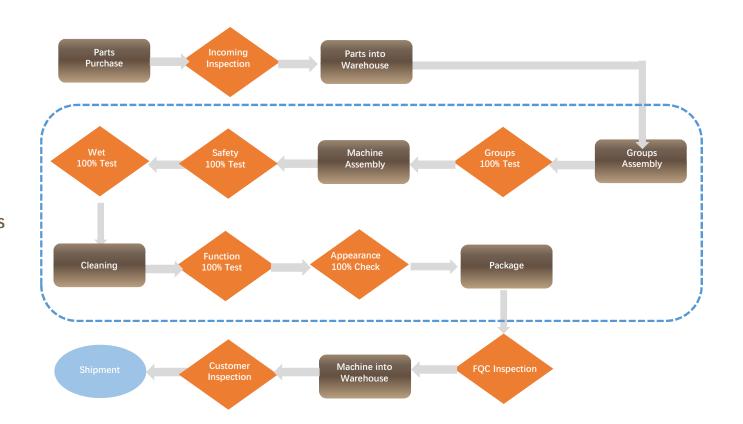


No.1 patents qty. regarding automatic coffee machine in China

Total number of patents	188
Patent for invention	60
Patent for utility	113
Other patents	15



- Full process quality management
- 100% functional testing in process





Environmental and Life Test Equipment

Chamber

Operating: 5~35C°

40%~90%

Storage: -20C°~60C°

10%~90%



Drop Testing ISTA-1A

Vibration

Random wave Max Freq.: 5Hz



Life Test Lab







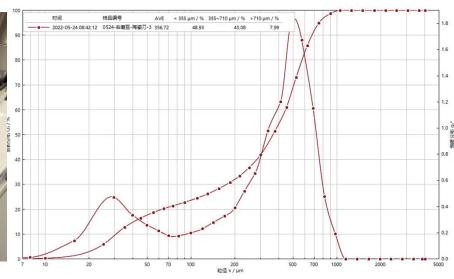
Powder particle size and shape Analyzer



TDS Analyzer

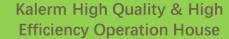












TQM	Lean	APS	Jidoka
ISO45001	IPD (APQP)	WMS	Poka-yoke
ISO14001	BSCI	MES	SPC
ISO9001	Kaizen	ERP	SOP/SIP

Fundamental Quality & Operation System

Consultants (Lean Manufacturing, Training org.)

Professional Labs (Reliability, Certification, Material Analysis) Strong Supply Base (Tooling, Material, Equipment, Logistic)

Outsourced Resources

Not Start

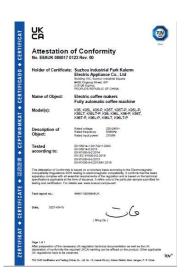
In Process

Implemented

Certification and Report

































Supply Chain



Global sourcing of key functional parts For better and stable quality















Filter









Solenoid Valve





Solenoid Valve





Miniature Motors

Strong local supply chain network For quick supply and cost control







Molding







Silicon Tube

Motor

PCBA







Thermo Block

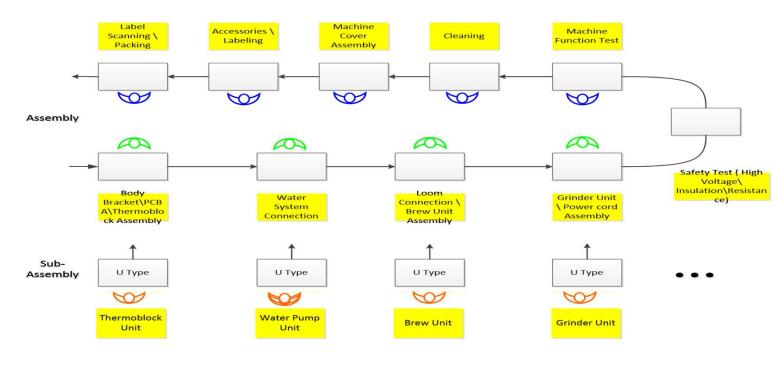
CNC

Sheet Metal

Operation System



Kalerm LEAN Manufacturing System can support both big batch and small lot



Production Line Layout

- 30 Flexible sub-assembly lines
- 5 U Type final assembly lines
- Multi-skilled operators to support quick line changes

Production Capacity

- Daily output: 250 machines
- Full line capacity: 400 machines
- Ramp up: 50% increase in 3 months

New Plant Plan



New Plant Plan

- -Planned capacity: 500,000 units/year
- -Put into use in Q3 2023



- Dedicated Production Line for key accounts
- Plan for injection workshop investment



MES System



Kalerm MES (Manufacturing Execution System) manages all production and quality on line and real time

Data collection

- Machine testing data (Temperature, volume etc.)
- Automatic judgment and failure model collection.





Quality Improvement

- FPY (Fist Pass Yield) monitor
- CPK control
- Reject rate reduction.

Traceability system:

- Key groups tracked by barcode system.
- Individual ID for each machine.
- Keep each machine's production history in MES.





Production efficiency measurement:

- Real time orders' status
- Line balance/cycle time analysis
- Production efficiency improvement



















Key Accounts-OEM/ODM





Lavazza



OEM/ODM projects for coffee machine/water cooler

Started from 2015 and 3 models launched

1 new model is in process now

Top branded manufacturer of coffee machine

OEM project from 2020 and launch in 2022

1st WMF model to sell online







Kalerm teams have mature experience of working with Global branded players

Key Accounts-Household



Cooperation with regional leading brands in Europe



Fast - Philco brand (sub-brand of **Electrolux**) in Czech



OTTO - Privileg brand (sub-brand of Whirlpool) in Germany



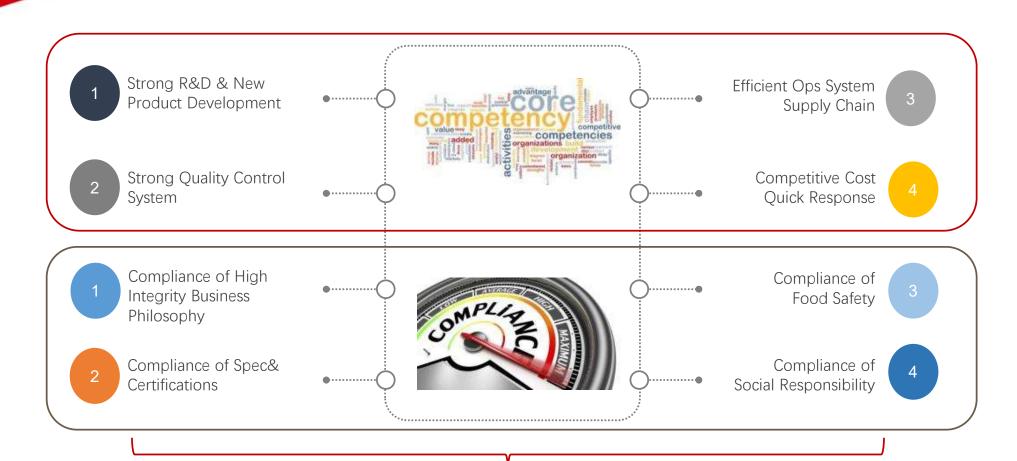
B/S/H - Zelmer brand in Poland



Rotel brand in Switzerland

Kalerm Advantages





Reliable Partner of High Quality Coffee Machine



PART 2
HOUSEHOLD PRODUCT PLAN

Kalerm's Market Position



	Household	ocs	HORECA	Professional
Daily Capacity	10-30 cups	50- 100 cups	150-250 cups	250+ cups
Product Life	10K-30K	50K-100K	150K- 300K	500K+
Brands	DELonghi PHILIPS Medic KAL RM	Saeco EVOCA GROUP WERNING FRANKE Schaerer Wass coffee competence	Creminational Eranke International Eranke KALOREM	Schaerer Schaerer Swiss Confee Competence FRANKE LACIMBALI FEX-royal

Restart new domestic product platform from 2020

Focus on OCS and Horeca Segment from 2015

Product Roadmap





All bean to cup with or without fresh milk, powder option models are also available now. 20% in Household; 50% used in OCS; 30% in Horeca Entrance Level

Kalerm Household Project Background









Advantage

- ✓ Mature technology
- ✓ Stable quality
- ✓ Excellent extraction

Weakness

- Big size
- High cost

- Suitable for OCS scenarios
- NOT competitive in Household scenario

Conclusion: Kalerm needs to develop new household machines to meet customer demands

Household Product Trend Research



PHILIPS





















ECAM22.110

ECAM23.460.B ECAM350.55.B

ECAM610.75.MB









ESSENTIAL LCD EVIDENCE ONE EA895N









EQ.6 plus S100







ENA 4

ENA 8

Product Trend

- Compact size
- Modern and simple design
- Competitive price
- Low noise
- Friendly user interface
- Easy operation
- Easy cleaning
- One-touch Cappuccino
- WIFI/Bluetooth

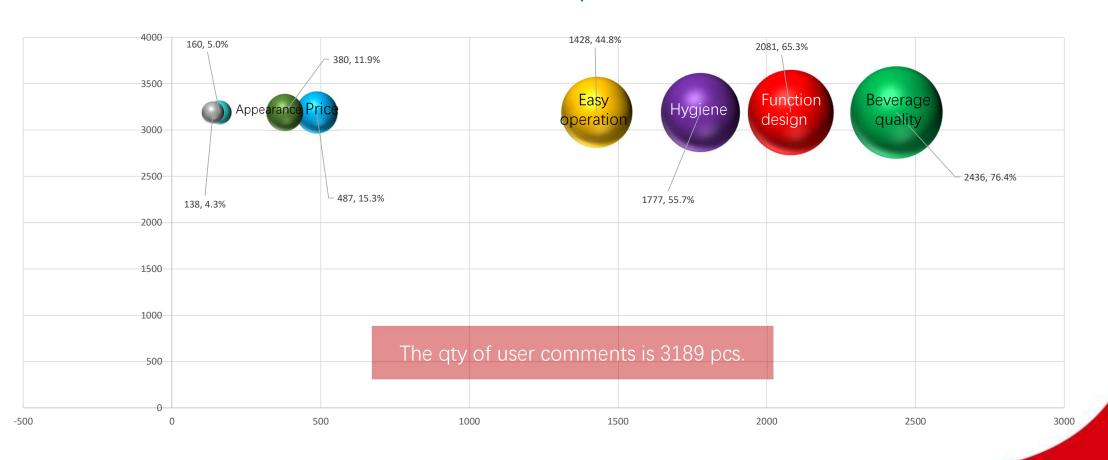




User Feedback Analysis



User feedback determines the product definition



New Household Product Line



Grinding system

The grinding granularity is uniform, the low-speed grinding reduces the temperature rise rate of the coffee powder, the residual amount of coffee powder in the grinder is small, ensuring the quality of the coffee.

Brewing system

The coffee powder pressing force greater than 20N ensures that the coffee powder pressing force is even. The water is evenly distributed to ensure that the hot water fully flows through each coffee powder. The 9bar extraction pressure ensures that the coffee powder is fully extracted.

Temperature Control System

The brewing water temperature is the key parameter for a good cup of coffee. This model has a short hot water pipeline, and uses high-precision temperature control devices and PID temperature control programs to ensure a stable hot water temperature.

Control System

With WIFI, Bluetooth function, and can be controlled by mobile phone; the beverage setting is convenient and fast, and the beverage parameters can be set at will. Support multiple users and multiple roles.

Core competitiveness --- coffee quality







Right brewing equipment

The coffee brewing equipment must be selected correctly, different types of equipment match different types of coffee beans

Appropriate extraction parameters

The parameters of the equipment should be matched with the coffee beans, and different beans have to match the different brewing water temperature.

High ↓ quality coffee beans

High-quality, freshly roasted coffee beans is the key to a good cup of coffee

In-Cup Coffee Quality= Coffee Bean + Machine + Brewing

Kalerm New A Series





A1 Black coffee model



A2 Black coffee model with steam wand



A3
Milk coffee model
Without color screen



A5
Milk coffee model
With color screen

Kalerm A5 Introduction



INTUITIVE COLOR DISPLAY

The new 2.4" color display with touch icons is intuitive to operate, and you can easily find your coffee of choice, or create your own coffee recipes.





UP TO 16 BEVERAGES

6 drinks can be selected through one touch, and the 16 recipe choices range from Espresso/Ristretto/Americano/Long Coffee/to Cappuccino/Café Latte/Macchiato/Fiat White/hot cream/AxEspresso/2xLong Coffee/2xCafé Cream/ and hot water. Travel mug function is also available.

HYGIENIC MILK CARAFE

No tube design, easy to clean. All parts of milk carafe are detachable and can be cleaned by tap water or dishwasher, ensuring every cup with great degree of hygiene.



MY COFFEE CHOICE

Personalize beverages the way you like and store them into My Coffee, totally 4 user profiles. Every one in the family can have their own recipes















COMPACT DESIGN

The compact figure of 215mm and the impressive streamlined design are true pleasure for your eyes. Available in different colors, it will fit seamlessly into any kitchen.



CDEC		
SPEC		
Display:	2.4" color display	
Bean hopper capacity:	200g	
Water tank capacity:	1.3L	
Waste bin capacity:	10 portions	
Espresso brewer capacity:	5-12g	
Brewer type:	Fixed	
Blade type:	Metal conical burrs	
Grinding level:	7 Levels	
Coffee strength setting:	5 levels	
Adjustable coffee spout:	68-138mm	
Volume setting:	3 levels (15-200ml)	
Water pump pressure:	15 bar	
Automatic power off setting:	15min-8h	
App Control:	Optional(Bluetooth. WIFI)	

