



บริษัท ซายน์เทค จำกัด science tech co., Ltd

ระบบทำความเย็น

Fiocchetti, Italy

www.sciencetech.th.com

By Ms. Wasinee Thanakulmetha B.Sc, M.Sc.



บริษัท ซายน์เทค จำกัด SCIENCE TECH CO., LTD



นโยบายคุณภาพ

" คุณภาพ คู่ คุณธรรม ซายน์เทคมั่นย้ำ สินค้าพร้อมบริการ "





Fiocchetti ส่วนประกอบสำคัญของระบบทำความเย็น



Refrigerant

- จุดเดือดต่ำ
- ดูดรับความร้อน ระเหยที่ Temp และความดันต่ำ
- ถ่ายเทความร้อนที่ Temp และความคันสูง
- คอยถึ่เย็น (Evaporator) ดูดรับความร้อนจากภายในตู้
 - คอยล์ร้อน (Condenser) ถ่ายเทความร้อนออกสู่นอกตู้
- Thermostat ควบคุม Temp ในตู้ ผ่าน 6 และ A
- Thermal Expansion Valve ควบคุมการปล่อย Refrigerant
- ถึงเก็บน้ำยา Refrigerant



Fiocchetti หลักการทำงานของระบบความเย็น

กรณีตั้ง Temp ที่ 4 °C

Thermostat

- ตรวจสอบ Temp ในตู้
- สั่ง Compressor ดูดน้ำยา
- สั่ง Expansion Valve ปล่อยน้ำยา

Thermal Expansion Valve

- ปล่อยน้ำยาถึงคอยล์เย็น
- น้ำยาถูกลดความดัน → ไอความดันต่ำดูดความร้อนภายในตู้



iocchetti หลักการทำงานของระบบความเย็น

คอยล์ร้อน (Condenser)

 น้ำยา → ใอความร้อนสูง → ของเหลวความดันสูง คายความร้อนสู่ภายนอกตู้

ถึงเก็บ Refrigerant

น้ำยาไหลเข้าสู่ถังเก็บ → ของเหลวความดันต่ำ

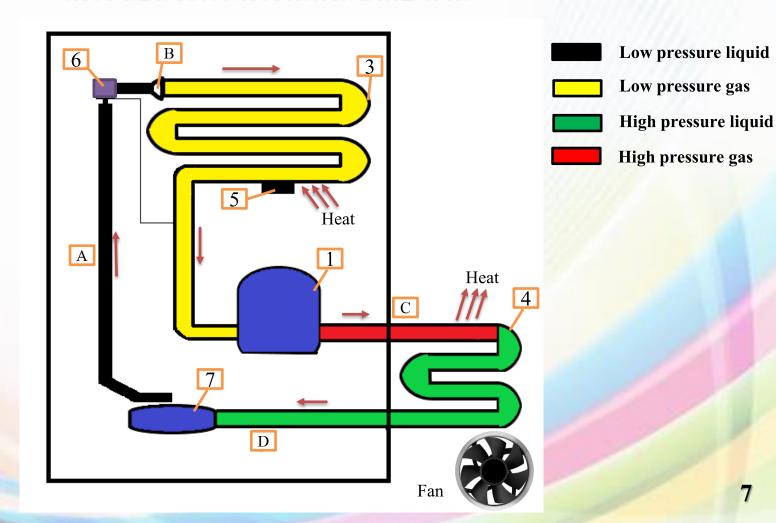
Thermostat

- สั่ง Compressor หยุดทำงาน
- ปิด Expansion Valve



หลักการทำงานของระบบทำความเย็น

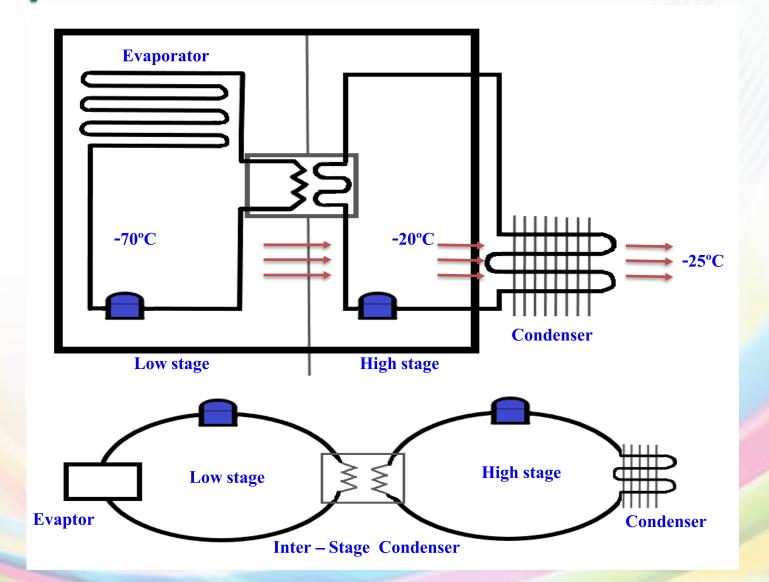
กรณีตั้งอุณหภูมิเครื่องเย็น เช่น SET อุณหภูมิที่ 4 °C เครื่องเย็นจะเริ่มทำงานตามลำดับ ดังนี้





หลักการทำงานของระบบเยือกแข็ง

รูปเปรียบเทียบแสดงการถ่ายเทความร้อนของระบบ Two Cascade





องค์ประกอบที่เกี่ยวข้องกับระบบเก็บความเย็นภายในตู้



ขืน (Upright) นอน (Chest)

2. ฉนวน

ัสดุ ความหนา

3. ประตู

กระจก (Glass) ทีบ (Solid)



3. ระบบเตือนเมื่อ

อุณหภูมิสูงหรือต่ำกว่า

Fiocchetti ข้อแตกต่างระหว่างตู้เย็น Scientific Model และ Commercial Model

- ไม่มี

ลกษณะทวเบ 	Scientific Model	Commercial Model
1. วัตถุประสงค์	- ใช้เก็บเวชภัณฑ์, วัสดุภัณฑ์, สารเคมี ที่ต้องเก็บในอุณหภูมิตาม Spec ของ ผลิตภัณฑ์นั้นๆ ในห้องปฏิบัติการทั่วไป คลินิก หรือ โรงพยาบาล โดยปกติจะ เก็บที่อุณหภูมิ 2-4 °C	- ใช้เก็บอาหาร เครื่องดื่ม ผลไม้ หรือ อื่นๆ ที่ต้องการเก็บในอุณหภูมิต่ำเพื่อ รักษาสภาพหรือต้องการความเย็น โดยปกติใช้อุณหภูมิ 4-15 °C
2. โครงสร้างตู้	- Stainless steel 18/10AISI 304 ไม่เป็นสนิม	 ทำด้วยเหล็กเคลือบด้วยวัสดุภัณฑ์ อื่นเพื่อความสวยงาม เป็นสนิทง่าย

- มีระบบเตือนด้วยเลี้ยงและแสง

กระพริบ



7. ระบบฉนวนกันความร้อน

8. ระบบละลายนำแข็ง

ข้อแตกต่างระหว่างตู้เย็น Scientific Model และ Commercial Model

- ฉนวนกันความร้อนเป็น foam

- อาจไม่มีหรือเป็นแบบ Manual

อย่างเดียว

ลักษณะทั่วไป	Scientific Model	Commercial Model
4. ระบบเตือนขณะเปิดประตู นานเกินไปหรือลืมปิดประตู	- มีระบบเตือนด้วยเสียงและประตูจะปิด อัตโนมัติ กรณีที่เปิดประตูค้างไว้น้อยกว่า 90°C	-ไม่มี

นานแกน เบหรอลมบดบระตู
 ภารบันทึกอุณหภูมิ
 - ทั้งอุณหภูมิได้ตั้งแต่ 2-15°C ตาม Spec ของ
 - การปรับอุณหภูมิโดยการหมุน
 ถึงของที่ใช้เก็บ โดยมีความคลาดเคลื่อน +/- 2°C
 หรือ กด อาจมีแสดงอุณหภูมิที่หน้า ตู้ปรับได้ตั้งแต่ 4-15°C
 - มี Sensor เพื่อเช็คอุณหภูมิภายในตู้

- Foamed in place polyurethane

- เป็นแบบอัตโนมัติตั้งช่วงเวลาได้

CFC free



การบำรุงรักษา / การตรวจสอบประสิทธิภาพ

- Data logger ชนิดไร้สาย
- ระยะเวลาในการนำอุณหภูมิภายในตู้กลับสู่ค่าปกติ
- ภายหลังการเปิดประตูในระยะเวลาหนึ่ง

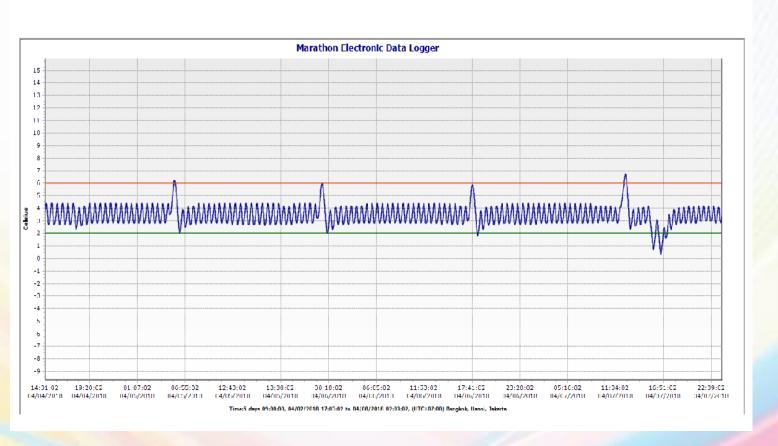






Fiocchetti กราฟแสดงอุณหภูมิในตู้เย็น

Non Scientific (Commercial Grade)

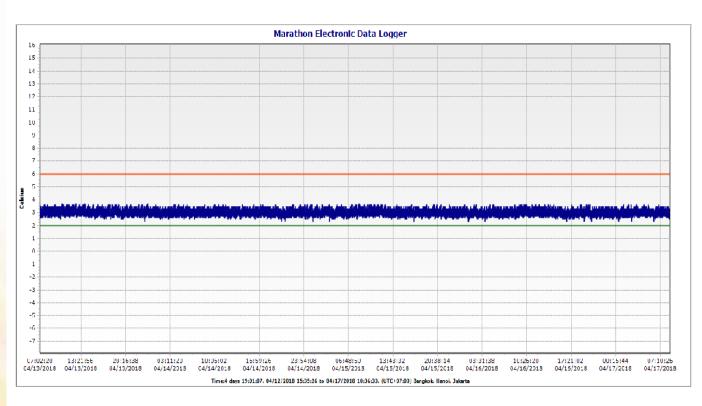






กราฟแสดงอุณหภูมิในตู้เย็น



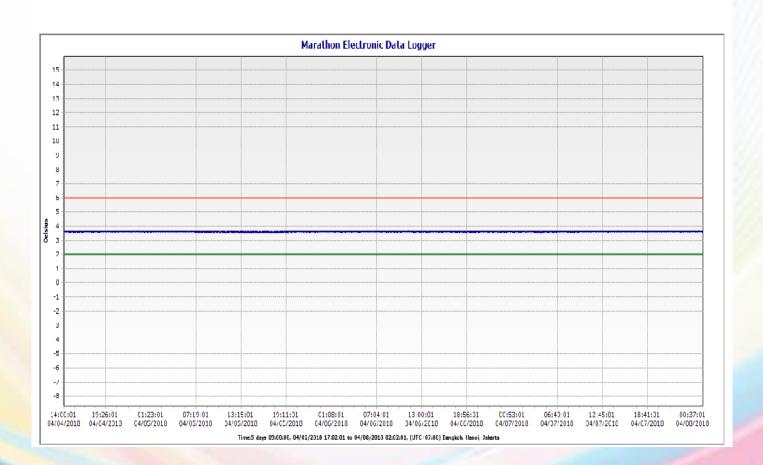






กราฟแสดงอุณหภูมิในตู้เย็น

Scientific Grade (High Version)





Fiocchetti, Italy

ก่อตั้ง: ปี 1969 โดย Mr. Ciro Fiocchetti

Product Range

111

Pharmacy/Laboratory Refrigerator Blood Bank Refrigerator Freezer/
Deep Freezer

Especially developed for the following fields:

- Hospitals and clinics
- Chemical and analysis laboratories
- Pharmacies and Para-Pharmacies (we are leaders on the Italian market)
- Chemical, pharmaceutical and biomedical industries
- Research institutes and Universities
- Blood transfusion centers







BLOOD BANKS and PLASMA-FREEZERS

Equipment designed and manufactured in line with Directive 93/42/ EC (class IIa), certified as Medical Devices and enlisted into the Italian National Register of Medical Devices.

Blood Banks and Plasma-Freezers cover the following ranges:

- EMOTECA series: blood storage at +4°C, also with twin system from 100 to 1500 liters
- PLASMA-FREEZER and PLASMA-VISION series: from -10 to -25°C
- PLASMA-SUPERARTIC series: from -20 a -40°C
- PLASMA-LABOR 2T and PLASMA-VISION 2T Series: combined to store blood and plasma
- PLASMA-LABOR 2T and PLASMA-VISION 2T Series: combined

As standard, blood banks and plasmafreezers are equipped with ECT-F TOUCH controller featuring:

- Electronic registration of temperatures and alarms with buffer battery to guarantee the signalization of alarms during power failure
- External terminal board for RS485 and dry contacts
- Digital Lock
- Ballasted probe for product temperature simulation
- Drawers with dividers or shelves, wire baskets or racks (depending on models).

(depending on models)

Drawers with dividers or shelves, wire baskets or racks



Fiocchetti FREEZERS CONGELATORI



COMBINED REFRIGERATOR AND FREEZER with double temperature setting, two independent compartments and cooling units. Available in a wide range of capacities, varying from 280 to 700 liters (refrigerator and freezer compartment have the same capacity). All models can be supplied either with ECT-F or ECT-F TOUCH controller.

Professional FREEZERS with temperature range from -10°C to -86°C, suitable for various applications in the medical-scientific field:

- FREEZER and VISION Series: from -10 a -25°C, available in ECT-F and ECT-F TOUCH versions
- SUPERARTIC series: from -20 to -40°C, available in ECT-F and **ECT-F TOUCH versions**
- ULTRAFREEZER series: from -60 to -86°C

ULTRAFREEZER series: from -60 to -86°C



Fiocchetti Accessory



Castors with brakes.



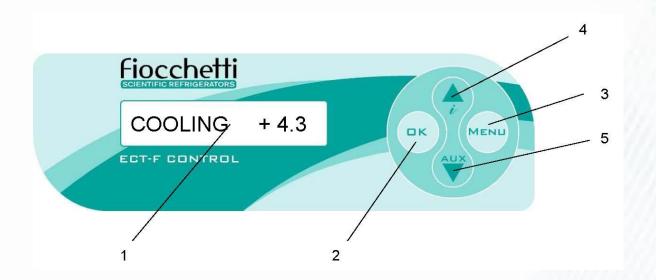
Sliding aluminium drawer with partitions



plasticized steel grid shelf



Door lock with key



DESCRIPTION CONTROL BOARD ECT-F

	1	/	Alphanumeric LCD Display, back-lit
	2	□ K	To confirm
ECT-F CONTROL	3	MENU	To Enter and Esc from the menu
	4		To increase values, scroll menu and for INFO DOCTOR VIEW special function
	5	Aux T	To decrease values, scroll menu. Switching on/switching off glass door LIGHT

Working status description on the display

STRING	DESCRIPTION OF THE OPERATION IN PROGRESS
PAUSE	Compressor is OFF, waiting next cooling cycle
COOL	Compressor is ON to reach setpoint
WAIT DEFROST	After request of manual defrosting, the controller waits for the necessary conditions to proceed automatically with defrosting
ACCESS DENIED	Attempt to access a disabled menu or deny to run a manual defrost if the conditions are not suitable for such action.
DEFROST	The equipment defrosts, warming up the evaporator
DRIPPING	Last phase of the defrosting to allow dripping of condensate water
RECOVERY	Compressor is ON after defrosting to re-acquire the setpoint
DOOR	Door open (close immediately!)
HEATING	Warming-up phase (ONLY FOR PRESET MODELS)

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ľ	DOOR	Door open (close immediately!)
		Compressor is ON after defrosting to re-acquire the setpoint



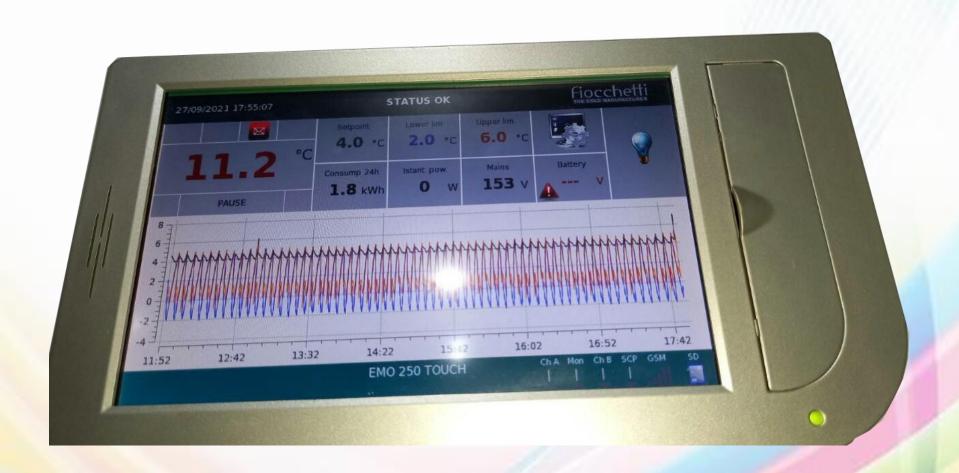






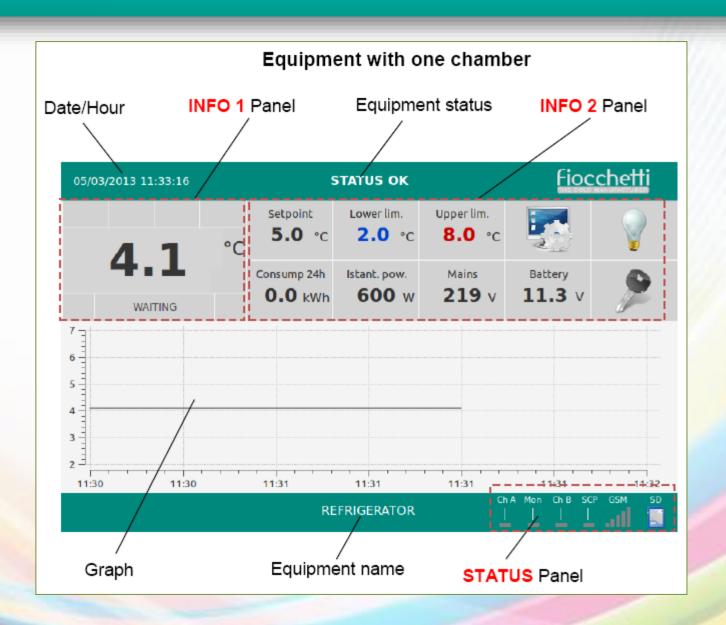


ECT-F TOUCH Control

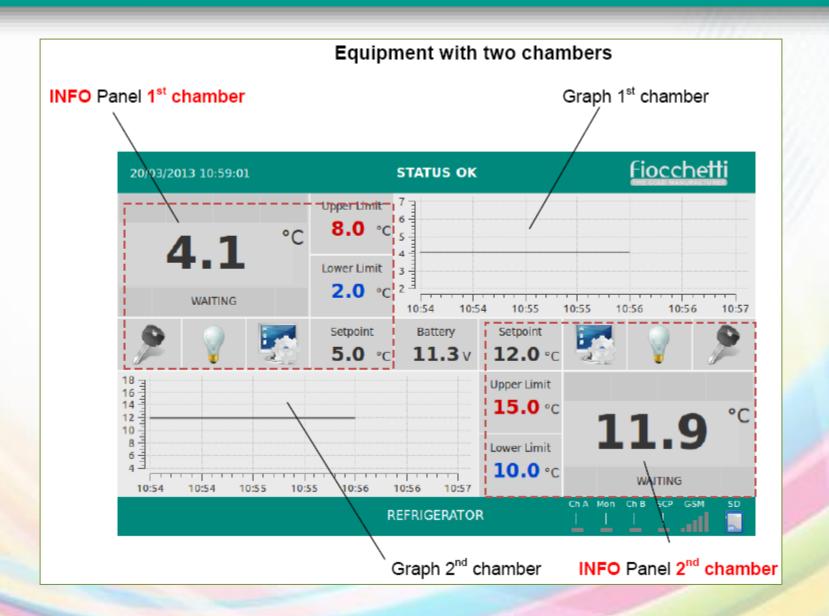


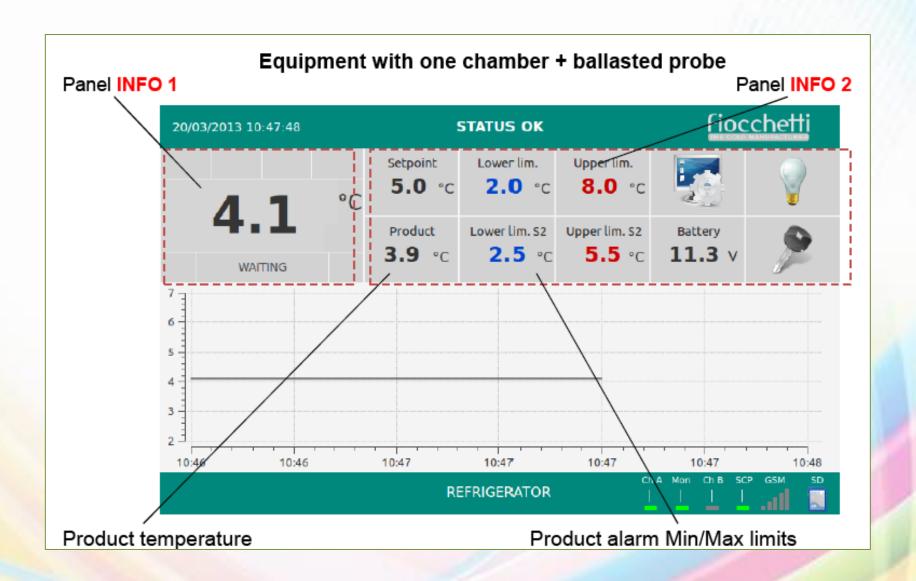


ECT-F TOUCH Control

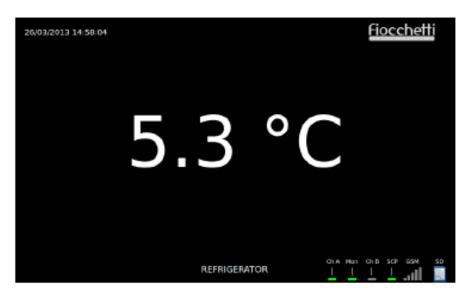






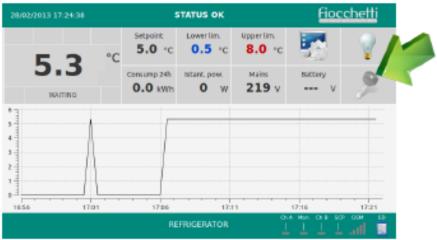


<u>Screensaver mode:</u> it is possible to set the screensaver page which will be automatically activated if the screen is not in use for a certain period of time (see "Description setup system menu" par. 6.2.10). The screensaver page will show the chamber temperature against a black background easily readable from the distance. The screensaver page will disappear at the touching of the screen.



6.2.10 ELECTRIC DIGITAL KEY LOCK

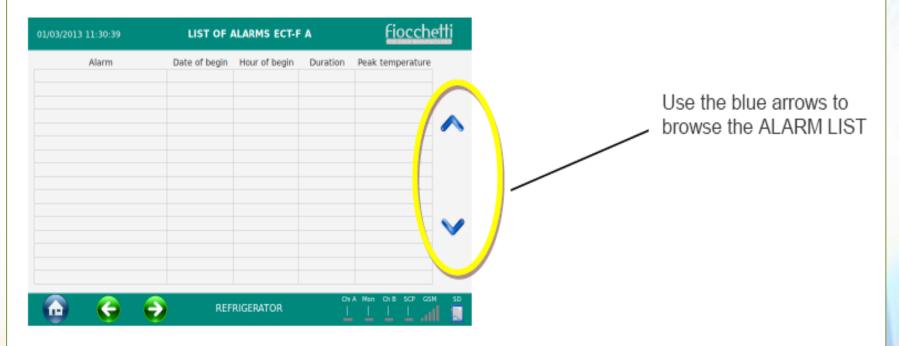
As safety device against unauthorized door opening, the equipment can be fitted with an electric-digital key locking, consisting in a small piston placed in the upper corner of the door of the machine (optional). The door is opened by means of a gentle pressure on the key icon in the homepage.



During the door opening period, the piston will be automatically release, to allow an immediate door closing. After having enabled the "Password" function from the SET UP SYSTEM using the password 0000, the machine can be protected against the opening of non-authorized users.

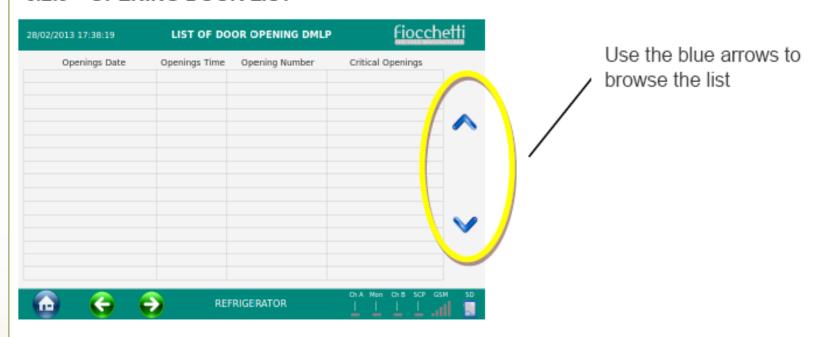
The generic user password is 1234 (see par. 6.2.12 Password).

6.2.8 ALARM LIST



In this list you can see type of alarm, date/hour of alarm beginning, duration and critical temperature attained.

6.2.9 OPENING DOOR LIST



In the list you can see the last 32 openings and in particular date, duration of each opening, total number of openings in a day and the no. of critical openings (>30 sec.)

















Ultra Freezer





Ultra Freezer





Ultra Freezer





Ultra Freezer





ioccheffi Standard / Certification



www.fiocchetti.i

Via Panagulis, 48 42045 Luzzara (RE) Italy Tel. +39 0522 976232 - Fax +39 0522 9760028 Cod.Fisc. e P. IVA 00934960352 R.E.A. N. 149865 - N.Mecc. Estero RE 012596

Registro Imprese N. 00934960352 - Cod. Identific. CEE IT 00934960352 http://www.fiocchetti.it - Email: info@fiocchetti.it - Pec: fiocchetti@pec.it

LETTER OF AUTHORIZATION

To: WHOM IT MAY CONCERN

WE, C.F.di CIRO FIOCCHETTI & C Snc., hereby declares that the company

SCIENCE TECH CO., LTD, 321/43 NANGLINCHEE ROAD, CHONGNONDSEE, YANNAWA, BANGKOK 10120, THAILAND

is an authorized Distributor of Company, and consequently they are eligible to represent, market, sell, service and participate in any tender with reference to our

We declare that the conclusion of any contract for the Supply of our Products is authorized by us.



Laila Balboni Export department CF di CIRO FIOCCHETTI & C. s.n.c.

Valid until 31/12/2021



www.fiocchetti.i

Via Panagulis, 48 42045 Luzzara (RE) Italy Tel. +39 0522 976232 - Fax +39 0522 9760028 Cod.Fisc. e P. IVA 00934960352 R.E.A. N. 149865 – N.Mecc. Estero RE 012596 Registro Imprese N. 00934960352 – Cod. Identific. CEE IT 00934960352 http://www.flocchetti.it - Email: info@flocchetti.it - Pec: flocchetti@pec.it

SERVICE AUTHORIZATION, TO WHOM IT MAY CONCERN

We, CF di Ciro Fiocchetti & C snc, having factories at Luzzara, Italy, Via Panagulis nr 48, manufacturer of cooling equipment (such as lab refrigerators and freezers, blood banks and plasma freezers, ice makers, mortuary Refrigerators, and others) hereby confirm that the company:

Science Tech Co., Ltd, 321/43 Nanglinchee Rd, Chongnondsee, Yannawa, Bangkok, Thailand, 10120, tel +662 2854101-3

is our authorized service partner for Thailand, and can therefore perform installation, repair, servicing and any technical intervention on any refrigerator with brand name "FIOCCHETTI".

The authorized technicians/specialized personnel are the following:

Mr. Sompol Sooksom

Ms. Chaluay Khairak

Mr. Songchat Singkaselit

Mr. Nitithorn Kaewmanee

Mr. Arnon Phunong-ong

We grant our full support to our service and commercial partner concerning any technical issues or spare parts replacement.

Best regards



Luzzara, 01/08/2020 Valid until 31.12.2021 (renewable on request)

Pag. 1/1

CERTIFICATE

The Certification Body TÜV Rheinland Italia S.r.l.

certifies, in accordance with the TÜV Rheinland Group procedures, that the Company

C.F. di Ciro Fiocchetti & C. s.n.c.

Fiocchetti

Via A. Panagulis, 48

IT - 42045 Luzzara (RE)

has established and applies a quality management system for the following scope:

Design and manufacturing of scientific equipments, refrigerators, freezers meant to be used in hospitals, laboratories, pharmacies and industries EA 19

Through an Audit, Report No. 28111738 001, proof has been furnished that the quality management system fulfils the requirements of the standard

UNI EN ISO 9001:2015

Please refer to the Quality Manual for the details about the exclusions with respect to the requirements of the standard.

Certificate Registration No. 39 00 0470905.

This Certificate is valid from 2018-12-21 to 2021-09-09.

The reference date for all the next audits is (day-month): 24-06.

Milan, 2018-12-21. First Certification: 2009-11-06

The certification responsible. Elena Re

TÜV Rheinland Italia S.r.I., Via E. Mattei, 3 - I - 20010 Pogliano Milanese (MI)



SGO Nº 083A SGA Nº 052D Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC

Signatory of EA, IAF and ILAC













CERTIFICATE

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certifies, in accordance with the TÜV Rheinland Group procedures, that the Company

C.F. di Ciro Fiocchetti & C. s.n.c.

fiocchetti

Via Lorenzini, 53

I - 42045 Luzzara (RE)

has established and applies a quality management system for the following scope:

Design, development, manufacture, and after-sales service of medical devices (blood bank, plasma freezer and accessories) and medical grade refrigerators and freezers.

Through an Audit, Report No. 0470905, proof has been furnished that the quality management system fulfils the requirements of the standard

ISO 13485:2003

Please refer to the Quality Manual for the details about the exclusions with respect to the requirements of the standard.

Certificate Registration No. 39 05 0470905.

This Certificate is valid from 2015-09-10 to 2018-09-09.

The reference date for all the next audits is (day-month): 24-06.

Milan, 2015-09-10. First Certification: 2009-11-06

TUV Rheinland Italia S.r.I., Via E. Mattei, 3 - I - 20010 Pogliano Milanese (MI)

This certificate does not represent proof that the statutory requirements of the Directives 93/42/EEC, 90/385/EEC or 98/79/EC have been fulfilled.





Signatory of EA. JAF and It Ar







www.tuv talia.com





IMQ S.p.A. certifica che

C.F. DI CIRO FIOCCHETTI & C

VIA PANAGULIS 48 - 42045 LUZZARA(RE)

È in possesso dei requisiti richiesti dalle seguenti disposizioni legislative

- REGOLAMENTO (CE) N. 303/2008 DELLA **COMMISSIONE DEL 2 APRILE 2008**
- DECRETO DEL PRESIDENTE DELLA REPUBBLICA 27 **GENNAIO 2012 N. 43**
- REGOLAMENTO ACCREDIA RT-29

Per lo svolgimento delle seguenti attività

installazione, manutenzione o riparazione apparecchiature fisse di refrigerazione, condizionamento d'aria e pompe contenenti taluni gas fluorurati ad effetto serra ai sensi del Regolamento (CE) n. 303/2008

14 | 11 | 2018

20 | 11 | 2018

13 | 11 | 2023

Termine validitià del certificato



IMQ S.p.A.







รายละเอียด

การตรวจสอบประสิทธิภาพเพื่อใช้ให้ถูกต้องในการเก็บเลือด,
วัคซีนและสิ่งจัดเก็บที่มีมูลค่าสูงและ
เสื่อมง่ายเมื่ออุณหภูมิเปลี่ยนแปลง
รวมทั้งระบบ(Storage & Delivery)

Stand Alone Single Use







Temperature Only (-29C to + 72C)

Temperature Only (-35C to + 50C)

Temperature Only (-20°C to +70°C)

Stand Alone Multi Use





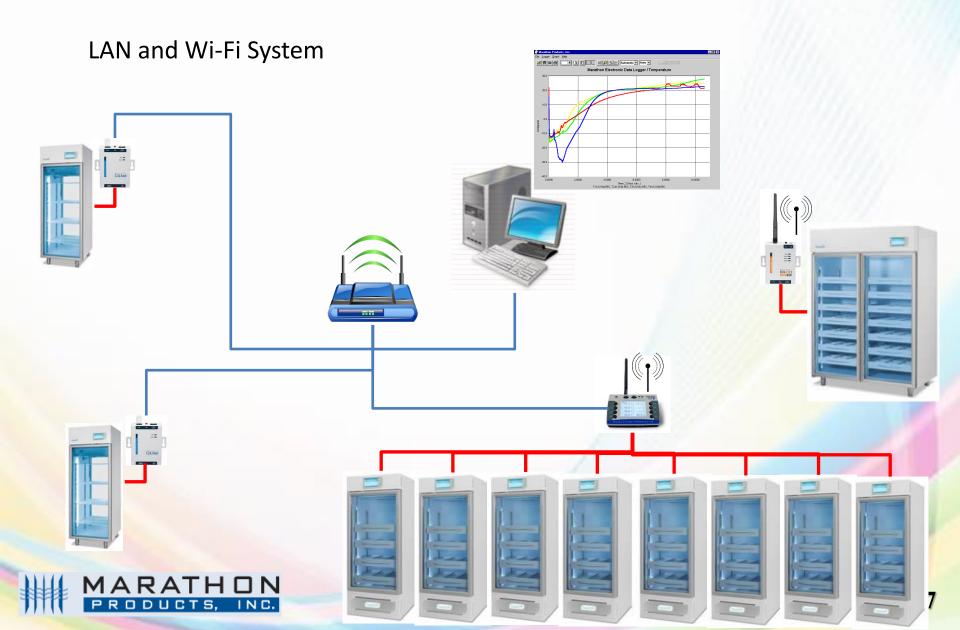


Temperature Only (-35C to + 50C)

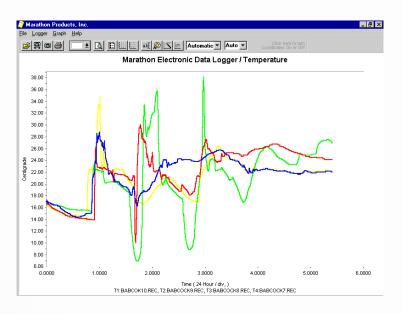
Temp + Humidity (-29C to + 72C) (0% to 100% RH)

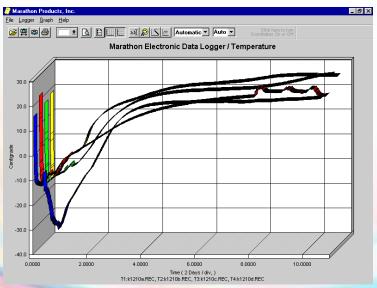
Temperature Only (-200°C to +72°C)

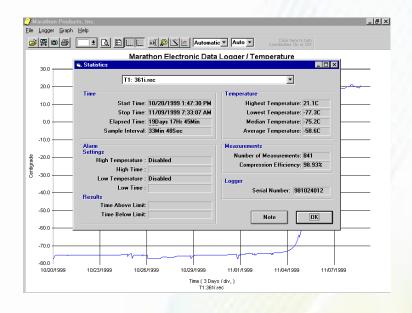
Network System: Marathon Product

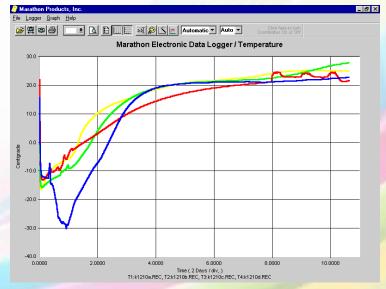


Marathon Product: Software









NASA - Mountain View, California

National Aeronautics and Space Administration



We are pleased to announce that NASA in Mountain View, California has successfully installed six (6) temperature data logging 900 Mhz "2-way" transceivers at their Food Commissary for HACCP regulation. Now should refrigerators not be holding proper temperatures or the doors not be fully closed, the temperature sensors will automatically send out an alert notification to dedicated personnel.

Learn more about Remote Monitoring Solutions from Marathon Products, Inc.

Center for Disease Control (CDC) tests using the Marathon's TempCheck Chart Recorder

O September 8, 2015 Case Studies

Center for Disease Control (CDC) – Validation of cold chain procedures suitable for distribution of vaccines by public health programs in the USA.

"To enhance quality assurance of vaccine distribution by public health programs in the U.S., various methods for packing vaccines were validated. Validation involved both tests in an environmental chamber and actual shipping of packages by commercial overnight delivery service. Dry ice was used with vaccines needing to be kept at temperatures lower than -14°C, and water-based cold packs with other vaccines."

"Disposable analog recording thermometers (Marathon Temperature Recorder Co., Modesto, CA) were used in real life shipping tests. They were placed in the middle of the vaccines in the smaller packages, or in the top layer of vaccines in larger-size packages. These monitors produce continuous linear strip charts over 4 days."

"The conclusions that the methods are satisfactory depended on measurement of temperatures inside packages of vaccines, not on testing vaccine potency. Nevertheless, the fact that temperatures were measured throughout the test, not just at the beginning and end, means there is no reason to doubt the validity of our conclusions"

Alan P. Kendal, Robert Snyder, and Paul J. Garrison (National Immunization Program, Centers for Disease Control and Prevention, Atlanta, Georgia)

New FDA Guidance Calls for Increased Emphasis on Centralized Trial Monitoring

A new guidance document released by the US Food and Drug Administration on 6 August 2013 calls on sponsors to develop centralized risk-based monitoring strategies for clinical trials involving medical products with the ultimate goal of enhancing protections for human subjects while simultaneously improving the quality of clinical trial data

In the guidance, Oversight of Clinical Investigations, A Risk-Based Approach to Monitoring, FDA "encourages greater use" of centralized monitoring practices compared to historical trends that emphasized on-site monitoring as it applies to pharmaceutical, biologics, medical devices and combination products.



"Centralized monitoring is a remote evaluation carried out by sponsor personnel or representatives (e.g., clinical monitors, data management personnel, or statisticians) at a location other than the sites at which the clinical investigation is being conducted. Centralized monitoring processes can provide many of the capabilities of on-site monitoring as well as additional capabilities."

FDA's guidance lists several it says would "reflect a modern, risk-based approach that focuses on critical study parameters and relies on a combination of monitoring activities to oversee a study effectively," such as the use of centralized monitoring.

HACCP (Hazard Analysis and Critical Control Points)

January 14, 2017 Case Studies

Quality assurance has specific meanings in different industries. In general, quality assurance is the term used for the various measures taken to monitor products and services to increase the likelihood of their being safe, effective, and marketable. Monitoring should be done during processing, shipment, and storage. Quality assurance managers are prominent in the food industry and in non-food industries such as pharmaceuticals, semiconductors, etc.

A safety program required by the United States Department of Agriculture focuses on the food processing system and its potential for allowing food to become unsafe. The program requires food processors to identify each point at which food may become unsafe because of too low or high a temperature, contact with harmful bacteria, etc. These points are to be identified and measured to monitor conditions of temperature, humidity, cleanliness, etc.. Documentation of the measurement is to be frequent, regular, and archived. The initials of the program are HACCP which stand for Hazard Analysis and Critical Control Points. HACCP system of food product control is a prevention system. The focus for control is transferred from final product testing to the manufacturing process, where monitoring and control methods are applied to reduce or eliminate the possibility of contamination.

An important element in a comprehensive HACCP program is temperature control and monitoring. The requirements for temperature monitoring for certain foods and chemicals can be quite demanding. Marathon Products' EDL temperature recorder has a reliable operating range of -40°F to +160°F [-40°C to +72°C] and its c\temp model has a range of -81°C to 72°C which is particularly needed when using dry ice as a refrigerant. A Marathon Products temperature data logger was used in a scientific test of shipment temperatures done by the government (See VACCINE 1997 Volume 15 Number 12/13, 1459-1465).

Clients





















A Textron Company



















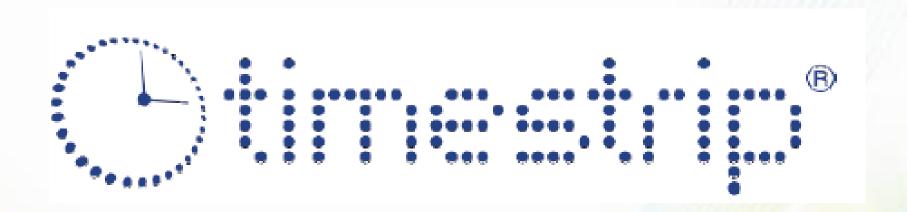












Strict blood product temperature control is

necessary to a void bacterial proliferation.

1947; AABB



(American Association of Blood Banks)



Transfusion Medicine



Hematopoietic Stem cells therapies

1971; The 30-minute rule



Return RBC to Lab



within 30 minute



temperature under 10°C

How to monitor the 30 Minute rule



By Hand





Special tool



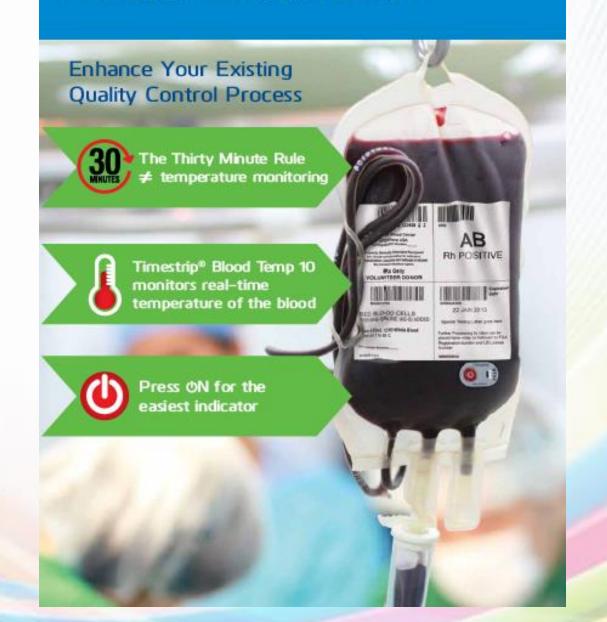


Timestrip® Blood Temp 10 Button-Activated Blood Temperature Indicator

PRESS ON FOR ASSURANCE



Timestrip® Blood Temp 10 PRESS ON FOR ASSURANCE



Simple Quality Assurance for Blood Temperature During Transportation and Storage

Easiest to Use

- Simple push-button activation
- Indicator requires no special conditioning prior to use
- Cost-effective monitoring

Quality Assurance

- Maintain quality control in blood transportation and storage
- Real-time data to make quick, safe decisions
- Peace of mind

Ensure Compliance

- Irreversible proof of meeting AA88 Standards and the FDA's CFR 600 IS(a) for monitoring temperature of whole blood during transportation and storage
- = FDA 510(k) dearance

Application Is Easy as 1, 2, 3





Firmly squeeze the activation button until you feel a pop, then release.

2 Verify Activation



Arming window will change from yellow to dark green immediately. If not, go back to Step 1.

3 Apply to Blood Bag



Remove adhesive liner and adhere activated indicator to the lower third of blood bag.

At-a-Glance Temperature Monitoring

Upon Activation, Instantly Monitors Blood Temperature

Activated & Monitoring BA SPACES

Clearly Indicates When Temperature Breaches 10°C

Breach window changes to blue

Color change is ineversible and carnot be reset or changed

-	
-	Ctimestrial
	Commong
	- 10
W	
ue –	- A
and	SAL BEACH

Product Number	Description	Dimensions	Timp Accuracy	UOM
BLOOD TEMP 10	Timestrip 10 Blood Bag Temperature Indicator	1-1/4" × 3/4"	±0.5° C, ±10° F	100 per box
BLOODTEMP6	Timestrip & Blood Bag Temperature Indicator	1-1/4" × 3/4"	±0.5° C, ±10° F	100 per box

This product is not a replacement for the professional judgement of laboratory/blood bank professionals and/or policies and procedures that are applicable to your institution.

Contact Us Today for Free Samples! 800.435.4242 or www.pdchealthcare.com/bloodtemp10

Also Available: Timestrip* Blood Temp 6 for Blood Storage!



Check out PDC Healthcare's Other Blood Safety Labeling and Patient ID Solutions.

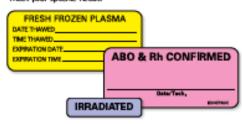
Reduce Errors and Improve Patient Safety with ISBT Compliant Labels

PDC Heathcare can help you meet the ISBT Blood Bank standards with our complete line of blank and pre-printed labels.



Get High Impact Communication with Highly Visible MedVision® Labels

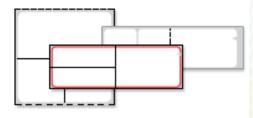
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Positive patient identification is amplified through the use of bar coding which helps eliminate human error and misidentification. These wristbands meet the Joint Commission's National Patient Safety Goal for Blood Transfusions (NPSG.01.03.01) cals for a one-person verification process.



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The Timestrip® Blood Temp 10 is a single use temp-sensitive indicator in a self adhesive label format that is designed to be applied directly to a blood bag and will display a colour change to alert when blood exceeds a certain temp.







The Timestrip® Blood Temp 10 (BT10) blood bag indicator is a temperature-sensitive indicator that can be used by blood banks and transfusion services to maintain quality control in blood storage and transportation.







visit: timestrip.com

Standards + Compliance of Blood Temp10

- FDA 510 (K)
- CE
- ISO 13485

Advantages of Blood Temp 10

- Small size (32mm x 19 mm)
- Accurate result
- No time consume process
- Decrease argument
- Good for quality control in blood storage transportation











Low cost Less energy Safer samples





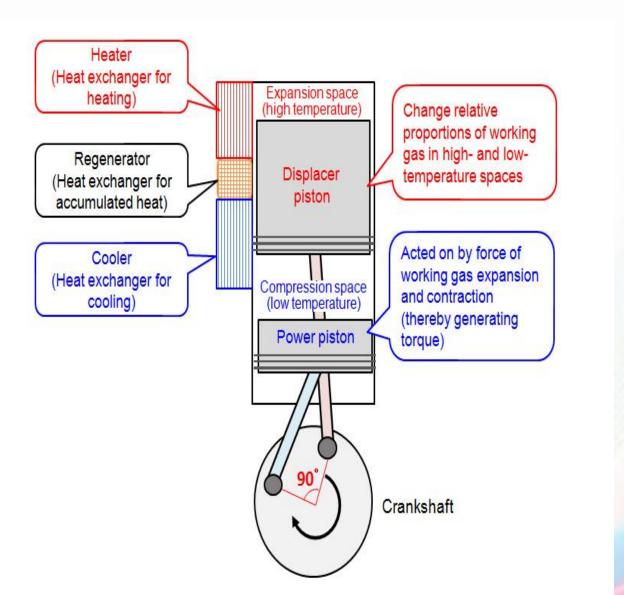
Undercounter
Benchtop
Stackable Storage

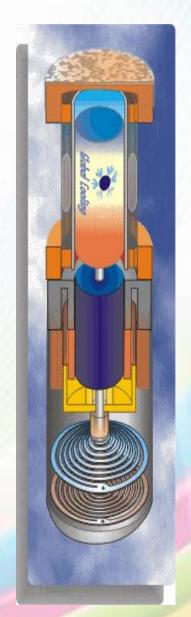


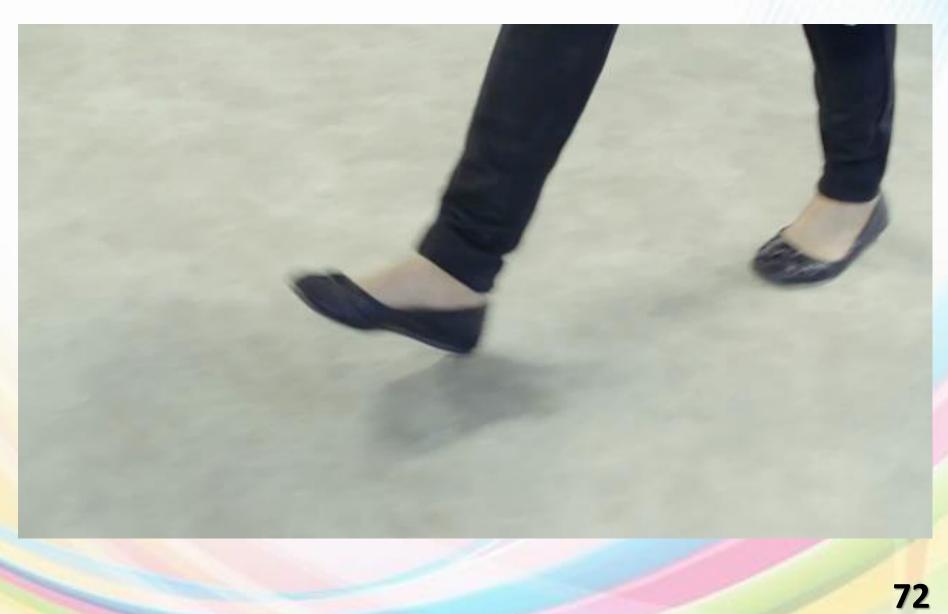
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Stirling Engines









SCAN ME



THANK YOU!