

# MEDICAL SCIENTIFIC EQUIPMENT

Decades of centrifuge intelligence



# HISTORY OF THE COMPANY





### From humble beginnings in UK in 1936

MSE was founded in **1936** by Dr. Ernest Foulkes in UK. Throughout World War II, MSE were appointed by the UK Ministry of Supply to act in the vital role of lease lend agents for American machine tools. **After the World War II, they expanded their offering to incorporate the development of centrifuges and other specialized laboratory equipment.** 

### A growing reputation in the UK

The company soon earned a reputation for delivering **efficient and safe equipment that was tailored to the specific needs of scientists** using them, and we became known the world over for top-quality design and manufacture of advanced products.



### Focus on higher capacity centrifuge models

From the 1980's until now, MSE has focused on designing higher capacity centrifuges. The Cellsep centrifuge, one of our bestseller is born in 1990. Yet, it is still highly appreciated for its robustness and its reliability. Thanks to our technical mastery, we are one of the few manufacturers of Blood Bank centrifuges up to twelve liters.

### Relocation in France integration to BIONORDIC, a world leader in Biotechnology

In 2019, the decision was taken to move the company to France to remain competitive in the centrifuge industry. This decision was deemed necessary, due to the uncertain economic climate caused by BREXIT.

MSE joins BIONORDIC group, a world leader in Biotechnology. Operating out of France, MSE's mission to be at the forefront of innovation in the centrifuge industry and remain leaders in the field remains unchanged.



Cellsep big capacity centrifuge commercialized since the 90's



Falcon and Falcon R



The Blue Force range, our new generation of centrifuges

# MASTER OF CENTRIFUGATION FOR 85 YEARS



Be confident in choosing MSE! Our centrifuges have been sold worldwide for 85 years. Widely proven, they are robust and built to last.

We designed and improved our centrifuges for and with you with a thorough understanding of your needs.

Reliability, reproducibility of results, intuitive programming, robustness and safety, choosing an MSE centrifuge is the guarantee of peace mind for years to come.

### DESIGNED FOR PERFORMANCE, BUILT TO LAST

Investing in an MSE centrifuge means choosing excellence and long-term value.

Spare parts are guaranted for at least 10 years after delivery, your long-term peace of mind.

With MSE centrifuge, you secure optimal results and productivity while maximizing equipement value.

#### **ECONOMICAL MAINTENANCE**

Our machines are designed to provide you long life service through maintenance-free design.

### TESTED, PROVEN, TRUSTED

All our machines are individually tested through rigorous inspection procedures, performance and reliability tests in our factory before to be released.

# **DIRECTIVES AND STANDARDS**





All our products are CE and IVD marked.

They comply wih **Regulation IVDR 2017-746** 

In consequence, all our centrifuges reflects the conformity of the medical device with the essential safety and clinical benefit requirements laid down by European regulations.



In accordance with these regulations all MSE laboratory equipment is fully RoHS 3 compliant, meaning that potentially harmful substances such as cadmium, mercury, lead or phthalates are not found in any of our products.



ISO 9001: Certified quality management system

ISO 13485: Certified quality management system specific for Medical Devices

# **MICROCENTRIFUGES**



Designed with a compact form factor, our microcentrifuge machines are suitable for all types of lab environments, regardless of space constraints.

With minimal dimension, they offer quick and acurate separation and efficient centrifugation of all types of samples. Very quiet they allow a comfortable working environment.

### **OWL**

- Digital display and easy to clean buttons
- · Fast acceleration and braking times
- · Automatic lid locking and opening
- · Viewing port in the lid
- · Centrifugation time adjustment
- · Quick acceleration and brake time





### MICRO CENTAUR

- · Lightweight and space-saving
- Programming up to 99 minutes
- $\bullet$  9 programs / 3 deceleration and acceleration ramps
- Viewing port in the lid
- · Short cycle and continuous mode
- Automatic unbalance detection



# MICRO CENTAUR R Improved and refrigerated version of Micro Centaur Timer from 1 second to 99h, 99mn et 99s 99 programs 10 acceleration rates 10 deceleration rates Speed cooling 8 blood tubes 8 tubes falcon 15 ml x 24 -20°C to +40°C

### MEDIUM CAPACITY CENTRIFUGES



Reliable benchtop centrifuges designed to deliver consistent results in demanding laboratory environments. Highly versatile with a wide range of rotors and adapters they cover all capacities of tubes and centrifugation vessels available on the market. Our benchtop centrifuge range offer high centrifugation parameters as well as high precision.

### HAWK & HAWK R

- · Programming up to 99h, 99mn and 99s
- 100 programs / 10 deceleration and acceleration rates
- · Short cycle and continuous operation mode
- Automatic rotor recognition
- Wide choice of angular, swing out rotors and adapters
- Pre-cooling function to start work at target temperature (Hawk R)



4 x 100 ml

Swing rotor



4 000

2504



18 000

24 270

Angular rotor



x 48

Blood tubes





-20°C to +40°C

Hawk R

### HARRIER & HARRIER R

- · Programming up to 99h, 99mn and 99s
- 100 programs / 10 deceleration and acceleration rates
- · Short cycle and continuous operation mode
- · Delayed start function
- · Automatic rotor recognition
- Wide choice of angular, swing out rotors and adapters
- Pre-cooling function to start work at target temperature (Harrier R)



 $4 \times 250 \text{ ml}$ 

Swing rotor



5 200





4724

Angular rotor



18 000





x 76

Blood tubes

50 ml

x 16

15 ml

x 36

Harrier R



-20°C to +40°C

### **FALCON & FALCON R**

- · Programming up to 99h, 99mn and 99s
- 49 programs / 10 deceleration and acceleration ramps
- · Automatic rotor recognition
- · Wide choice of rotors and adapters



4 x 785 ml

Swing out rotor



3 600

2 958



4 700

6 385



6 000 6 0 3 0

15 ml 50 ml Tubes 48 24 148

4 x 500 ml

Poches de sang DW GW

Bouteilles 4 x 750 ml

Falcon R (業) -20°C to +40°C

Falcon

Falcon R

Falcon & Falcon R

# STAND FLOOR CENTRIFUGES



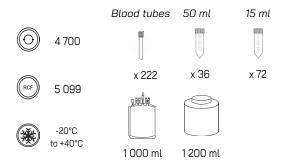
Our floor-Standing Centrifuges are high-performance centrifuges, proven to be safe, and robust even in the roughest and most demanding laboratory environment.

MSE floor-Standing centrifuge **CELLSEP 6/720R** features an eco-friendly design and maintains a low noise and low power consumption compared to similar models on the market.

After years of research and development, as well as extensive customer testing, we are proud to introduce The **Blue Force 12L**. Developed in collaboration with a blood transfusion institution, the BF12 is engineered to meet the rigorous demands of this specialized field.

### CELLSEP & CELLSEP +

- Autoclavable accessories
- · High-quality aluminum housing and lid
- · Reinforced, armored tank
- · Programming up to 99h, 99mn and 99s
- 50 programs / 10 deceleration ramps, 9 acceleration ramps
- · Automatic rotor recognition
- · Large castors for easy movement

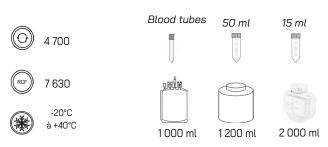




6 x 1 000 ml - 6 x 1 200 ml 12 x 500 ml

### **BLUE FORCE 12LR & 12LR+**

- · Touch screen
- Fast, silent and precise (temperature control +/- 2°C max.)
- · Plastic-free design
- · Reinforced, armored stainless steel bowl
- 100 programs in 10 steps
- Programming up to 99h, 99mn and 99s
- · Alarm history recording
- · Large castors for easy movement
- Blue Touch: additional end-of-cycle mode that protect samples from the impact of deceleration



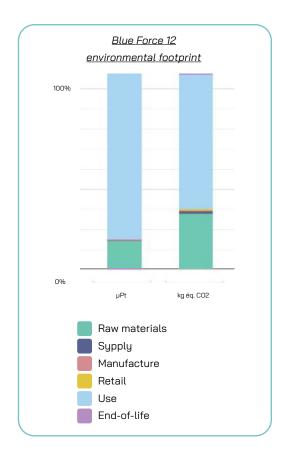


# SUSTAINABLE DEVELOPMENT IN OUR INDUSTRY



Our mission is to be at the forefront of centrifuge innovation, but this goes hand in hand with our commitment to better production! We design and improve our centrifuges to have as little impact as possible on the environment and offer solutions to reduce our carbon footprint.

To minimize the carbon impact of manufacturing we work mainly with local suppliers.



### FOCUS ON OUR ECODESIGN APROACH

The studies we ran with an independent office specialized in **Eco-design** shows that the most impacting cycle is the use of the centrifuge.

Our R&D engineers have adopted on eco-design approach to provide our customer a centrifuge that is using less energy, but not only.

We have been able to act right from the conception of the machine in order to:

- √ REDUCE ENERGY CONSUMPTION
- √ FACILITATE REPAIRS AND MAINTENANCE,
- √ EXPAND SERVICE LIFE
- √ MINIMIZE THE QUANTITY OF MATERIALS
- √ INCORPORATING FLEXIBILITY TO COUNTER TECHNOLOGICAL CHANGE

**Interview** with MSE's Director and MSE's R&D manager on the actions taken to limit the energy consumption of our centrifuges and their carbon impact.

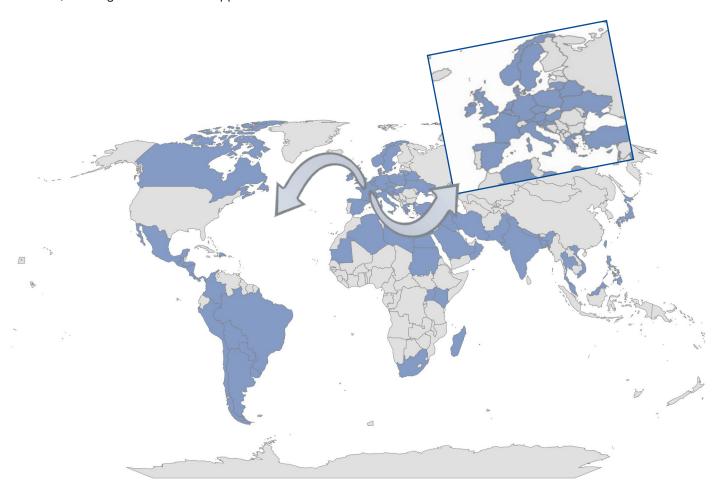


# WHERE TO FIND US



We rely on a network of **reliable distributors specialized in the medical field**. All are trained in our products, and offer the service required for installation and operation.

In each country we rely on a strong partnership that allows us to offer to the customer **local service**, personalized advice, training and after sale support.



# **CONTACT**

Contact our team for advice or information, or to be connected with our partner in your country:



MSE, 15 rue du Mans, 49300 Cholet, FRANCE

 $\sim$ 

To contact our technical department: sav@mse-sas.fr



You can call or be in touch with our team at **+33 241 647 341** or on whatsapp ( **+33 772 032 426** 



MSE Centrifuges

V090725.1.3 <u>www.mse-sas.com</u>