



ENRODISC[®] FILTER

THE EXCELLENT FILTRATION CAPACITY



TECHNICAL SPECIFICATION

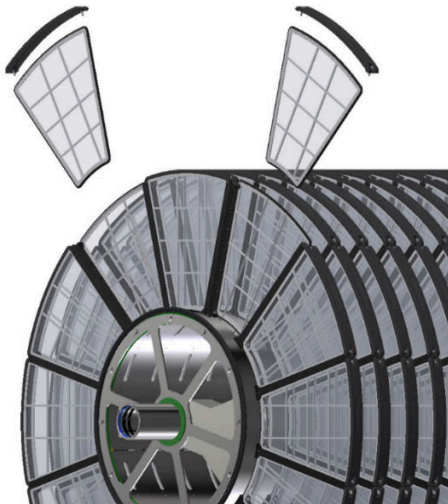


ENDEMIC Rotary Disc Micro-Filter

Endemic Rotary Disc Micro-filter “**ENRODISC® FILTER**” is a compact, mechanical and self-cleaning filter unit that does not consume energy under normal operating conditions and starts to rotate automatically when the filter surface becomes dirty. Having a high filtration area with its compact and innovative structure, ENRODISC® FILTER provides high volume, low head loss disc filtration for tertiary wastewater and industrial process water applications. During the cleaning process, it provides faster particle separation that increases the filtration capacity.

ENRODISC® FILTER's compact design uses polyester fabric or stainless steel filter surfaces for filtration. The contact areas of this filter with water consist of small open surfaces between 10-100 µm. The discs that make up the Enrodisc® Filter structure consist of two micro filter panels, which are very easy to assemble and disassemble. A disc structure is created by placing these two filtering panels in their places with the guide feet and closing the top cover.

During the filtration process, the working principle of the discs is very simple. The water that needs to be treated is usually fed into the central drum by gravity and flows through the panels from the inside out. Solid particles are separated from the water by filtration panels placed on both sides of the discs. While solids are retained inside the discs, the purified water flows out to the external tank or basin where the machine is located.



Discs operate underwater up to approximately 65% of their diameter under normal operating conditions. During normal operation, the disks remain stationary until clogging occurs due to the accumulation of solids. When clogging occurs, the disks automatically begin to rotate when the water level in the feed channel reaches a certain value, thereby performing a cleaning process on the filter surface.

As the amount of particles in the micro-filter increases, the water level in the inlet continues to rise. When the inlet water reaches a certain level, the backwash process starts automatically. The disks placed on the drum start to rotate and, while rotating, the dirty filter surface is cleaned by backwashing with filtered pressurized water with the help of counter-current and nozzles. Solid particles are separated and the wastewater is discharged into the collector flume and removed from the system. Cleaning nozzles are designed for easy maintenance and replacement.

Each filter panel that makes up the disk segments of the ENRODISC® FILTER can be easily replaced within seconds using the locking screws on the cover. The panels can be easily and quickly removed without the need to drain the tank or remove the filter.



ISO 9001:2015 ISO 14001:2015

ENRODISC® FILTER unit is offered as a turnkey system that is delivered fully equipped, including a backwash system prepared with a backwash pump, pipes, and spray nozzles. When maintenance is required for the spray nozzles on the nozzle distribution pipe, both the nozzle bar and top cover are automatically controlled by linear actuator systems.

The distribution drum is driven by a gear motor and its rotation speed can be adjusted with frequency control. Operational processes are automatically controlled with an electrical panel.



ISO 45001:2018

Endemic is ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 10002:2018 and CE certified, which is an additional step in providing a high quality product and the best possible support to our customers. ENRODISC® FILTER is delivered in compliance with the EC Machinery Directive and welded according to European standards.



“HEAVY DUTY” DESIGN

The discfilters use surface filtration. The filters operate with an inside-out flow path. Influent enters the central drum and flows into the filter segments due to the effect of gravity. The disks are only partially submerged while solid materials are sent to the waste flume. Solids accumulate on the inside filter surface and are backwashed with counter-current spray nozzles. The disc only rotates only during backwash depending on the design.

HIGH EFFICIENCY BACKWASHING SYSTEM

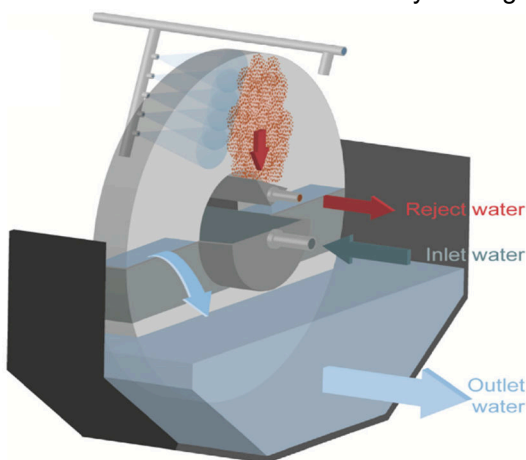
The captured solids are washed back to a waste flume using a positive pressure spray cleaning system. This backwash cycle is automatically initiated by a level sensor in the inlet channel while backwashing during filtration. The spray mechanism efficiently removes solids from the filter surface. The design of Enrodisc minimizes lifecycle costs with fewer moving parts and lower energy demand for backwashing

MODIFICATION OR UPGRADING OF EXISTING PLANTS

Disk filters can be used in a way that existing filtration systems can be upgraded using the same concrete structures and existing tanks or can be updated simply by replacing the panels and washing system.

TYPICAL APPLICATIONS

- Municipal and industrial tertiary filtration,
- Wastewater reuse,
- Purification of industrial process water,
- Pulp and paper industry,
- Recirculation of steel industry cooling water.



HOW IT WORKS?

Water to be filtered is guided into the rotor drum and flows by gravity into the discfilter, through openings in the drum, and passes through the filter cloth.

1. Suspended solids are separated and accumulate on the inside of the filter cloth.
2. When the water level inside the filter increases to a preset point, the discfilter starts rotating and switches to the backwash period.
3. The high pressure backwash spray nozzles remove the accumulated suspended solids into the reject flume located inside the central drum. The suspended solids are then discharged via the reject pipe.
4. 65% of the disc area is submerged in operation to provide a high area through which the flow can pass.

THE MAIN FEATURES OF ENRODISC® FILTER

- DISC does not consist of single SEGMENTS (modules). Each SEGMENT (module) consists of 2 PANELs and 12 SEGMENT (MODUL) creates a DISC,
- Maximum 40 DISC can be installed,
- Minimum energy consumption and limited headloss,
- Minimum backwash water consumption,
- Modular design with maximum flexibility for different effluent requirements,
- Easy replacement of filter panels,
- Replacement of filter panels is 70% more economical, only panels are replaced instead of segments,
- Polyester cloth or stainless steel filtration material,
- The panels are made of high-strength thermoplastic material frames.
- Concrete basin and steel tank versions,
- Made in AISI 304 or 316 stainless steel,
- Completely enclosed unit with removable and modular cover,
- Covers and nozzle bundle are opened/closed automatically with linear actuators,
- Simple and automatic control system with minimal instrumentation,
- Due to the nozzle material, the Discs can be washed on the machine with a chemical solution,
- 100 micron particle filter is placed on the backwash line to prevent nozzle clogging,
- During washing, the RPM of the discs can be adjusted by frequency control,
- In case of request, a stepped outlet weir can be placed in the reinforced concrete pool (or tank clean water outlet), and in this case, a cover with an actuator is not required,
- Automatic and manual easy operation features,
- Aesthetic structure.







CERTIFICATE

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SAN. VE TİC. A.Ş.

DUBULLU OSB MAH. DES-110 SOK. NO:42
ÜMRANİYE / İSTANBUL / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:
Denetlenmiş ve aşağıdaki standartın gerekliliklerine uygunluğu görülmüştür:*

ISO 9001:2015

*The Quality Management System is applicable to:
Kalite Yönetim Sistemi:*

DESIGN, PRODUCTION, SALES AND AFTER SALES SERVICES OF MECHANICAL EQUIPMENT AND MACHINES FOR WATER AND WASTEWATER TREATMENT FACILITY, ENDEMIC PLANT, VEGETABLE OIL, NATURAL OIL EXTRACTION FACILITY AND RENEWABLE ENERGY CENTRAL, ATMOSPHERIC AND PRESSURIZED PROCESS TANKS, SPECIAL STEEL STRUCTURES, OZONE GENERATOR, ODOR AND GAS TREATMENT FACILITY EQUIPMENT FOR COMPACT TYPE WATER AND WASTEWATER TREATMENT FACILITIES, INDUSTRIAL FACILITIES, ENDEMIC PLANT AND HERBAL OIL EXTRACTION UNITS AS HIGH TECHNOLOGY PRODUCTS

SU VE ATIKSU ARITMA TESİSLERİ, ENDEMIC BİTKİ, BİTKİSEL YAĞ, NATÜREL YAĞ EKSTRAKSİYON TESİSLERİ VE YENİLEBİLİR ENERJİ SANTRALLERİ İÇİN MEKANİK EKİPMAN VE MAKİNELER, KOMPAKT TİP SU VE ATIKSU ARITMA TESİSLERİ, ENDÜSTRİYEL TESİSLER İÇİN ATMOSFERİK VE BASINÇLI PROSES TANKLARI, ÖZEL ÇELİK YAPILAR, OZON JENERATÖRÜ, KOKU VE GAZ ARITMA TESİS EKİPMANLARI, ENDEMIC BİTKİ VE BİTKİSEL YAĞ EKSTRAKSİYON ÜNİTELERİ GİBİ YÜKSEK TEKNOLOJİ ÜRÜNLERİNİN TASARIMLI, ÜRETİMLİ, SATIŞI VE SATIŞ SONRASI HİZMETLERİ

Certificate Number: QMS-0108219 Initial Certification Date: 13.12.2022
Belge Numarası: QMS-0108219 İlk Belgeleme Tarihi: 13.12.2022

Certification Period: 3 Years Certificate Validity Date: 12.12.2024
Belgeleme Periyodu: 3 Yıl Belge Geçerlilik Tarihi: 12.12.2024




IQR ULUSLARARASI BELGELENDİRME HİZMETLERİ LTD.ŞTİ.
Beşevler Mah. Kocayunus Sk. No:3 Arslan Han Plaza K:2 Nispetiye / BURSA
Tel.: +90 224 206 00 16 Faks: +90 224 249 41 13 www.iqrcert.com e-posta: info@iqrcert.com



CERTIFICATE

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SAN. VE TİC. A.Ş.

DUBULLU OSB MAH. DES-110 SOK. NO:42
ÜMRANİYE / İSTANBUL / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:
Denetlenmiş ve aşağıdaki standartın gerekliliklerine uygunluğu görülmüştür:*

ISO 14001:2015

*The Environmental Management System is applicable to:
Çevre Yönetim Sistemi:*

DESIGN, PRODUCTION, SALES AND AFTER SALES SERVICES OF MECHANICAL EQUIPMENT AND MACHINES FOR WATER AND WASTEWATER TREATMENT FACILITY, ENDEMIC PLANT, VEGETABLE OIL, NATURAL OIL EXTRACTION FACILITY AND RENEWABLE ENERGY CENTRAL, ATMOSPHERIC AND PRESSURIZED PROCESS TANKS, SPECIAL STEEL STRUCTURES, OZONE GENERATOR, ODOR AND GAS TREATMENT FACILITY EQUIPMENT FOR COMPACT TYPE WATER AND WASTEWATER TREATMENT FACILITIES, INDUSTRIAL FACILITIES, ENDEMIC PLANT AND HERBAL OIL EXTRACTION UNITS AS HIGH TECHNOLOGY PRODUCTS

SU VE ATIKSU ARITMA TESİSLERİ, ENDEMIC BİTKİ, BİTKİSEL YAĞ, NATÜREL YAĞ EKSTRAKSİYON TESİSLERİ VE YENİLEBİLİR ENERJİ SANTRALLERİ İÇİN MEKANİK EKİPMAN VE MAKİNELER, KOMPAKT TİP SU VE ATIKSU ARITMA TESİSLERİ, ENDÜSTRİYEL TESİSLER İÇİN ATMOSFERİK VE BASINÇLI PROSES TANKLARI, ÖZEL ÇELİK YAPILAR, OZON JENERATÖRÜ, KOKU VE GAZ ARITMA TESİS EKİPMANLARI, ENDEMIC BİTKİ VE BİTKİSEL YAĞ EKSTRAKSİYON ÜNİTELERİ GİBİ YÜKSEK TEKNOLOJİ ÜRÜNLERİNİN TASARIMLI, ÜRETİMLİ, SATIŞI VE SATIŞ SONRASI HİZMETLERİ

Certificate Number: EMS-0108219 Initial Certification Date: 13.12.2022
Belge Numarası: EMS-0108219 İlk Belgeleme Tarihi: 13.12.2022

Certification Period: 3 Years Certificate Validity Date: 12.12.2024
Belgeleme Periyodu: 3 Yıl Belge Geçerlilik Tarihi: 12.12.2024




IQR ULUSLARARASI BELGELENDİRME HİZMETLERİ LTD.ŞTİ.
Beşevler Mah. Kocayunus Sk. No:3 Arslan Han Plaza K:2 Nispetiye / BURSA
Tel.: +90 224 206 00 16 Faks: +90 224 249 41 13 www.iqrcert.com e-posta: info@iqrcert.com



CERTIFICATE

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SAN. VE TİC. A.Ş.

DUBULLU OSB MAH. DES-110 SOK. NO:42
ÜMRANİYE / İSTANBUL / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:
Denetlenmiş ve aşağıdaki standartın gerekliliklerine uygunluğu görülmüştür:*

ISO 10002:2018

*The Customer Satisfaction and Complaint Management System is applicable to:
Müşteri Memnuniyeti ve Şikayet Yönetim Sistemi:*

DESIGN, PRODUCTION, SALES AND AFTER SALES SERVICES OF MECHANICAL EQUIPMENT AND MACHINES FOR WATER AND WASTEWATER TREATMENT FACILITY, ENDEMIC PLANT, VEGETABLE OIL, NATURAL OIL EXTRACTION FACILITY AND RENEWABLE ENERGY CENTRAL, ATMOSPHERIC AND PRESSURIZED PROCESS TANKS, SPECIAL STEEL STRUCTURES, OZONE GENERATOR, ODOR AND GAS TREATMENT FACILITY EQUIPMENT FOR COMPACT TYPE WATER AND WASTEWATER TREATMENT FACILITIES, INDUSTRIAL FACILITIES, ENDEMIC PLANT AND HERBAL OIL EXTRACTION UNITS AS HIGH TECHNOLOGY PRODUCTS


SU VE ATIKSU ARITMA TESİSLERİ, ENDEMIC BİTKİ, BİTKİSEL YAĞ, NATÜREL YAĞ EKSTRAKSİYON TESİSLERİ VE YENİLEBİLİR ENERJİ SANTRALLERİ İÇİN MEKANİK EKİPMAN VE MAKİNELER, KOMPAKT TİP SU VE ATIKSU ARITMA TESİSLERİ, ENDÜSTRİYEL TESİSLER İÇİN ATMOSFERİK VE BASINÇLI PROSES TANKLARI, ÖZEL ÇELİK YAPILAR, OZON JENERATÖRÜ, KOKU VE GAZ ARITMA TESİS EKİPMANLARI, ENDEMIC BİTKİ VE BİTKİSEL YAĞ EKSTRAKSİYON ÜNİTELERİ GİBİ YÜKSEK TEKNOLOJİ ÜRÜNLERİNİN TASARIMLI, ÜRETİMLİ, SATIŞI VE SATIŞ SONRASI HİZMETLERİ

Certificate Number: ISO-07341 Initial Certification Date: 13.12.2022
Belge Numarası: ISO-07341 İlk Belgeleme Tarihi: 13.12.2022

Certification Period: 3 Years Certificate Validity Date: 12.12.2024
Belgeleme Periyodu: 3 Yıl Belge Geçerlilik Tarihi: 12.12.2024




IQR ULUSLARARASI BELGELENDİRME HİZMETLERİ LTD.ŞTİ.
Beşevler Mah. Kocayunus Sk. Arslan Han J. Markazi K2 Nispetiye / BURSA
Tel.: +90 224 206 00 16 Faks: +90 224 249 41 13 www.iqrcert.com e-posta: info@iqrcert.com



CERTIFICATE

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SAN. VE TİC. A.Ş.

DUBULLU OSB MAH. DES-110 SOK. NO:42
ÜMRANİYE / İSTANBUL / TÜRKİYE

In recognition of the organization's Management System which complies with

ISO 45001:2018


The scope of activities covered by this certificate is defined below

DESIGN, PRODUCTION, SALES AND AFTER SALES SERVICES OF MECHANICAL EQUIPMENT AND MACHINES FOR WATER AND WASTEWATER TREATMENT FACILITY, ENDEMIC PLANT, VEGETABLE OIL, NATURAL OIL EXTRACTION FACILITY AND RENEWABLE ENERGY CENTRAL, ATMOSPHERIC AND PRESSURIZED PROCESS TANKS, SPECIAL STEEL STRUCTURES, OZONE GENERATOR, ODOR AND GAS TREATMENT FACILITY EQUIPMENT FOR COMPACT TYPE WATER AND WASTEWATER TREATMENT FACILITIES, INDUSTRIAL FACILITIES, ENDEMIC PLANT AND HERBAL OIL EXTRACTION UNITS AS HIGH TECHNOLOGY PRODUCTS

SU VE ATIKSU ARITMA TESİSLERİ, ENDEMIC BİTKİ, BİTKİSEL YAĞ, NATÜREL YAĞ EKSTRAKSİYON TESİSLERİ VE YENİLEBİLİR ENERJİ SANTRALLERİ İÇİN MEKANİK EKİPMAN VE MAKİNELER, KOMPAKT TİP SU VE ATIKSU ARITMA TESİSLERİ, ENDÜSTRİYEL TESİSLER İÇİN ATMOSFERİK VE BASINÇLI PROSES TANKLARI, ÖZEL ÇELİK YAPILAR, OZON JENERATÖRÜ, KOKU VE GAZ ARITMA TESİS EKİPMANLARI, ENDEMIC BİTKİ VE BİTKİSEL YAĞ EKSTRAKSİYON ÜNİTELERİ GİBİ YÜKSEK TEKNOLOJİ ÜRÜNLERİNİN TASARIMLI, ÜRETİMLİ, SATIŞI VE SATIŞ SONRASI HİZMETLERİ

Certificate Number : GCR/CERT-12.2023.4399
Certificate Issue Date : 20.12.2023
Certificate Validity : 19.12.2024

Abimanyu Gaurav
Abimanyu Gaurav
Approval



For updated & more information concerning the process certificate visit at www.gcr-cert.co.uk
Global Certification & Register Services Limited
NO 23 BRISTOL, 201 BRISTOL, BRISTOL AVON, BA1 2EJ, ENGLAND
cert@globalcert.co.uk
www.gcr-cert.co.uk



QA-AC-6127/22

QA TECHNIC – UYGUNLUK ONAYI
QA TECHNIC – ATTESTATION OF CONFORMITY

MAKİNA EMNİYETİ YÖNETMELİĞİ (2006/42/AT)
MACHINERY DIRECTIVE (2006/42/EC)

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SAN. VE TİC. A.Ş.
DUDULLU OSB Mah. DES-110 Sk. D.20 BLOK NO:42 ÜMRANIYE
İSTANBUL/TÜRKİYE

Ürünün Tanımı
Description of the Product/Product Part : FİLTRELER
FILTERS

Markası
Product Commercial Brand : ENDEMIC

Ürün Tipi
Product Type : MİKRO DİSK FİLTRE, TAMBUR ELEK, DİSK ELEK
MİKRO DİSK FİLTRE, DOLU FİLTRE, ROTARY DİSK FİLTRE

Uygulanabilir AT Direktifi
Applicable EC Directives : 2006/42/AT
2006/42/EC

Uygulanabilir Harmonize Standartlar
Uygulanabilir Ulusal Standartlar
Ve Teknik Spesifikasyonlar
Applicable Harmonized Standards/
Applicable National Technical Standards : TS EN ISO 12100:2010, TS EN 60204-1

Rapor No & Rapor Tarihi
Report No. & Report Date : M.LVO-2296/22, 09.12.2022

İbu belge incelenmesi yapılan ürün tasarımı için geçerlidir. Ürünün değiştirilmesi halinde bu belge geçerliliğini kaybetmektedir.
Ürünün ilgili direktif / direktiflere uygunluğu ile ilgili nihai sorumluluk üretici firmaya aittir.
The Present certificate is valid just for the analysed product design. The certificate shall lose its validity in case of any changes
in the product. Ultimate responsibility related with conformity of product with directive / directives, belongs to manufacturer.

İlgili yönetmelikler ve yasal mevzuat gereği ürünün CE işareti ile ilgili nihai sorumluluk üreticiye aittir.
Ultimate responsibility regarding the affixing of CE mark according to relevant regulations and legal legislation, belongs
manufacturer.

Sertifika Yayın Tarihi : 12.12.2023
Certificate Issue Date : 12.12.2023
Geçerlilik Tarihi
Validity Date :

ALBERK QA SÜREKLİLİK İZLENİMİ TEKNİK
KONTROL VE BELGELENDİRME A.Ş.
BAĞCIBAZI MAH. 407. PARSEL NO: 100
A BLOK KAT: 10.02. ATAGÖR
19170/ANILI, T.C. SAKARYA
TRT. 0264 674 89 10 10
TRT. 0264 674 89 10
www.qatechnic.com

L. Murat YILMAZ
Yönetim Kurulu Başkanı
Chairman Of Executive Board




Endemic Fito Farma Biyoteknoloji
Sanayi ve Ticaret A.Ş.



CERTIFICATE OF ORIGIN AND QUALITY
For equipment and accessories issued by manufacturing company.


PRODUCT NAME : MICRO DISC FILTER
MODEL & S/N : ENRODISC-27p
TYPE : Rotary Type Micro Disc Filter
SUPPLIER NAME : ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SANAYİ VE
TİCARET ANONİM ŞİRKETİ
SUPPLIER ADDRESS : Dudullu OSB Mah. DES-110 Sk. No:42 Ümraniye
İSTANBUL / TÜRKİYE
MATERIAL : Drum & Frame: AISI316, Disc Segment: ABS,
Filter Panel Frame: PP, Filter Cloth: Polyester
COUNTRY OF ORIGIN : TÜRKİYE




THEREFORE, WE CONFIRM THAT THE PRODUCT AND ACCESSORIES LISTED ABOVE HAVE BEEN
PRODUCED IN THE BEST CONDITIONS. ALL MATERIALS ARE THE BEST QUALITY, AND THE
MANUFACTURING PROCESS WAS MONITORED ALL THE STAGES.

MANUFACTURER AUTHORIZED SIGNATURE

Name / Function : BURAK ATOM OKUMUŞ / General Manager
Location / Date : TÜRKİYE / 01.01.2024
Signature :



Endemic Fito Farma Biyoteknoloji
Sanayi ve Ticaret A.Ş.



DECLARATION OF CONFORMITY – CE

WE HERE DECLARE MANUFACTURER / EU REPRESENTATIVE:

ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SANAYİ VE TİCARET ANONİM ŞİRKETİ
Dudullu OSB Mah. DES-110 Sk. No:42 Ümraniye – İSTANBUL / TÜRKİYE

That following described product in our delivered version complies with the appropriate basic safety and
health requirements of the Directive 2006/42/EC (Machinery Directive) based on its design and type, as
brought in circulation by us. In case alteration of the product, not agreed upon by us, this declaration will
lose its validity.

Description of the Product : MICRO DISC FILTER
Product Commercial Brand : ENDEMIC
Product Type : Rotary Type Micro Disc Filter
Standards : EN ISO 12100:2010, EN ISO 60204-1
Applicable EC Directives : 2006/42/EC (Machinery Directive)

MANUFACTURER AUTHORIZED SIGNATURE

Name / Function : BURAK ATOM OKUMUŞ / General Manager
Location / Date : TÜRKİYE / 01.01.2024
Signature :



Endemic Fito Farma Biyoteknoloji
Sanayi ve Ticaret A.Ş.



WARRANTY CERTIFICATE

MANUFACTURER

NAME : ENDEMIC FİTO FARMA BİYOTEKNOLOJİ SANAYİ VE
TİCARET ANONİM ŞİRKETİ
ADDRESS : Dudullu OSB Mah. DES-110 Sk. No:42 Ümraniye
İSTANBUL / TÜRKİYE
PHONE : 0216 415 10 14 - 0216 489 12 58 - 59

PRODUCT NAME : MICRO DISC FILTER
MODEL & S/N : ENRODISC-27p
WARRANTY PERIOD : 24 Months

WARRANTY CONDITIONS

- This equipment are under the manufacturer's warranty for the period mentioned above against
design and production defects.
- This warranty does not apply to damage caused by accidents, negligence or misuse.

MANUFACTURER AUTHORIZED SIGNATURE

Name / Function : BURAK ATOM OKUMUŞ / General Manager
Location / Date : TÜRKİYE / 01.01.2024
Signature :