

# DUAL SEF version 2024

DEGASSING UNIT FIXED ON GROUND WITH SIC ROTOR
EQUIPPED WITH DISPENSER FOR DOSING GRANULAR FLUXES
NEW CONTROL FEATURES + ACCESSORIES
FOR AUTOMATIC TREATMENT OF ALUMINIUM ALLOYS IN LADLES





# **DESCRIPTION**

In aluminium foundries, rotor degassing provides an efficient method to reduce the presence of hydrogen and oxides in liquid alloys. The alloy will reach the optimal density and thanks to the calculation of the density index (D.I.) the result is certified. The treatment capacity of the machine varies on ladles from 300 to 1500 kg of aluminium. Cycles are programmable for different alloys and it is easy to use. Equipped with a new 9" control panel - change of impeller rotation , interface from PC or Smart phone, datalogger and humidity environmental condition alarm sensor, connection for remote assistance

The addition of a slagging product in granular form purifies the bath, freeing it from the oxides and impurities present in the alloy.

The use of this machine brings a significant reduction in flux consumption and a considerable cost saving for the shafts/rotors as it mounts a monolithic rotor in silicon carbide.

#### STANDARD EQUIPMENT

- Anti-rotating vortex fin: optimizes slagging salt reaction
- One-piece SiC rotor with long service life
- Metal Temperature Detection System and Cycle Data
- Insulated cover diameter 800 mm or larger on request
- Movement on column with adjustable steel chains
- Steel base with 12 mm diameter holes for ground fixing

# **GRANULAR FLUX DISPENSER** (on request)

Automatic dosing of quantities of granular streams, slagging or modifying flows.

- Capacity: 25kg
- Stainless steel tank







#### **ROTOR WITH ANTI-VORTEX PADDLE**

The rotor is supplied in silicon carbide with sizes from 500 to 1200 mm diameter, propeller diameter 150 mm or 200 mm

#### **FEATURES**

- Shaft- monobloc structure in Silicon Carbide
- High wear resistance and anti-oxidation
- Six-vane rotor for less turbulence
- Great efficiency on Hydrogen removal
- Adjustable shaft rotation up to 700 RPM
- · Paddle Rotation when adding flux
- Insulated lid and safety fence on column
- Sturdy construction to prevent shaft oscillations
- Ready-to-use unit: plug & play
- Counterclockwise and clockwise rotation of the movement
- 3 colours light for machine functionality



### **OPERATOR PANEL**

The unit is equipped with an inverter and a tactile control panel to set the different parameters: degassing time, fin rotation, rotation delay, speed steps, cycle program for the different alloys

Remote interface visualization from PC or Smartphone, Remote connection for remote assistance
Ambient data display and alarm if exceed values
Automatic and manual mode operation
Standard cable length between electrical panel and machine: 5 m (on request a quick connection socket between the unit and the control panel)
Power supply: 400 V/ 3phase/ 50 Hz/ 2 kw
Touch screen with IP65, Ethernet and USB equipment Circuit breakers

# NITROGEN OR ARGON GAS MANAGEMENT PANEL

- Low flow solenoid valve with flow regulator
- High flow solenoid valve with flow regulator
- · Lack of gas pressure switch
- Injection flow rate 10-30 l/min
- Supply pressure: 4-5 Bar
- Flow rate: 100 NI/min
- Connection: 1/42 Gas F







# LADLE PRESENCE CONTROL SYSTEM AND CORRECT POSITION DETECTION

Microswitch system with laser detection integrated in the column for a correct position and enabling the operation of the degassing cycle

# **ACCESSORIES ON REQUEST**

- Data logger for bath temperature detection for monitoring and downloading degassing cycle data on the network
- Anti-intrusion curtains and CE conformity certification
- The unit is delivered with a certificate of incorporation
- Self-supporting steel frame equipped with slot for forklift on both sides and easy movement in the foundry
- Multi-pin plug for quick connection from control panel to machine
- Steel cradle for a safe delivery and transport by truck (after delivery it can be returned to our works)



