

STAR 3000

STATIONARY DEGASSING SYSTEM

The STAR 3000 is a stationary rotor degassing system.

In a rotor degassing system a metered amount of inert gas is injected into the molten aluminium through a rotating graphite shaft and rotor. The graphite rotor shears the inert gas into tiny bubbles and disperses them evenly throughout the melt. Unwanted hydrogen gas and non-metallic inclusions are attracted to the inert gas bubbles and rise to the surface for removal, which creates a higher quality molten metal.

COMPOSITION

- Mast lift
- Extension arm
- Hydraulic power system
- Electrical/gas control system
- Graphite parts

SPECIFICATIONS

Electrical	<ul style="list-style-type: none"> • 3-Phase, 460 VAC, 9A • 5 kW total power • Automatic end of cycle indicator • ≤600 rpm variable speed rotor
Mechanical	<ul style="list-style-type: none"> • Stationary, floor mounted • Hydraulic power lift with adjustable up/down stroke • SHUR-LOK coupling between the graphite shaft and drive shaft • Linear slider lifts the extension arm • 107–122 cm (42–48 in) lift stroke length • 86–97 cm (34–38 in) boom reach
Gas Supply Requirements	<ul style="list-style-type: none"> • Dry nitrogen or argon • 10–20 SCFH purge/idle gas preset • 30–100 SCFH degas process gas
Operational Cycle	<ul style="list-style-type: none"> • Purge mode • Manual and automatic degassing



BENEFITS

- Continuous operation
- Programmable Logic Controller (PLC) monitors and controls operation
- Hydraulic lift for smooth, trouble-free operation and easy rotor replacement
- Variable speed electric motor
- SHUR-LOK shaft coupling
- Auto-timer and flashing light notify the operator when the cycle is done
- Automatic mode settings provide repeatable results and efficiency
- Efficiently uses nitrogen or argon
- Process gas flow meter
- Compact electrical control panel with NEMA enclosure
- Self-checking diagnostics
- Password protected cycle parameters
- Degassing system can rotate around the support column (optional)

APPLICATIONS

- Aluminium foundries
- Aluminium holding and transfer vessels (crucibles, furnaces, ladles)

OPERATION

- Manual degassing
- Auto degassing. Preset the degassing parameters and start the equipment. The cycle ends automatically at a set time (0–99.99 hours)

