

STAR 3500

STATIONARY DEGASSING AND FLUX INJECTION SYSTEM

The STAR 3500 is a stationary degassing and flux injection system used for continuous degassing and flux injection applications.

The STAR 3500 has a robust auger style flux injector that allows a steady flux flow below the metal line. This effect improves the aluminium alloys quality and reduces operating costs.

COMPOSITION

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

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 and fluxing gas
Flux Tank Specifications	<ul style="list-style-type: none"> • 11 kg (25 lb) flux tank capacity • Flux injection rates: 0.06 kg/min (0.125 lb/min), 0.11 kg/min (0.25 lb/min), 0.17 kg/min (0.375 lb/min), 0.23 kg/min (0.50 lb/min), 0.28 kg/min (0.625 lb/min), 0.34 kg/min (0.75 lb/min) • Supports powder or granular flux use • >0.34 MPa (50 psi) flux injection pressure



BENEFITS

- Continuous operation
- Accurate flux injection under the metal level
- 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 flux, nitrogen or argon
- Transparent flux view window
- 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)
- Cooling air blower prevents overheating

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

