

# ACD

## Aluminium Compact Degasser®

« The Most Efficient and Flexible  
Degassing System for the Aluminium  
Casthouse »

### How it works

The ACD / Aluminium Compact Degasser® is a multi-stage, sealed in-line rotary degassing equipment that processes molten aluminium using spinning nozzles directly in the casting trough between the furnace and the casting pit.

The ACD is much smaller and flexible than conventional in-line degassers (with refractory-lined steel boxes). Although the physical, mechanical and operational differences between the ACD and conventional degassers are significant, the underlying metallurgical principles involved in metal treatment are the same. The metallurgical performance of ACD is therefore equivalent or even superior to conventional degassing equipment.

Since there is no metal hold up in the machine at the end of a cast, alloy changes are much easier, and no heating is required. Then, the operating and maintenance costs of the ACD are lower than for any other type of degasser on the market.

The ACD is particularly effective for applications such as batch casting or when multiple alloy changes are required.

### Key features

#### METAL QUALITY IMPROVEMENT

- > High hydrogen removal efficiency.
- > Good alkali and inclusion removal efficiency if chlorine or flux are used.

#### PRODUCTIVITY IMPROVEMENT

- > Operates in sealed mode; very little dross formation.
- > Eliminates metal loss due to alloy changes; furthermore, no need to remelt aluminium.
- > Eliminates the need to maintain molten aluminium between casts in the degassing chamber.
- > Operator-friendly, easy to operate, fully automatic operation.
- > Low floor space required for installation (several models available)

#### LOW OPERATION AND MAINTENANCE COSTS

- > Eliminates high costs heating elements and thermocouples.
- > Eliminates high costs for replacement of refractory lining.
- > Reduces energy consumption.
- > Over 60% reduction of overall operations and maintenance costs.

#### SAFE OPERATING ENVIRONMENT

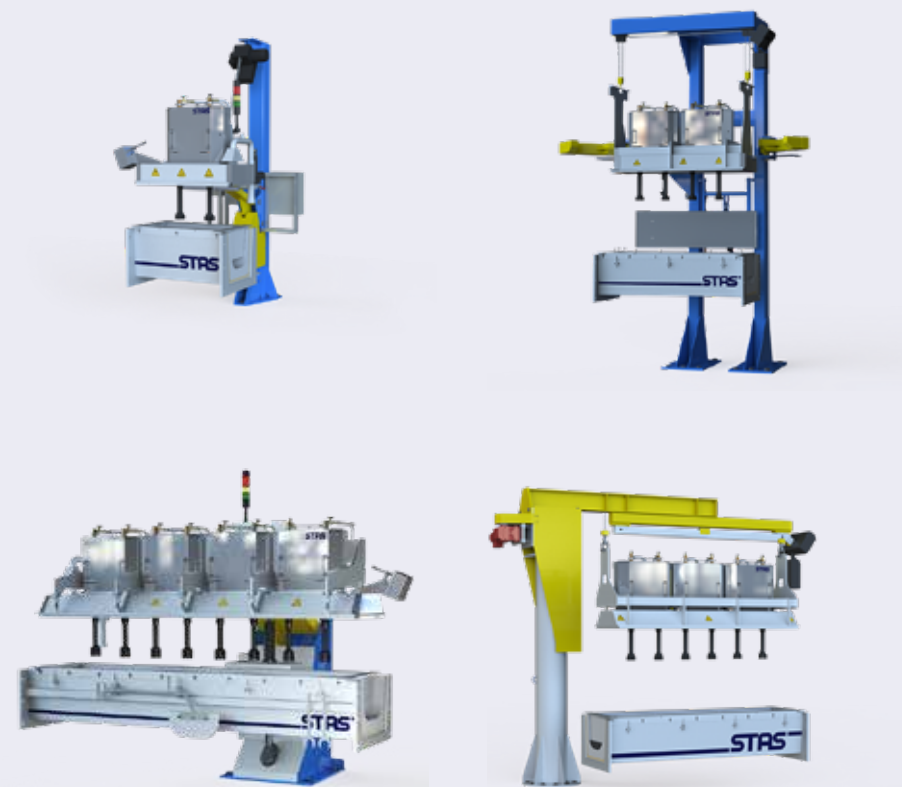
- > Elimination of chlorine, if required, through the use of the FFD / Flux Feeder for Degasser®.



## Models available

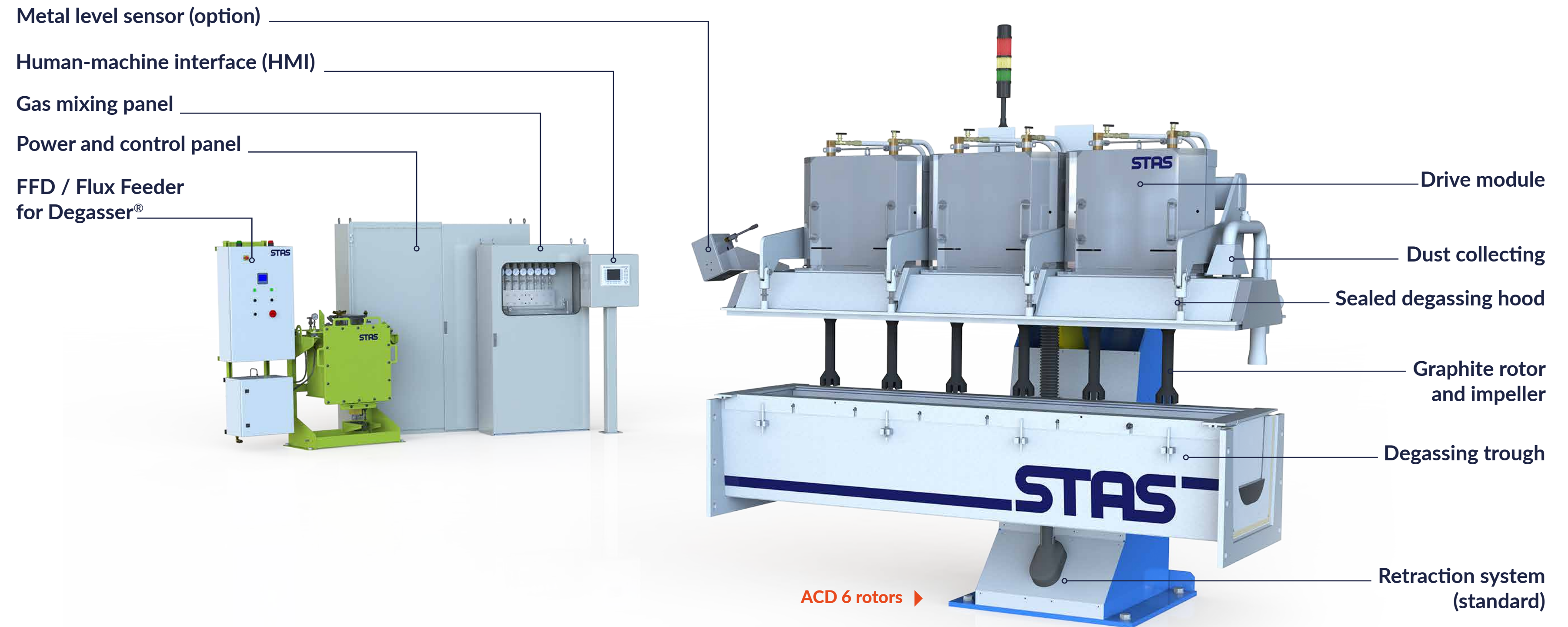
2 to 10 rotor systems available for treatment of various metal flow rates from 20 up to 1500 kg/min. Several models have been developed to meet any type of layout constraints.

For long continuous casting, we suggest to install two or three ACD 2 rotors in series to allow alternate skimming, without affecting performance.



## Options available

- > Metal level sensor
- > Exhaust system including blower, valve and ducting
- > Transition trough
- > Heated degassing trough
- > Mecanized trough gate



## Typical specifications

Models	Main unit Overall dimensions*				Argon gas		Chlorine gas (if required)	
	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Inlet pressure (kPa)	Flow (l/min)	Inlet pressure (kPa)	Flow (l/min)
ACD 2 rotors	1220	2000	3200	1300	550	90	414	1
ACD 4 rotors	1905	2150	3500	2500	550	180	414	3
ACD 6 rotors	2600	2300	3600	3300	550	360	414	5
ACD 8 rotors	3500	2300	3600	4100	550	480	414	5
ACD 10 rotors	3900	2300	3600	5000	550	600	414	7

\* Models with standard retraction system

\* Power requirement : 10 kVA, 415 or 575 V, 3 phases, 50/60 Hz