



# BAC's S1500 open cooling tower is supporting the world's first hydrogen plant in steel production







## LOCATION

Ovako Sweden AB is one of the largest recyclers of steel scrap in the Nordics and is engaged in responsible business across the entire supply chain. They are a leading European **manufacturer of engineering steel** for customers in the bearing, transportation and manufacturing industries.

The new **hydrogen plant**, located in Hofors, will make Ovako Sweden AB the **first in the world to heat steel with hydrogen** prior to rolling and this is the **next major step towards carbon-neutral steel production** by replacing liquefied petroleum gas with fossil-free hydrogen.

## CUSTOMER REQUIREMENT, NEEDS & EXPECTATIONS

-  Reliability and REDUNDANCY
-  Extreme LOW SOUND levels
-  Low MAINTENANCE and easy INSPECTION
-  TROUBLE-FREE operation



## BAC SELECTION

### (1) S15E-1218-12MEW

- ★ After installing (4) S3000E cooling towers in 2021 for the steel plant, Ovako Sweden AB wanted their new hydrogen plant to experience the same BAC benefits.
- ★ Support of the BAC local & HQ team throughout the decision process

#### Options and accessories:

- ★ Baltibond® Hybrid Coating
- ★ Remote sump connection
- ★ External ladder & safety cage
- ★ Internal lower walkway & service platform with ladder
- ★ Swing out motor base & motor davit



## TECHNICAL DETAILS

Consultant: AFRY Borlänge  
 Temperatures: 48,9°C / 25°C / 21°C  
 Cooling Capacity: 7 MW



*BAC's open cooling tower is the **heart of a central cooling system**. This central cooling system cools multiple devices like dryers, scrubbers and compressors (oxygen and hydrogen related), as well as the electrolyzers and transformers.*

### REDUNDANCY

**Peace of mind** - The customer can relax by opting for an open cooling tower with high efficiency fan motors. The multiple fan motor system covers an independent fan motor and drive assembly per fan. In case of fan failure, the other fans can still operate. Elaborate cold weather testing in our R&D laboratories has provided guaranties that winter operation in this Nordic climate will not be a problem.

### SOUND

**Extreme low sound levels** - The choice of Whisper Quiet fans ensures minimal surrounding noise. As the open cooling tower is located quite near to a building, the single-side air inlet creates a quieter tower rear for this noise-sensitive area. The smaller motors (15 kW) also assist with lowering the overall sound.

### MAINTENANCE

**Maintenance made easy** - The S1500E has a spacious plenum that can be reached via a large hinged door. By selecting the internal walkway and service platform with ladder, easy inspection and maintenance access is guaranteed. The addition of a motor removal davit ensures safe, easy and quick motor replacement. Baltibond® hybrid coating gives the equipment a smooth surface finish that facilitates internal cleaning.

### TROUBLE FREE OPERATION

**The combinations add up** - The year-round reliable operation, thermal performance tested and certified by Eurovent, the energy and water savings, the minimal maintenance requirements,... All these elements combined result in the S1500E open cooling tower bringing a low overall operating cost and trouble-free operation to its owner for many years to come.

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Cold weather testing



Whisper Quiet fans with multiple fan motor system



Easy and safe access via the walkway, ladder and platform

