A plant capacity in middle-east was heavily limited by the performance of the ACHE (Air cooled heat exchangers), especially during hot ambient air temperature conditions. This call to action made the end-user decide to contact ELBRONS BV and D’Hondt Thermal Solutions who are specialized in ACHE performance assessment, improvement by specialized solutions and manufacturing of new air cooled heat exchange units.

Based on visual inspection of external fouling, the bundles seemed extensively contaminated.

An external cleaning campaign on an Oil & gas, (Petro)-chemical site can be quite an extensive activity regarding eventual work permits, scaffolding, shutting down fans (hence loss in production). Therefore it is essential to maximise the effect of that activity.

Improper external cleaning of finned tube bundles can lead to considerable production losses during hot summer days that can reach levels as much as 20% loss solely due to poor external cleaning.

Our ELBLAST™ dry on-line cleaning technology is the answer to this problem.

Main objectives of ELBRONS / DHTS:

- To assess the current performances of critical ACHE (through extensive performance tests, general and visual inspections);
- To perform ELBLAST™ dry cleaning method;
- To debottleneck the ACHE in order to increase the plant’s capacity.
The **ELBLAST™** process is mainly used to clean “critical” air-cooled heat exchangers and allows these facilities to recover close to design values and operations running characteristics.

### Process outlet temperatures air cooled heat exchange unit

![Graph showing temperature changes before and after ELBLAST™ cleaning.]

The unit is successfully cleaned using the **ELBLAST™** cleaning method with airflow improvements between +53% and +125%.

### Additional benefits of ELBLAST™

- **No production losses** as on line cleaning (while fans are running)
- **No more lengthy motor isolation procedures** as cleaning can be carried out while fans are in operation (on line cleaning)
- **No scaffolding or wooden boards required**
- **No damage on fins due to spray jetting** as the work pressure is low (8-10 Bar)
- **No risk of damage to fins** as our specialists do not need to walk on fins at all (we stay under the finned tube bundle)
- **No more lengthy issuing of entry permits**
- **No more damage on pumps, motor, bearings** due to water ingress
- **No EEC classification for transportation or storage**
Global
D’Hondt Thermal Solutions
Thierry Fontaine
Chief Sales Officer
Mob: +33 6 88 82 38 08
thierry.fontaine@dh-ts.com

Elbrons
Therry Baas
Commercial Manager
Mob: +31 6 53 98 09 59
baas@elbrons.com

Middle-East & India
Biju PUTHANVEEDU
Sales Director
Mob: +973.3997.5879
biju.puthanveedu@dh-ts.com

Asia Pacific
Sang Hak LEE
Sales Director
Mob: +82-10-7272-7544
sh.lee@dh-ts.com