EDITORIAL

A Good Start in North America

ACS investment in North America, with the local presence of an experienced Engineer for Business Development (Martha Watson), is already showing very good results.

In the energy recovery application, ACS won its largest project so far at Tafisa wood panel board plant in the Megantic region of Quebec, Canada. This is North America’s largest particleboard manufacturing facility, with two 580,000m³/h drying lines. The removal of sparks and particulates at high temperature upstream of the dryers is essential for the plant to operate at maximum capacity without compromising safety and product quality. It’s an honor for ACS to have such a terrific opportunity to demonstrate not only the performance of the cyclones, but also our Project Management capability.

Furthermore, in the powder recovery area, and specifically in the pharmaceutical industry, an order for 9 cyclones was placed by Actavis + Allergan to capture particles from the combined flow of a deduster and a tablet press. This order follows the good results achieved last year for a test cyclone, which is working in Allergan plant in New Jersey.

The product recovery area has also started strong in 2016 elsewhere, with repeated orders by Portuguese pharmaceutical multinational Hovione and German company Werner, focused on Spray Drying technology for the food ingredients industry, where our cyclone extra efficiency has a major impact on plant productivity. In Portugal, ACS started another project for Innovnano for Nanoparticle recovery (nanostructured zirconia) in the scope of the company’s patented manufacturing technology (Emulsion Detonation Synthesis).

Back to emissions control worldwide, ACS is currently commissioning the first systems for the Palm Oil Industry in Malaysia, which we believe to be a major breakthrough in solving dust emissions of palm waste boilers in the country cost-effectively.

Further south and east, in Tasmania, Australia we started up our most remote Hurricane type MK for Britton Timbers and successfully achieved emissions under 50mg/Nm³ at 12% CO₂.

We now have a system on the other side of the world, literally!

Pedro Ribas Araújo CEO
Recent Projects

Air Liquide's cyclone system has been tested and is ready to be set up. The system is composed by a Hurricane® HR system to separate iron oxide particulates from compressed air, at a flow rate of 104 342 Nm³/h at 6.9 Bar(A), 40°C.

Air Liquide | Krakow, Poland | 2015
Our first installation in Tasmania is showing promising results! Our team was on site last week!

**Project Objective:** Reduce particulate matter from a biomass boiler

**Technology:** Hurricane MK System

**Operating conditions:**
- **Fuel:** Eucalyptus shavings
- **Effective flow rate (wet)** (m$^3$/h): 8 760
- **Gas temperature (°C):** 328
- **Expected maximum emissions (mg/Nm$^3$):** 12

Britton | Tasmania | 2016

---

**Hurricane® HR_AT** cyclone system (6 cyclones ø2800mm) to reduce particulate matter emissions, remove silica and sparks particulates before the dryers and allowing the unit to safely work at full capacity. The design flow rate is 580 000 am$^3$/h at 500°C per line.

Tafisa | Canada | 2016

---

**Hurricane® MK** cyclone system to reduce particulate matter from a biomass boiler burning cork at a flow rate of 23 000 m$^3$/h at 250°C.

Flucal/Amorim & Irmãos | Portugal | 2016

---

**ReCyclone® EH** system for the recovery of nanoparticles of metal oxides (ZnO) placed downstream of a reactor at a flow rate of 1800 m$^3$/h at 52°C. The measured efficiency is 96%.

Innovnano | Portugal | 2016

---

**Hurricane® HR ø130mm** cyclone for product recovery after spray dryer with a 112kg/h N2 flow rate.

Hovione | Loures, Portugal | 2016
Hurricane® HR ø1050mm cyclone to increase oligosaccharide powder recovery after a spray dryer with a 6.872 m³/h flow rate at 80°C.

Werner | France | 2016

Hurricane® MK cyclone system designed to reduce PM emissions from a biomass boiler burning wood at a flow rate of 28.558 m³/h at 180 °C.


ACS is supplying 9 Hurricane® HR cyclones! 7 cyclones with ø275mm (200cfm at ambient temperature) and 2 cyclones with ø400mm (450cfm at ambient temperature) to capture the waste particles from the combined flow of a deduster and a tablet press.

Allergan / Actavis | New Jersey, USA | 2016

Conferences & Events

ACS was at the XXII Symposium Spring Meeting of Heat, 26–28 April 2016 in Zakopane, Poland.


XXIII Sympozjum Wiosenne Spotkanie Cieplowników | Poland | 2016

ACS attended the Spray Drying and Atomisation of Formulations Short Course at the University of Leeds from 12th–14th April 2016. Romualdo Salcedo our CTO, spoke on the 13th of April on "Cyclone Science and Improving Product Recovery in Spray Drying Processes".

Spray Drying and Atomisation Short Course | Leeds, UK | 2016

ACS will be exhibiting in again in RWM at the NEC Birmingham between 13–15 September 2016 in UK. We hope to see you there!

RWM 2016 | Birmingham, UK | 2016

Copyright © 2016 Advanced Cyclone Systems, All rights reserved. | www.acsystems.pt