

Hurricane Cyclones Case Study: Dedusting and Emission Control

Dust from cutting and scarfing operations on pressboard

FOREWORD

In 2010, Advanced Cyclone Systems was approached by a Portuguese energy industry, Efacec Energia, to capture the pressboard's dust coming from the cutting and scarfing operations. The previous filtering system, based on bag filters, was outdated as well as with problems of operation and maintenance. With the predicted installation of a new cutting CNC machine, the client needed a new and efficient system, prepared to achieve great results.

CASE DESCRIPTION AND OBJECTIVES

ACS proposed and installed a *Hurricane* system, to comply with imposed emission limits. The system ended to reveal a better efficiency than the expected one.

OPERATING CONDITIONS

• Type of particles	Pressboard dust
• Flow rate (m ³ /h)	13,500
• Temperature (°C)	30
• Inlet concentration (g/Nm ³)	2.6

PERFORMANCE

• Expected collection (%)	98.9-99.6
• Pressure drop (mm w. g.)	1.9
• Outlet emissions (mg/Nm ³)	9



GENERAL ARRANGEMENT

The equipment is composed by a battery of 4 *Hurricanes* with Ø 900 mm. Its location is Porto, Portugal.