

Case Study

Industrial Energy Efficiency



Sector:	<input checked="" type="checkbox"/> Industry	<input type="checkbox"/> Large Buildings	<input type="checkbox"/> Infraestruturas	<input type="checkbox"/> Small buildings / residential
Subsector:	Urban Solid Waste Collection (vehicle maintenance)			Year: 2013
Client:	Soma			Implementation (months): 1 day
Location:	Ovar (Northern Portugal)			Performance Contract (years): N/A
Type of Contract:	Compressed air network optimization and reduction of leakage flow rate, implemented under a performance contract			

Project description:

In a walk-through audit done by EWEN at the client's vehicle maintenance workshop in Ovar, several improvement opportunities were identified related to the compressed air network. It was agreed to implement the proposed improvement measures, which covered two areas: reduction of leakage flow rate in the piping network and installation of pressure reduction valves in the air supply to the painting booths.

Using ultra-sound technology, EWEN identified 16 leaks, which were tagged with a colour coded tag (Red for major leaks, Yellow for important leaks and Green for minor leaks). Some of these leaks were eliminated by EWEN, and the remaining (in rigid steel threaded pipe, which needed a longer shut-down period) were identified to be intervened in the next maintenance shut-down.

96	NAVE #1		34	NAVE #1 Posto alimentação ferramenta automática	
35	NAVE #2		C	NAVE #1	
A	NAVE #1		36	NAVE #2 Estufa	

Project results:

The original objective of eliminating 75% of the leakage flow rate, was not met. The eliminated leaks reduced the leakage flow rate by 41%, since the main leaks were in rigid steel threaded piping, which had been agreed not to be intervened, because this type of work needed an interruption to the compressed air system, longer than the agreed period (one day). All the leaks identified but not corrected in this project, remained clearly identified in the field, with colour coded tags, to be corrected in the annual shut-down of the plant. The final cost of the project implemented by EWEN, was proportional to the achieved results.