

CONTROL 
TECHNIQUES

BOILER COMPANY CUTS COSTS AND NOISE

SIA GRANDEG | COMMERCIAL & MANUFACTURING

DRIVE OBSESSED

IMPROVE PERFORMANCE AND REDUCE COSTS & ENERGY

Latvian company SIA GRANDEG is one of Europe's leading suppliers of boilers and manufactures a range of wood pellet fuel boilers with heat outputs between 15 and 500 kW, for both domestic and commercial installations.

The Challenge

SIA GRANDEG was seeking expansion and to do so needed to develop its range of boilers.

The biggest growth potential for the company was the domestic sector in northern Europe, Russia and other (CIS) countries, where a sophisticated product is required. To meet customers' demands, SIA GRANDEG wanted to supply a boiler with much better performance and greater reliability.

The Benefit

As well as better performance and greater reliability, "It is also much quieter in operation," said Mr. Andris Lubins, owner of GRANDEG.

"The relay was proving to be too noisy for a domestic setting and now the whole system starts, and runs, almost silently."

He added, "Because of the reduced stresses on the bearings and other components, the general reliability and lifetime costs are much reduced. What's more, because the drive has comprehensive diagnostics on its screen, most often problems can be resolved with a telephone call, eliminating the costs and resources required for a call-out." The introduction of the Commander SK has also reduced the size of the control cabinet by some 30% and panel building costs have been lowered too.

Overview

- Lower energy & maintenance costs
- Improved performance
- Cuts operating noise
- Smooth & accurate control

The Solution

Working with Control Techniques, a new control system for the screw feeders to improve performance and reduce energy and maintenance costs was developed.

Commander SK 0.25 kW and 0.5 kW AC drives were used to provide smooth and accurate control of the screw-feed motors giving a steady supply of wood pellets. The Control Techniques system replaced a logic-controller, contactor and thermal relay so that as the boiler demands more fuel, the drive is accelerated up to the required speed, and ramped down as demand falls.

The Commander SK is simple to fit and can be programmed for most tasks in a matter of minutes, meeting customer need for ease-of-use & versatility. Copying parameters from one unit to another is extremely easy with the SK's SmartStick plug-in option.

