

CONTROL 
TECHNIQUES

VARIABLE SPEED DRIVES PROVIDE COOL SAVINGS

ETHICAL INNOVATORY SOLUTIONS | ENTERTAINMENT & LEISURE

DRIVE OBSESSED

VARIABLE SPEED DRIVES & 360° MOVEMENT

Control Techniques' AC drive, the Commander SK, has been selected as an essential component in a revolutionary rotational casting machine designed and manufactured by Ethical Innovatory Solutions (EIS).

Overview

- Quick to operate
- Extremely reliable
- Excellent control
- Faster production

The Challenge

Precise and independent control of acceleration, final speed, and deceleration of both axes is crucial in the production of quality castings.

The new Rotacaster evenly distributes moulding compound within an empty mould, to create a hollow and light weight model. The dual axis machine also has a "Rock and Roll" feature, ideal for long, narrow moulds that require a gentle rocking motion instead of a complete spin. In this mode, the primary arm is controlled by two adjustable proximity switches that limit the degree of swing, while the turntable simultaneously rotates at the required speed.

The Solution

The level of control is provided by two Commander SK variable speed drives, one for the turntable that spins the mould and the other for the primary arm, which provides 360° movement of the mould.

Ewan MacPherson of EIS, chose the Commander SK drives for the project because, "the drives are virtually 'plug-and-go' as all our settings are stored on a memory stick, this allows us to load the key parameters to each drive in seconds! We seal the drives in a tamper-proof cubicle, so we have to be completely confident in their reliability – and we are."

The Benefit

One of the first companies to own a Rotacaster is Cod Steaks, a world leading special effects and model making company who made the props for Oscar winning Wallace and Gromit film "Curse of the Were Rabbit".

Matt Sanders, Construction Supervisor and Model Designer for Cod Steaks stated, "It is at least three times faster than thermo-casting for example, the new machine gives a perfect, bubble-free casting in just a matter of minutes."

Cod Steaks' customers often have tight deadlines and the Rotacaster has made meeting their deadlines easier. Matt Sanders continued, "With a recent order for robots used in an advertisement, we were able to sculpt the models, produce moulds, cast parts for three complete robots, paint and finish them in just two weeks."

