Low-entry sway control solution
Trolley and gantry movements of a crane with a rope suspended load results in sway. It makes load positioning more difficult and causes stress on the crane structure. Handling takes longer and collision may occur.

The main purpose of the sway control system is to eliminate the sway motion so that manual operation becomes easier. This relieves the crane driver and increases the handling productivity.

SIMOCRANE Drive-Based Sway Control (DBSC) is a special solution for mid-performance overhead bridge cranes (OHBC) inside the SIMOCRANE Sway Control Family. Drive-Based Sway Control can easily be integrated in Siemens' overall drive system – SINAMICS.

SIMOCRANE Drive-Based Sway Control, features
- Sway is damped during manual traveling. After the axis has stopped or reached a constant velocity, no load sway remains.
- Single axis solution with AC/AC drives and corresponding SINAMICS Power Modules PM340, Chassis and PM250
- "ready-to-run" with pre-configured application on CF-card for trolley or gantry. Control via onboard-I/O signals, only parameterization is needed
- "ready-to-apply" applications can be adapted to customer-specific requirements
- Easy to upgrade existing projects with additional sway control functions

Benefits SIMOCRANE Drive-Based Sway Control
- Crane technology embedded in the SINAMICS drive
  - Reduction of external control hardware
  - Reduction of hardware interface
  - Reduction of cost
- Pre-configurated “ready-to-run” application on CF Card
  - Use of SIMOCRANE Drive-Based Technology
  - Direct commissioning without engineering
  - Simple commissioning via Basic Operator panel (BOP20)
  - Optional commissioning via SINAMICS web server on PC or Tablet
- Use of standard applications
  - Reduction of engineering effort
  - Customizable for special requirements
- Combine with SIMOCRANE Drive-Based Technology...
  - to provide an integrated and complete solution
  - to start commissioning with ‘ready-to-run’ SW on CF-card
Application example

A typical hardware configuration of an overhead bridge crane (OHBC) is usually controlled via onboard-I/O signals. The SIMOCRANE Drive-Based Technology provides crane specific functions, like start pulse and load dependent field-weakening for hoist motions, and master-switch and pre-limit functions for Hoist, trolley and gantry motions. Furthermore, the SIMOCRANE Drive-Based Sway Control damps sway in manual operation for trolley and gantry. This combination meets can meet the challenges of mid-performance crane applications.

Scope of delivery

The scope of delivery of the SIMOCRANE Drive-Based Sway Control package includes:

- CompactFlash card with:
  - Crane-specific SINAMICS firmware
  - A preconfigured example
  - Required License key
- DVD with SW and manuals
- license certificate

Product order number: 6GA7280-1AA10-0AB0