ABES
Advanced Bridge Engineering Systems

Product Information Sheet
ABES assemCon

ABES Engineering Software
Research and Development

ABES assemCon supports geometry management of pre-cast segmental bridges during construction.

ABES assemCon provides the following general functions:

- On-site setting out data
- Geometry forecasting during construction
- Ongoing cross-checks with target points throughout construction
- Simulation and optimisation of corrective measures; e.g. shimming or wet joints
- Accurate consideration of as-cast geometry, on-site survey data, and construction stage deflections
- Quality assurance through error tracking and error analysis functions
- Record of construction history and final as-built geometry

ABES assemCon supports assembly of pre-cast segmental bridges, and assists in optimising the final as-built geometry by:

- Optimised setting-out data for starter segments
- Accounting for casting imperfections introduced in the casting yard
- Tracking and adapting to on-site survey data
- Considering construction stage deflections
- Geometry forecasts throughout construction
- Optimisation of shimming strategies
- Documentation and quality control

ABES assemCon has been used for balanced cantilevers, span-by-span construction, and the assembly of three large pylons for a cable-stayed bridge.

ABES assemCon interfaces with CAD packages, spreadsheet programs, and word processing software.

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