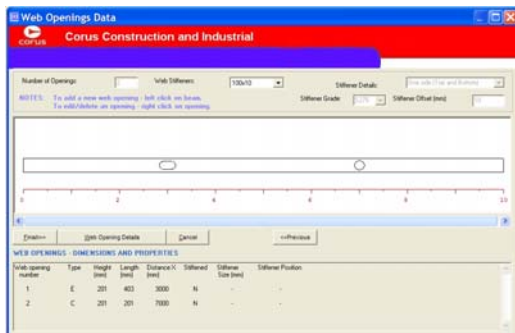


Project: **BDES Version 7**
 Client: **Corus Construction**
 Date: **1999 – Present**
 Link: [http:// www.steel-stainless.org/architects](http://www.steel-stainless.org/architects)

Status: **Live**
 Contact: j.moran@steel-sci.com



Background

BDES was first prepared in 1989 for the design of simple composite and non composite beams. This program was prepared by the Steel Construction Institute. It designs and analyses composite and non-composite beams under distributed and/or point loading. Both edge and internal beams are covered.

Objective

The objective of the 2004 upgrades were:

- To bring the software into the formal SCI Quality management scheme
- To update the software to the design principles are in accordance with the appropriate parts of BS5950 : Part 1 (2000), Part 3 (1990)
- To improve the graphical user interface
- To add a series of European languages and European sections
- To add Hilti shear connectors

Features

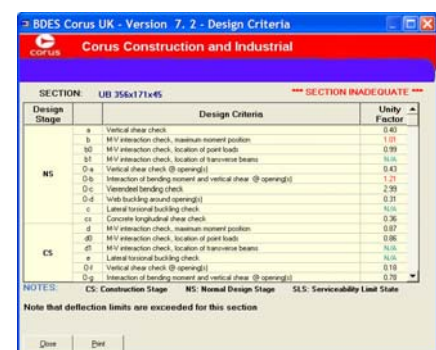
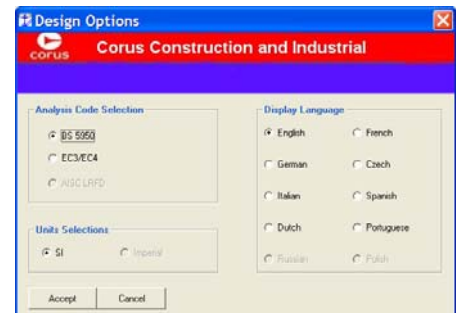
Both edge and internal composite and non-composite beams are covered.

Design principles are in accordance with the appropriate parts of BS5950 : Part 1 (2000), Part 3 (1990), and ENV 1990,1991,1993 and 1994 and the following SCI Publications:

1. SCI-P-055: Design of composite slabs and beams with steel decking (1993)
2. SCI-P-059: Design of fabricated composite beams in buildings (1984)
3. SCI-P-068: Design of openings in the webs of composite beams (1989)

The program now covers the Corus I-sections: UB, IC and the following hot rolled hollow sections: RHS and SHS. It also extends to European section ranges. Options exist in the program to use a solid concrete slab or a steel decking acting compositely with the beam. For edge beams the beam may also be loaded by a cladding element on one side. The decking may span perpendicular to, or parallel to, the beam on one or both sides.

Discrete web openings may be fabricated of rectangular, circular or elongated circular shape. Output calculations present the critical design check at each opening.



Outcomes

Over 500 requests to the new BDES software have been filled. The software also conforms to the SCI new Quality Standards and this includes the use of automatic Internet updating to ensure that users are supplied with the most current patches and a backup database supplying a complete quality management audit trail for the products.

The product is available at : http://www.corusconstruction.com/page_9033.htm