

Sludge Press House for the Severn-Trent
Water Authority, Burton upon Trent

ARCHITECTS
Dalglish & Partners
STRUCTURAL ENGINEERS
Roughton & Partners
STEELWORK CONTRACTORS
Space Decks Ltd, Chard
Durham Steelwork Ltd
CONSULTING CIVIL ENGINEERS
John Taylor & Sons

Judges Comments

An Industrial Project which greatly enhances the visual
appearance of the locality.
A building of distinction to house an essential but unattractive
service.

The building is constructed with perimeter steel stanchions to the
two machinery spaces supporting a steel space frame roof deck
over each. The link structure, comprising concrete floors and roof,
is supported on the flanking stanchions. Profiled steel roof
decking and wall cladding predominantly cover the machinery
spaces with brick cavity walling at ground level. The presses are
carried on a separate raised platform formed from Warren
trusses on stanchions. The Warren trusses are of welded box
section. Steel was selected as the structural material for the
following reasons:

- (a) Both machinery spaces required waterproof envelopes
supported at the perimeter only to provide unrestricted
floor areas.
- (b) Possible mining subsidence in the area needed to be taken
into consideration.
- (c) Speed of erection and ease of fabrication was required to
provide quick shelter for a lengthy machinery installation
programme.
- (d) Steel cost and delivery were competitive and quick compared
with alternative materials.
- (e) A high strength/weight ratio was required for the trusses
carrying the presses over large spans so as to leave the
ground floor clear for easy cleaning.

Internal finishes also needed to be easily cleaned by hosing down
and a PVC-faced steel lining was chosen to back the external
PVC-coated steel sheet.

