

BREVET DE TECHNICIEN SUPERIEUR

Groupement 15

session 2005

ANGLAIS

Durée : 2 h

- SUJET -

Dès la remise du sujet, assurez-vous qu'il est complet.

Spécialités :

Agencement de l'environnement
architectural
Aménagement - finition
Bâtiment
Charpente - couverture
Constructions métalliques
Enveloppe du bâtiment
Études et économie de la construction
Géomètre topographe
Systèmes constructifs bois et habitat
Travaux publics

The need for new housing can only be met by reinventing house building

In an ultra-modern factory near a Jaguar plant in Birmingham, they are reinventing the house – or rather, the way it is built. At one end, timber is being jointed into frames by machines and men – invariably former car workers – and transformed into panels that roll down the assembly line. [...]

5 On parallel lines, internal walls and floors are being produced in a seamless production process, a world away from the traditional chaotic building site, which is invariably characterised by piles of discarded brick, cement, timber and other squandered materials. [...]
"You will not see another plant like this in Europe, or the world, in terms of automation,"
10 boasts Robin Davies, the company's development director and the force behind the project. "It is that far advanced. The panels might look the same, but we are making individual houses down the line: about 50 different types so far. This is definitely not a Lego kit house."

Once offloaded on site, the panels are hoisted into place by a crane. At the end of the day, four "assemblers" will have bolted together a windproof, watertight structure. Only the outer walls have to be cladded¹ with brick and the roof tiled, leaving the inside to be fitted out.
15 In many ways, this house will be indistinguishable from any other – except that it will have been fully completed in around 10 weeks, half the time of the conventional brick and breeze-block home². [...]

Davies sees further developments ahead. There is no reason, for instance, why piping, plumbing, power cables and other services cannot be incorporated into panels before they
20 arrive on site – further cutting final construction time. But the imperative is overcoming skills shortages; significantly, assembly-line workers at Castle Bromwich³ are classed as semi-skilled, with the key specialities in the computer-aided design and manufacture section upstairs. [...]

A former logistics director at a large manufacturing company, Davies views the house
25 – like the car – as a series of components. "At present hundreds of them are needed," he laments. "It would be good to get to the stage where, say, 15 or 20 could be bolted together."

Adapted from *THE GUARDIAN*
Wednesday February 19, 2003

¹ *Cladded* : revêtu d'un parement extérieur.

² *Breeze-block* : parpaing.

³ *Castle Bromwich* : the place where the factory is located.

Travail demandé

Expression en français (10 pts)

Rédigez un compte-rendu du texte en français et en 150 mots environ.

Expression en anglais (10 pts)

Répondez en anglais aux deux questions suivantes :

1. Does standardisation – as described in this article – represent the future of construction? (100 words, 5 points).
2. Using your own professional experience, would you say that speed is what matters most in the working world? (100 words, 5 points)

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