



### Reconstruction of the "Frauenkirche" Cathedral in Dresden, Germany



The 26 lifting jacks are each controlled by a central computer. This computer is given the precise position and loading at each lifting jack, and in turn adjusts all the jacks so that the load rises perfectly level. Once in each new position, the roof is locked in place so that the activities underneath can proceed in complete safety.

#### Facts

|                        |       |                |
|------------------------|-------|----------------|
| Maximum weight lifted: | 290   | t              |
| Lifting in Steps of:   | 10.5  | m              |
| Roof area:             | 2'700 | m <sup>2</sup> |

#### Handling equipment

|  |    |     |
|--|----|-----|
| Strand jack H-40:                                | 26 | pcs |
| Power pack:                                      | 9  | pcs |
| Central control PC-Visualisation and supervision |    |     |

#### Description

After remaining as a ruin for almost 50 years, the reconstruction of Dresden's Frauenkirche Cathedral commenced in 1993.

The aim is to achieve a faithful reproduction according to the original plans by combining hand craft-work with modern building techniques.

So that the church can once again be used, and also so that the main construction work can proceed to a tight schedule without interruptions from bad weather, a roof has been placed over the entire site. This roof has an area of 2'700 sq m and weighs 290 tonnes.

It has been constructed on site at ground level, and it is Hebetec Engineering's task to raise the whole structure through successive 10.5 metre steps as the re-construction work proceeds, keeping the entire roof structure level during each lifting phase to a very tight tolerance. To achieve this exceptionally exacting requirement, Hebetec Engineering Ltd. is employing a special procedure.

