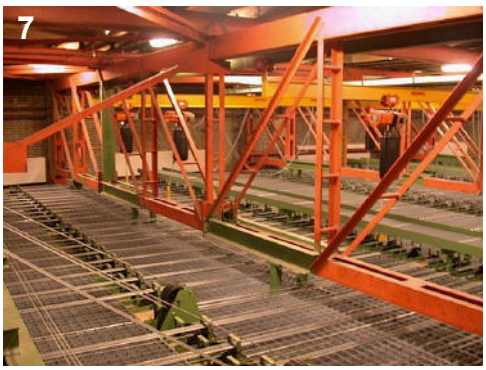

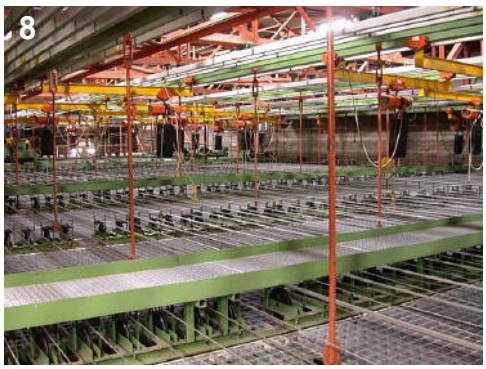

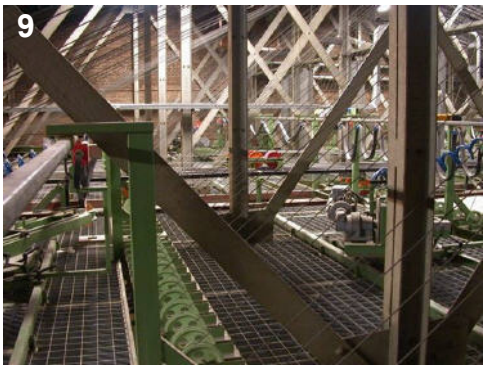

Photos: Louis Janssen, theateradvies bv

down stage, the effective height of the fly tower becomes 4 metres less.

Another type of grid has the roof trusses running across stage from left to right and the pulleys on the grid floor. In my opinion, this is not such a good grid because, if you have to walk from front to back, it is like a minefield with all those trip wires. Not very user friendly – but there can be worse. Where the pulleys are on the floor, the roof is fairly low and you don't have a lot of flying height, it is natural that in a refurbishment you leave the grid where it is. Some of the pictures show a theatre with these problems after the installation of a power flying system. You have to deal with the situation and try to make the best of it and in my opinion, having the wires on the floor is not really the best solution. But also the changing levels that result from getting walkways over wire-ropes and other equipment does not lead to a good solution. The result is that the height differences make it unpleasant for the people who have to work there.

There is an installation which is a combination of manual and power flying. With this type of installation, you can drive the bars in electric mode and when you balance the system you can unlock the power flying and work that set manually. In this theatre they had a very nice high grid, but nevertheless they put the wires over the grid floor and overhead, and took away at least 1 metre (3'-3") of the height in order to provide for making the change from manual to electric. It is very difficult to walk on this grid and
obstructed by
my wife was
had to climb o
experience wh
out of here. A

Where they h
floor, with ve
pulleys, this
structure of th
between them to hang a chain hoist, then you have to step off the pathway and work very carefully between the wires. Lack of headroom is really serious as it can lead to injury, and this can be compounded by critical height being taken away because of these walkways. On one of these projects we changed to put the pulleys overhead, which I think is a better solution, but notice that even this can be messed up by some people as illustrated by the pictures on the left with the pulleys mounted on a separate structure alongside the roof trusses! It seems nobody thought about integrating the flying system

7: pulleys on grid floor not aligned with roof trusses that are also difficult to pass through,
8: pulleys on floor with walkways above them,
9: main pulleys in top of roof, making it impossible to get to hoists on grid,
10 & 11: pulleys overhead bear no relationship to the roof trusses

In this section consultant Louis Jannsen describes 1001 ways to mess up a grid and also suggests improvements; consultant Mike Nishball sets out the approach in the US, while consultant Clive Odom and structural engineer Oliver Plunkett examine different types of grids and how to contain the forces exerted by flying systems.