



#### II.4.2 Access guarding

Perimeter guarding using 3 beams (at heights of 300, 700 and 1100 mm) allows for a perpendicular approach as described in II.3.4. This solution must allow for the possibility of the operator becoming undetected between the hazardous zone and the AOPD. Consequently, additional

precautions must be taken to alleviate this risk. For example, the local control shall be positioned in such a way that the whole of the hazardous zone can be seen, and it shall be beyond the reach of an operator in the hazardous zone.



#### II.4.3 Guarding the interior of a large press

This type of guarding is recommended for large presses where access is possible at ground level. In this particular case it is necessary to prevent the press from starting when an operator is inside. This is a secondary guarding system which shall on no account take the place of the main guarding system which shall consist of a suitable device (AOPD or two-hand control).

In this particular case:  
The safety distance must be calculated for the main guarding system, the function of which is to stop the press, whereas the secondary protection system detects the presence of a person in the press and does not allow the press to be started.



Power press:  
combination of point of operation guarding (SICK light curtain FGS) and interior monitoring (SICK laser scanner PLS).

For starting both sensors are activated. Afterwards the SICK laser scanner PLS is muted in the down stroke.