Step-by-step car door modernisation with the MOD concept



There can be all kinds of reasons for modernising a lift that has started to show its age. It may be that the breakdown frequency is increasing or perhaps the operator wishes to bring the equipment and safety up to the latest technical and safety standards or minimise energy costs. However, the costs of such modernisation activities can quickly exceed the planned budget. For this reason, the individual measures are usually set out in detail by the lift company and the operator well in advance.

But what if it is no longer possible to repair key components and it is necessary to replace them? Or what if the original parts are no longer available and can only be produced at great expense as custom constructions? This is where flexible concepts can be very helpful, as they enable modernisation in stages, to alleviate pressure on the operator's cost budget.

When planning a lift modernisation, the focus is generally not only on the drive unit but also the doors. Besides disturbances that are caused by vandalism or improper use, car doors can wear at different speeds, as a result of them opening and closing at every stop on every floor.

These were all good reasons for Meiller Aufzugtüren GmbH, the specialists

from Munich, to examine the problem in detail, leading to the development of a multi-tracked approach that gives operators a range of options when it comes to lift door modernisation.

Suppose the door panels and sill are still in generally good conditions and only require cosmetic enhancement, but the mechanical system is worn and needs replacing. In such a case, the MOD concept makes it possible to replace only the car door transom with the drive and the complete door mechanism. This can be done not only with old Meiller doors but also with doors made by other manufacturers, as long as the existing Meiller or other landing doors can be left in place.

To ensure that the new car door mechanism remains fully functional together with the original landing doors following the conversion, the Munich specialist supplies the transom with a variable skate that is set ex works to match the hook bolt of the respective landing doors. In some cases, it might be necessary to provide a small amount of measurement data, which can be quickly and easily determined on site in advance with the aid of a dimension sheet. Similarly, some dimensional information is required for the link between the new carriage and the original door panels, so that matching adapter plates can be supplied.

In the event that the door panels also require replacement, Meiller offers two alternative solutions. The first is that new single-wall door panels can be supplied with the new mechanism, in the same dimensions as the ones being replaced. In this case, the existing car door return can remain in place. Alternatively, double-wall door panels can be supplied in the familiar standard dimensions. In this case, however, the car door return will need to be replaced by the client.

Moreover, to satisfy EN 81-20/50 safety requirements with respect to pendulum impact and structural strength tests, it is essential in both cases that the car door sill is replaced by a new sill. Naturally, a locking device in accordance with EN 81-20/50 or a car door interlock are optionally available for the mechanism.

This is all possible thanks to the MOD concept for car doors that enables step-by-step modernisation in line with both technical requirements and the available budget.

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