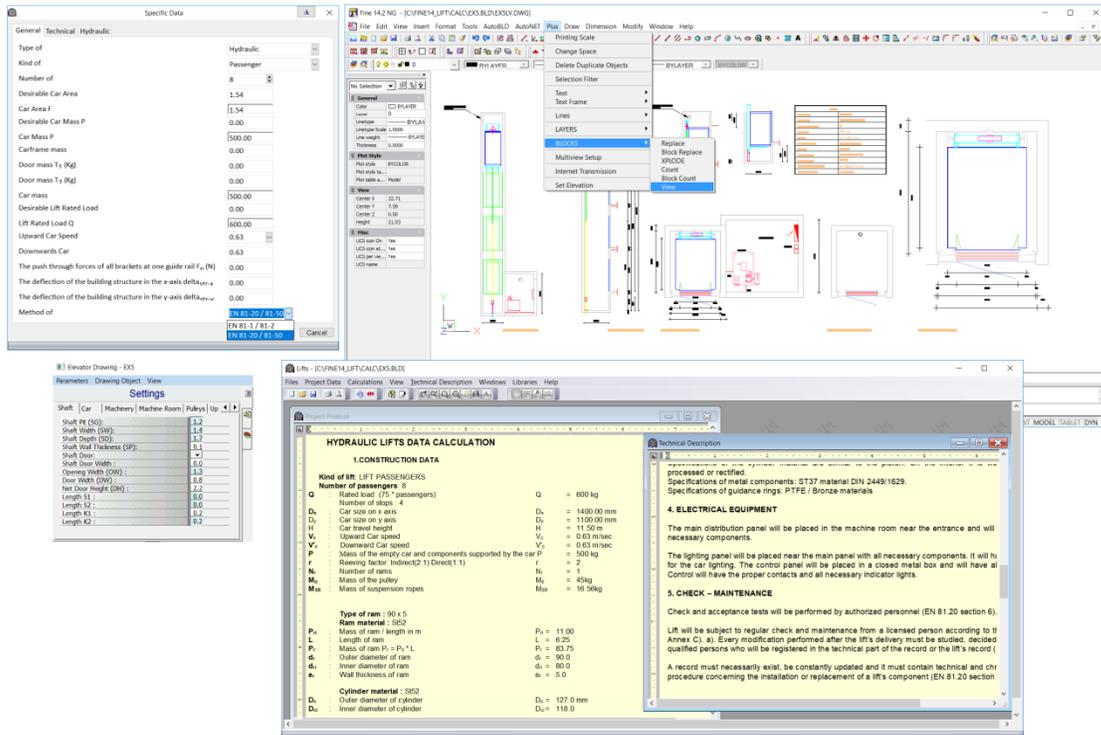


New FineLIFT 2017 based on the new Standards EN81-20/50



From the 1st September of 2017, the old Standards EN 81-1 and EN 81-2 that were valid since the year 1998 have been replaced by two new safety standards for the construction and testing of lift components:

- **EN 81-20:** Safety rules for the construction and installation of lifts – Part 20: Passenger and goods passenger lifts, and
- **EN 81-50:** Safety rules for the construction and installation of lifts – Part 50: Design rules, calculations, examinations and tests of lift components

Both above standards, properly harmonized with the Directive 2014/33/EU, are effective and mandatory as of the 1st September 2017, which means that any lift taken into use after this date will be required to comply with the requirements of these new standards. Apparently, the older standards EN 81-1 and EN 81-2 they are not in force any longer.

From September 1st the new upgraded version of FineLIFT has been properly designed to meet the new Standards EN81-20/50.

Totally new requirements

The new Standards increase safety, considering any new elevator from two points of view:

a) as a vertical transport system of people, and

b) as a workplace for assembly and maintenance by specialized personnel.

In fact, EN 81-20 sets out revised and updated safety requirements for the construction and installation of lifts, while EN 81-50, defines the test and examination requirements for certain lift components. Within this context, a series of increased specific requirements concern most of the lift components, like for example the landing door and car door resistance, the shaft walls and the rescue of entrapped persons, the car roof balustrade and the prevention of the risk of entrapment on roof and in the pit, new specifications regarding maintenance and rescue operations, ventilation and emergency lighting (i.e. fire resistance complying with EN 81-58, safety glass with EN 12600, Car finishes with EN 13501-1, alarm system with EN 81-28 and others).

New FineLIFT 2017 calculations complying with EN81-20/50

The new calculation engine of FineLIFT has been recreated in order to fulfill the new requirements. Some examples are:

1. Calculation of the guide rails (EN81/20 § 5.7.2.3.5) by introducing the new parameters M_g and F_p , as well as the δ_{str-x} and δ_{str-y} (EN81/50 § Annex C.1.3)
2. Calculation of the wall thickness of Rams (EN81/50 § 5.13.1.1): the new standard considers the internal diameter D_i of the cylinder wall (instead of the external considered by the older standard), a fact which leads to different results, as well.
3. Calculation of new types of safety gears (EN81/20 § 5.6.2.1.2.1).
4. Calculation of the wire ropes relatively to the friction (EN81/50 § 5.11.3)
5. Plus many others....

New FineLIFT 2017 with enhanced functionality

FineLIFT is widely known to most of the lift designers, as the complete software solution, generating calculations plus drawings for any type of elevator (Electromechanical or Hydraulic of any kind). The two FineLIFT Components, CALC and CAD are synergistically interacting between each other in order to produce the final case study printout, along with the final detailed drawings according to the calculations. Over the data input step, the user is assisted by the suggested technical tables of the new Standard EN81-20/50, whereas during the calculation step the layout is documented in accordance with the new EN81-20/50 standardization and the set of drawings automatically generated are also properly updated.

For any additional info (technical or regarding the upgrade pricelist) please contact 4M S.A. at info@4msa.com.