



Zucchini



A brand from the Group |  **legrand**[®]

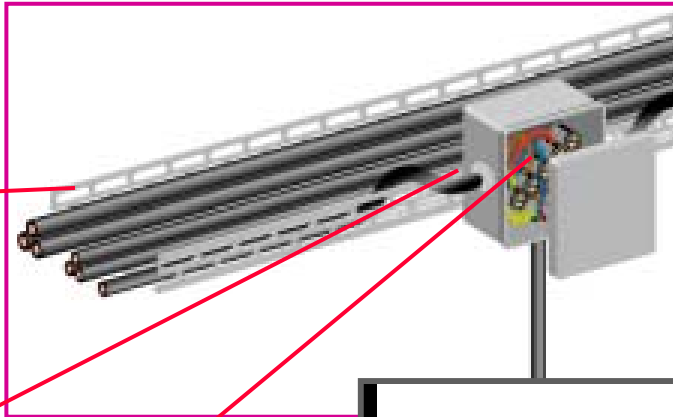
The Zucchini busbar concept

Cable

Distributes electrical current via insulated conductors :
- on cable tray
- within conduits

Power accessed when conductors are connected to connection box.

Power distributed from source to load via one continuous length of cable.

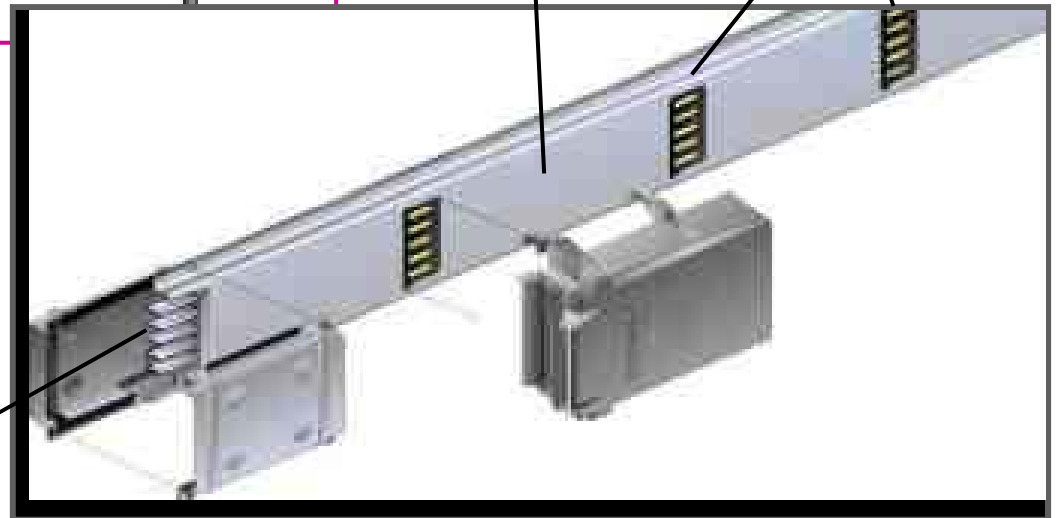


Trunking lengths joined together distributes power from source to loads.

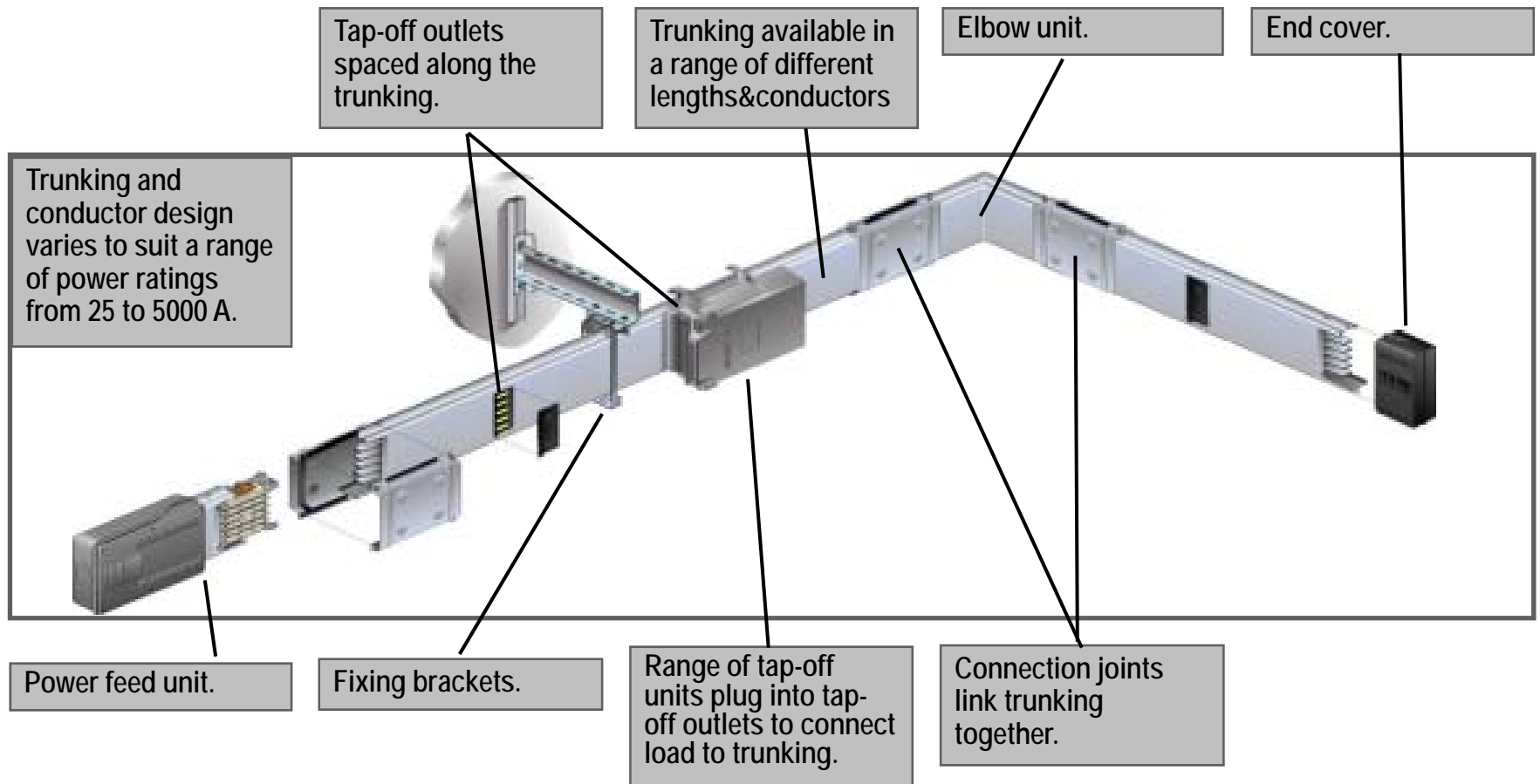
Zucchini busbar

Distributes electrical current via conductors carried within prefabricated lengths of steel trunking.

Power accessed via tap-off points built-in to the trunking.



Zucchini busbar components

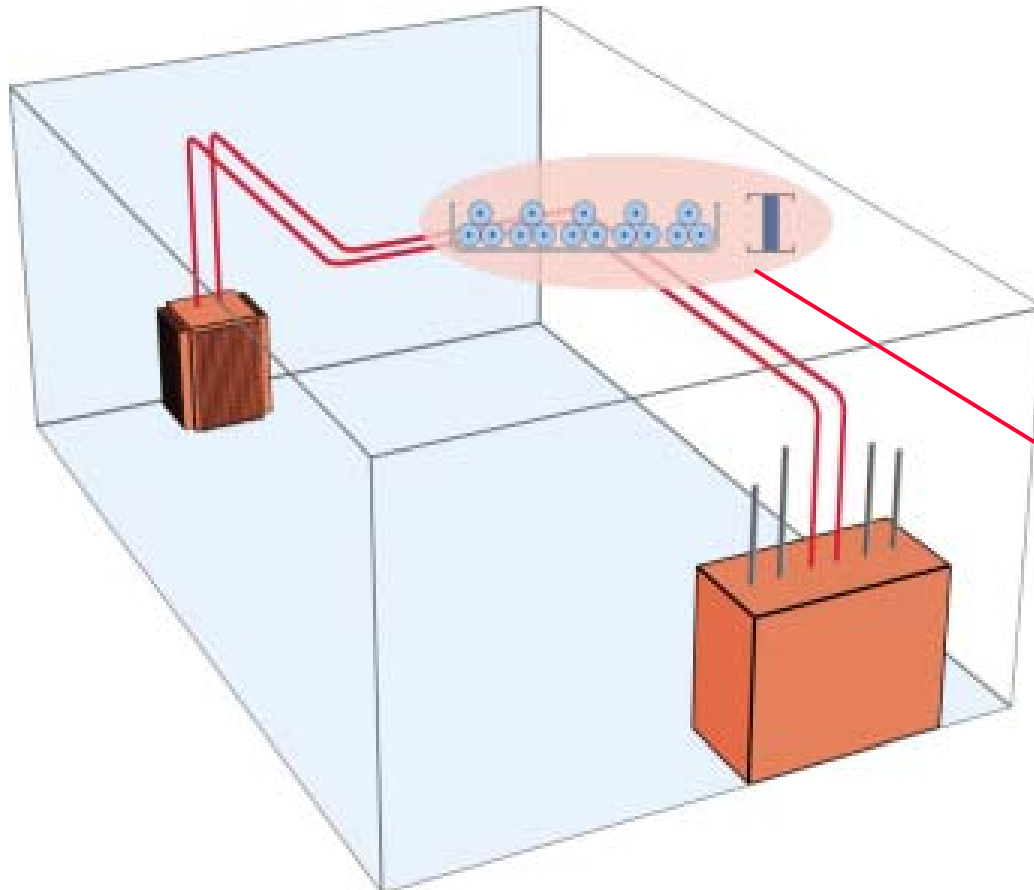


Heavy power distribution with cable

Disadvantages of cable compared to busbar

Can take twice as long to install than busbar

Installation requires a mechanical support and then the placing of cables. Pulling-in of large cables is difficult and hard to manipulate, particularly in confined spaces.



Multiple fixings required to take weight

The combined weight of cables and mechanical support is heavier than busbar.

Takes up valuable space

Bends require a large radius, taking up space in congested switch-rooms. A large number of cables required to achieve high current ratings.

Heavy power distribution with Zucchini busbar

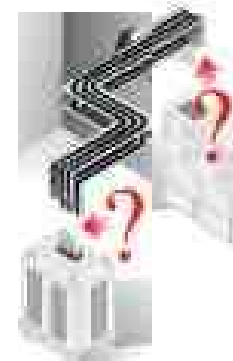
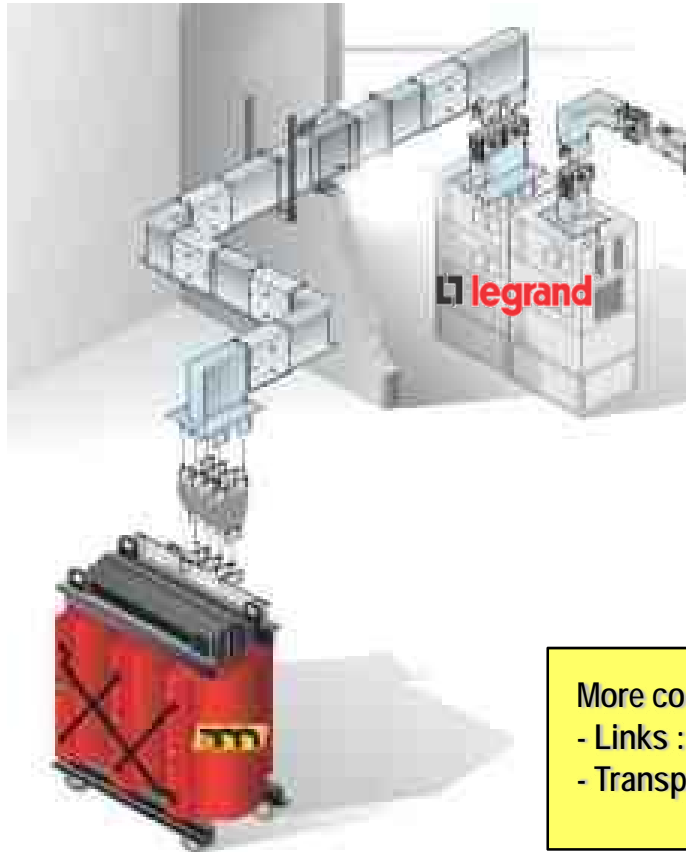
Advantages of busbar interconnectors compared to cable

Twice as quick to install than cable

Prefabricated trunking lengths allows installation to be completed in one process.

Prefabricated junction into the transformer and the switchboard

1 hour to connect or disconnect the transformer in case of breakdown.



Reduced number of fixings necessary

Busbar is around 40% lighter than a cable installation.

Saves space

A single busbar is capable of replacing many cables in parallel. Busbar gives a true 90° bend, allowing best use of space.

More competitive than cable over

- Links : over 1600 A.
- Transport : over 1000 A.

Power distribution with cable

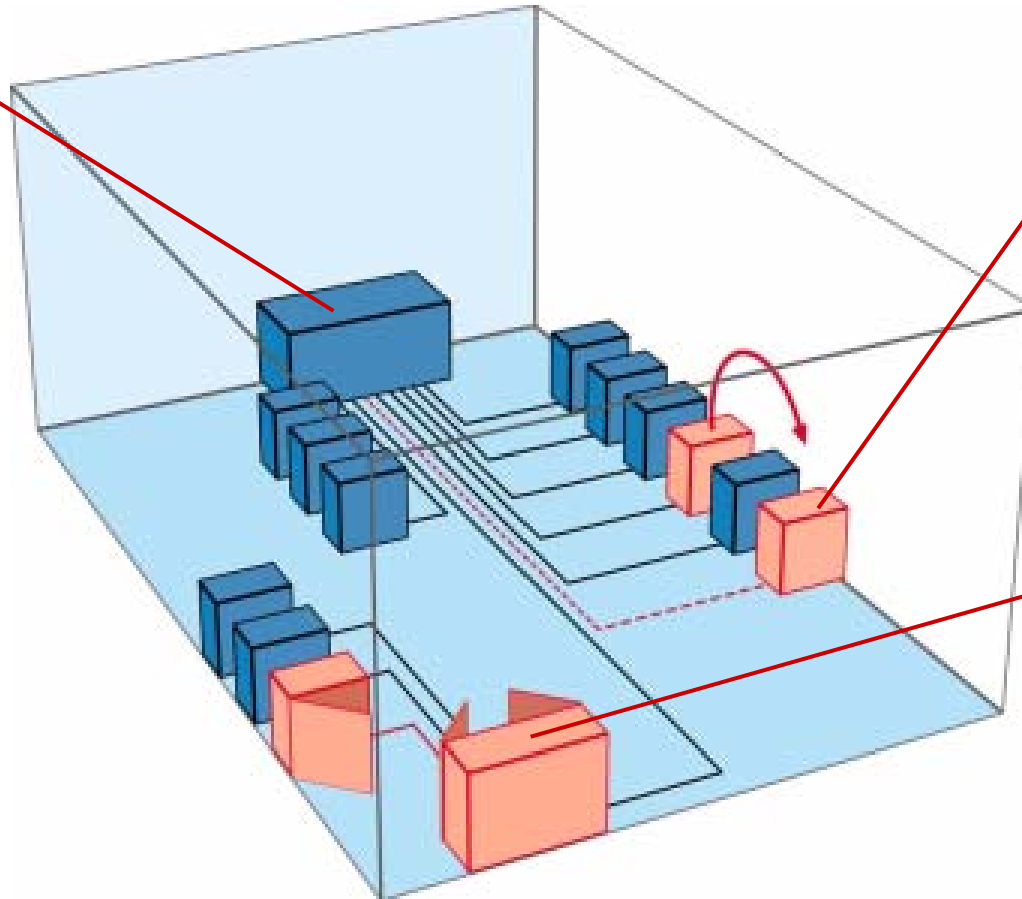
Disadvantages of a centralised cable system compared to busbar

Complex, centralised distribution system

Power is taken from the distribution board to each load individually.

Can take twice as long to install than busbar

All cables require mechanical support along the total length.



Difficult to modify

To move a machine or install a new machine, can require a complete new cable run.

Causes disruption

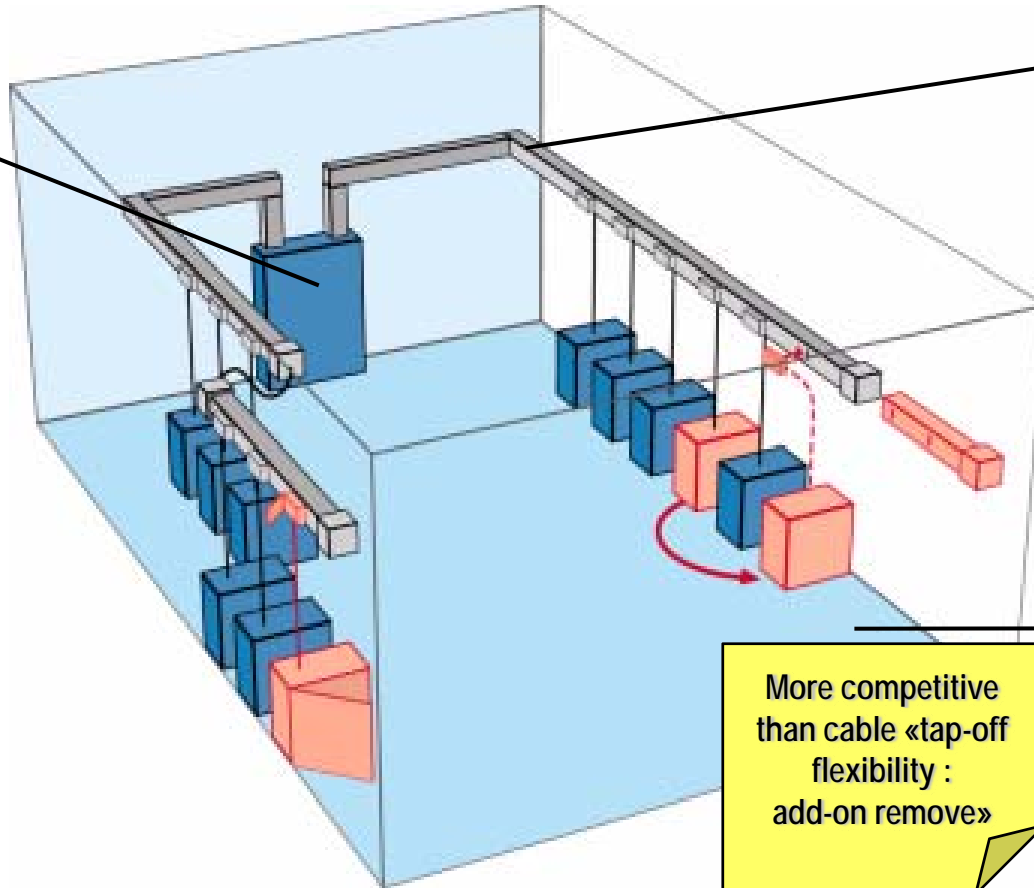
A large part of the system may have to be "switched-off" during maintenance or repair, as the protective devices are centralised within the distribution board.

Power distribution with Zucchini busbar

Advantages of a decentralised busbar system compared to cable

Saves space

The simpler busbar system means a smaller distribution board can be used compared to cable installations.



Half the time to install

Prefabricated trunking lengths allows installation to be completed in one process.

Simple design

Design of the installation is possible without knowing the final energy distribution and load layout.

More competitive than cable «tap-off flexibility : add-on remove»

Power distribution with Zucchini busbar

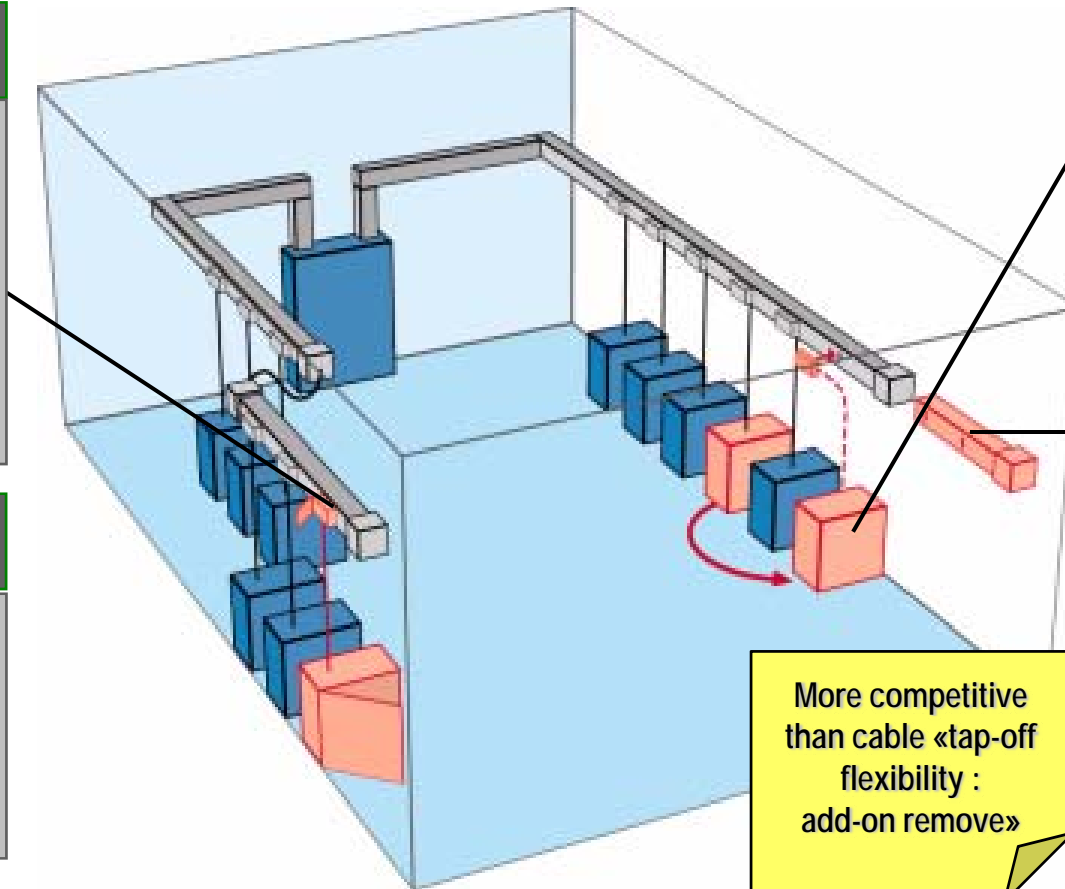
Advantages of a decentralised busbar system compared to cable

Minimal disruption.

Protection devices are located within each loads' tap-off unit, so only the one load is removed from supply, minimising "down-time" during maintenance and repair.

Quality of the lay out

- The lay out is clear.
- The magnetic induction for busbar is very low and known in advance.
- The technical data are known.



Easy to modify.

A machine can be moved easily, or a new machine added by simply connecting to a vacant tap-off point.

Very adaptable.

Trunking can be added or removed to meet changes in layout.

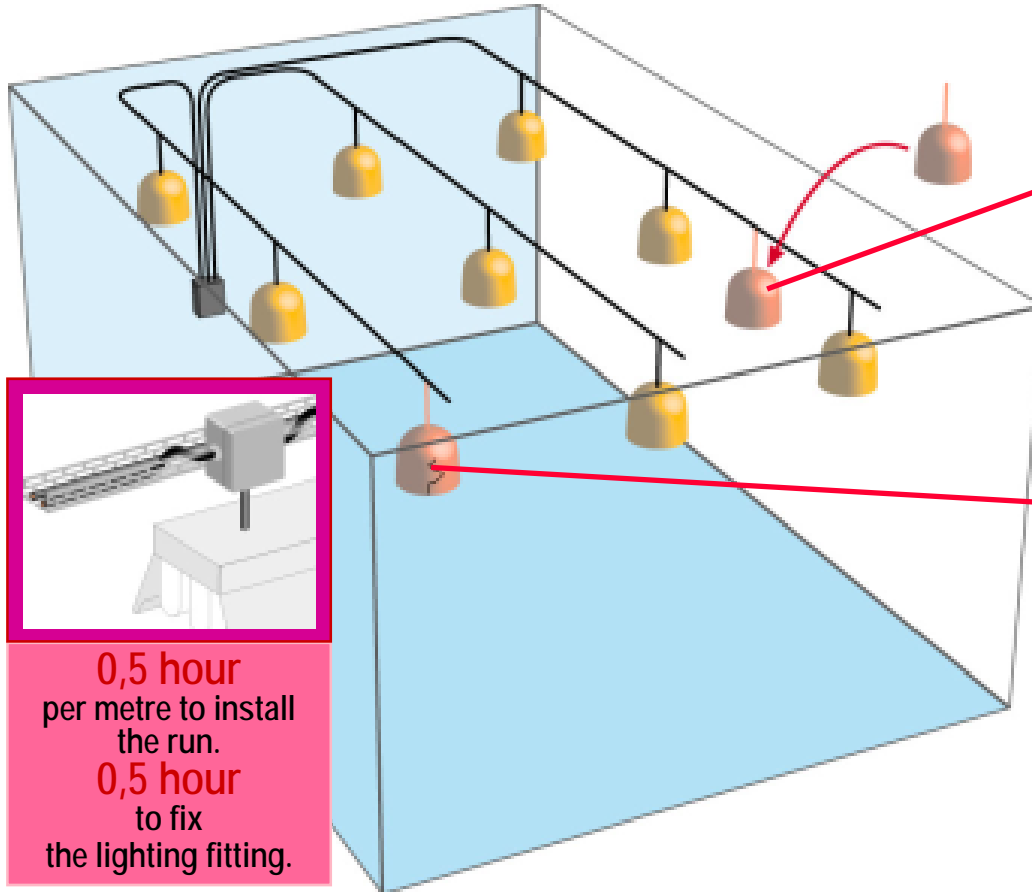
More competitive than cable «tap-off flexibility : add-on remove»

Lighting distribution with cable

Disadvantages of a cable system compared to busbar

Time-consuming to install.

After the cable tray or conduits are installed, it is necessary to pull-in cables specifically to match the switching operation.



0,5 hour
per metre to install
the run.
0,5 hour
to fix
the lighting fitting.

Difficult to modify.

In the case a area requires more or less lighting, removing luminaries or adding new ones can be difficult if not impossible.

Causes disruption.

Maintenance or repair of luminaries may require an entire area of lighting to be shut down.

Lighting distribution with busbar

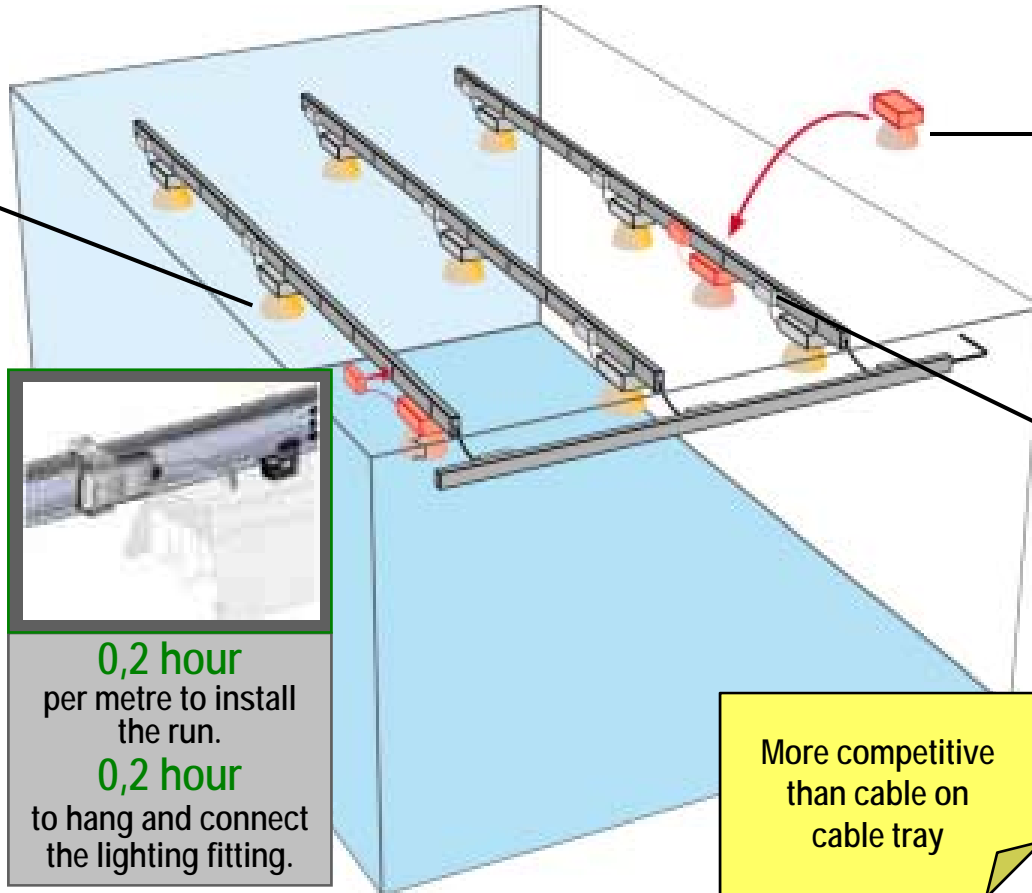
Advantages of busbar compared to cable

Twice as quick to install than cable.

Lengths are installed in the same time as cable tray alone. Luminaries are preequiped on the ground.

Minimal disruption.

Only the selected luminaries needs to be removed from the trunking, leaving the other luminaries operative.



Easy to modify.

Removing luminaries or adding new ones is easy as they are simply plugged into the available tap-off outlet.

Easy to change switching.

Connection to the different conductors is achieved by phase selectable tap-off units.

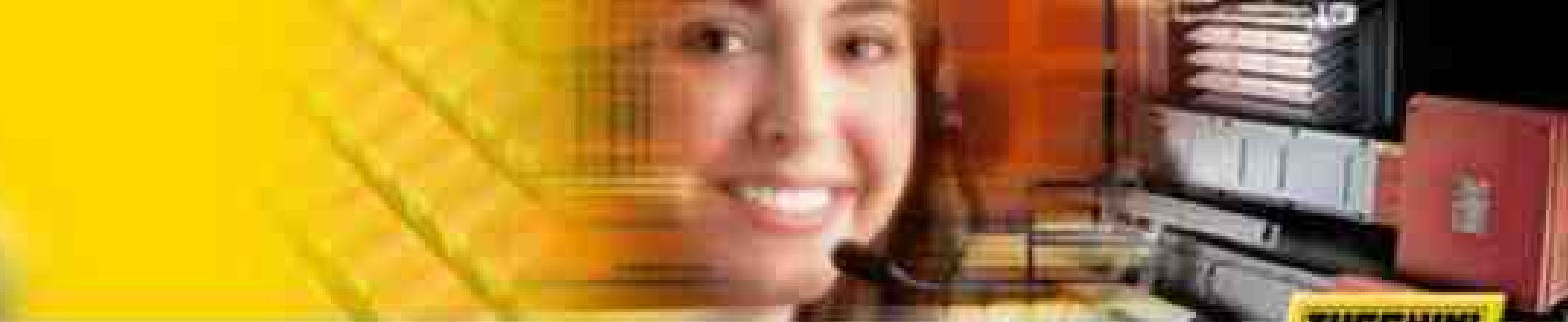
0,2 hour

per metre to install the run.

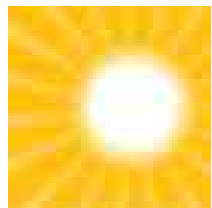
0,2 hour

to hang and connect the lighting fitting.

More competitive than cable on cable tray



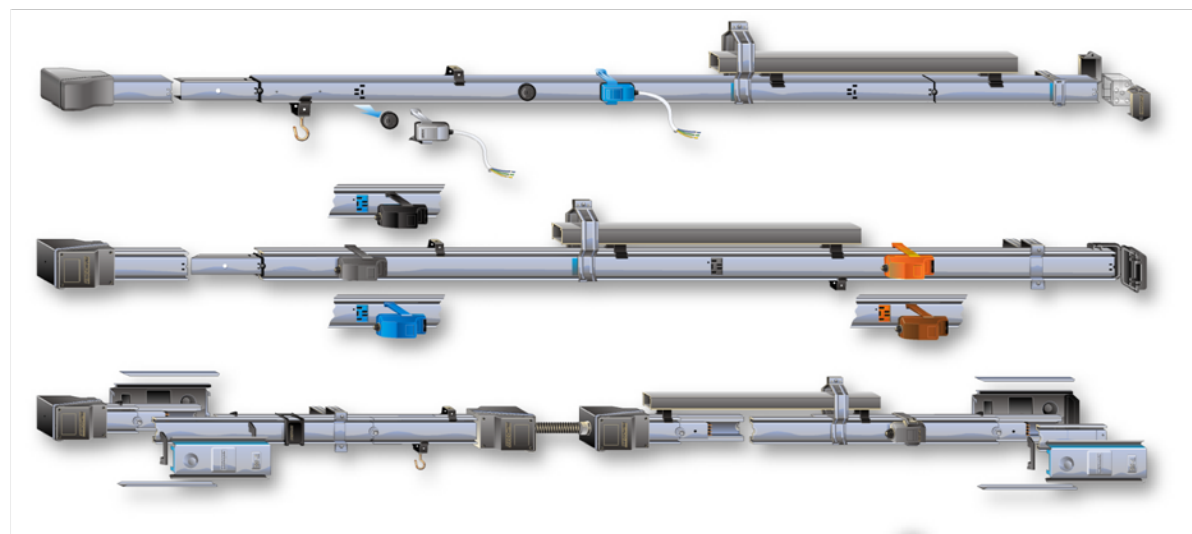
Low Power busbars



LB **Lighting Busway**
25A-40A L+N+PE
IP55 3L+N+PE

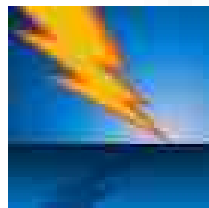
HL **High Lighting**
25A-40A 3L+N+PE
IP55 2(3L+N+PE)

SL **Serie Luce**
40A-63A 3L+N+PE
IP40-IP55





Medium Power busbars



MS Mini Sbarra
63A-100A-160A
IP40-IP55



MR Medium Rating
160A+1000A
IP52-IP55

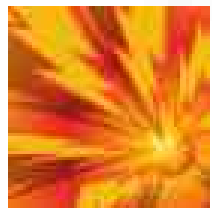


SCM miniCompact
250A+800A
IP55

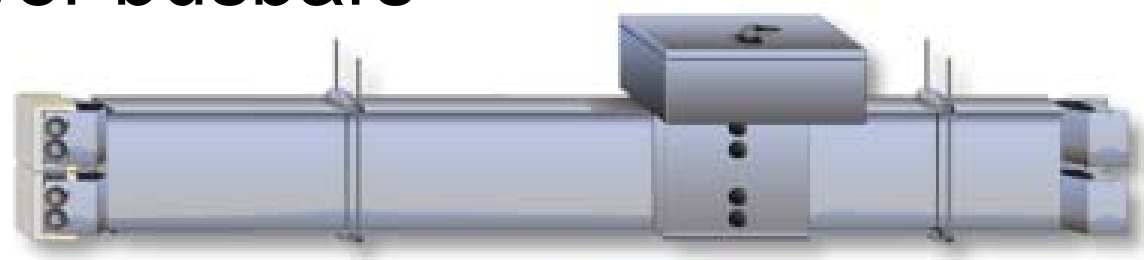




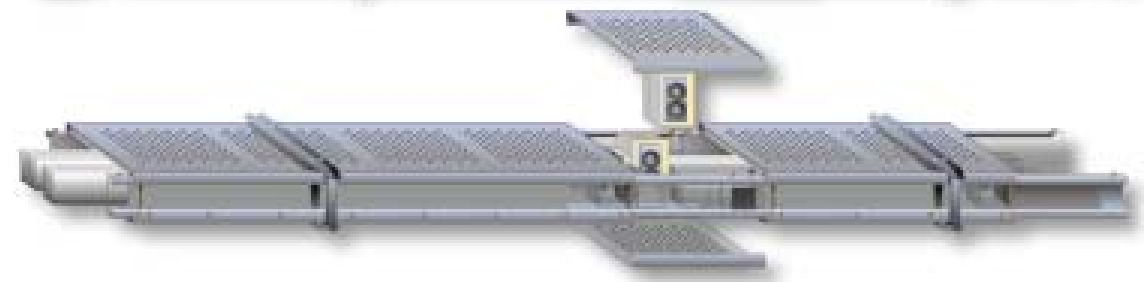
High Power busbars



SC Super Compact
630A+5000A
IP55



HR High Rating
1000A+5000A
IP30-IP31





Mobile users busbars



TS Trolley System
63A-70A=250A 3L+N
IP20 3L+N+PE

MTS Trolley System
63A 3L+N+PE
IP23-IP44





Power Transformers

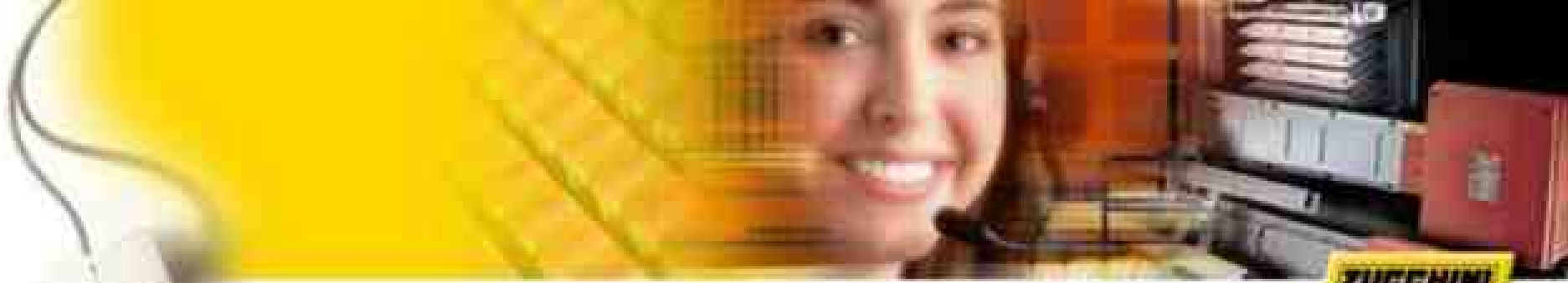


CRT

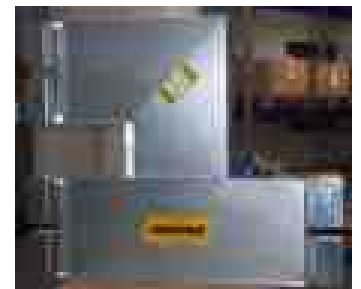
100-16.000 kVA

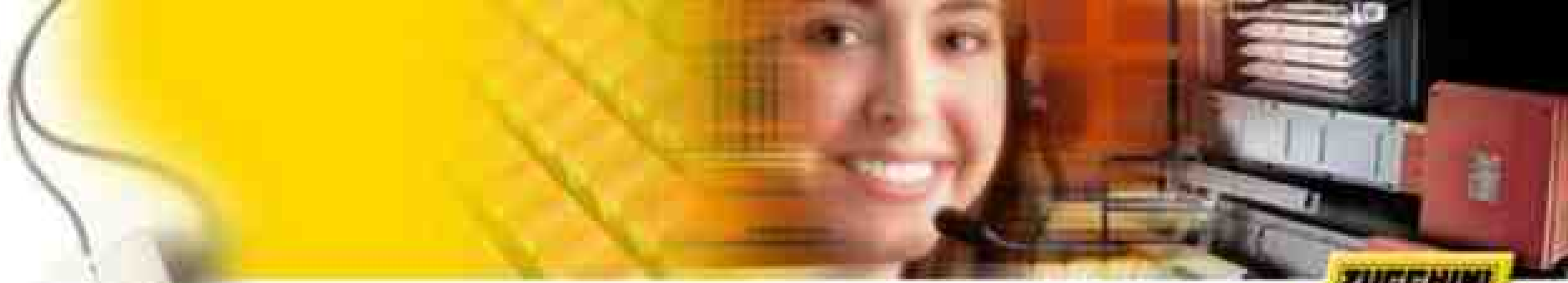
12-36 kV





Special elements, often normal





Quality System

Zucchini and EdM are certified
ISO9001:2000





Thanks for your attention!

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