



McDonald's Remodeling | Technology Concept

A new era for McDonald's with cutting-edge interior design has begun. Mangelberger supports you quickly and professionally with your remodeling – with innovative technology, time-saving installation solutions and a completely new energy saving concept, which reduces your operating costs to a minimum!

mangelberger
الهام التكنولوجيا

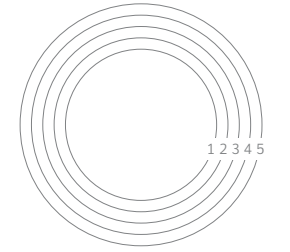
Mangelberger Elektrotechnik GmbH

Norisstraße 25,
Industrial area III, D-91154 Roth

Phone: +49 (0) 91 71 / 97 99-0
Fax: +49 (0) 91 71 / 97 99-800

E-Mail: CS@mangelberger.com
www.mangelberger.com

mangelberger
Inspiration Technology



McDonald's Remodeling | Mangelberger gives you clear advantages

Entrepreneurship, personal commitment and consistent standardization of architecture, design and technology are the basis of the McDonald's success story. This is now being updated with the remodeling concept.

Why are we recommending ourselves for the implementation of your remodeling work? Very simply - we have not only optimized and standardized the technology, but also our operational procedures. The same technician is your personal contact, remains on site during the entire construction period and carries out all work reliably in the shortest time. Seven clear plus points guarantee cost security, technically optimized solutions and, in addition, an optimal service.

1. Unique operating reliability through Plug & Play technology

2. Ambience and atmosphere through Light Control

3. More value without more costs: Adjusting not just installing

4. Modern energy management upgrade from EMS 9000/EMS 9010 to Mangelberger utilitec®

5. Controlled fresh air supply in the Lobby and Playland dependent on the air quality

6. Collection as well as evaluation of all relevant utility and HACCP data via an internet-based data base

7. Run/Trip indication as well as automatic alarm at abnormal values



Plug & Play-Installation | Your advantage for operation, expansion and maintenance



Well-conceived use of modern Plug & Play solutions mean the electrical installation is child's play. You, as the owner, profit from fast remodeling times as well as from unsurpassed operational reliability and flexible expansion possibilities years into the future.

Shortened Remodeling Times

With all remodeling, Mangelberger integrates wiring which is 100% connectorized. During the installation, the pluggable lights prepared by Mangelberger in the factory, are simply and quickly connected to the Plug & Play wires. Junction boxes, terminals as well as conventional cable splices are dispensed with, and thus also multiple potential fault sources.

Flexible and operational reliability

Years later you will still appreciate this innovative technology. During maintenance or expansion, lights can be disconnected by your own technician in a few minutes and reconnected again. Completely without tools and guaranteed without faults. And with the time saved, our technicians attend to the examination of your existing switchboard.



Simply brilliant | Custom-made Light Control

With the investment in a lighting control you save at the right place! You permanently lower your day-to-day operating costs, extend the lifetime of the lights and at the same time, achieve a priceless increase in value for you and your guests through the atmospheric light production.

Attractive lighting makes hungry for more

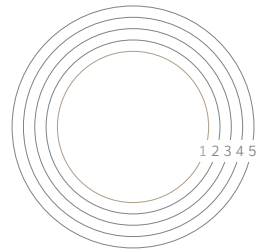
A professional Light Control creates increased attention for your restaurant and a unique atmosphere in the customer areas. Use this modern marketing instrument also for more frequency and improved customer relations.

You and your customers are submerged in a completely new world. There will be no more light switches. The lighting is fully automatically regulated via sensors and automatically adapts the mood in your restaurant to the respective time of day, and thus the external brightness. Through the accented, warm and unobtrusive lighting, the new aesthetics of the customer areas can reveal their full effect.

Added value should be of more value to you

Our lighting solutions have however yet another, extremely important function in the present-day: they lower the day-to-day operating costs. The illuminant lives longer, the adjustment to the external brightness saves energy, and the automatic control guarantees that lights in your restaurant are not operating unnecessarily.

Besides the interior lighting, the effect at a distance, of interestingly staged light accents in the exterior area, should not be forgotten. We are happy to advise you with the advertising-effectiveness and at the same time, the economic reconfiguration of your exterior lights.



utilitec®

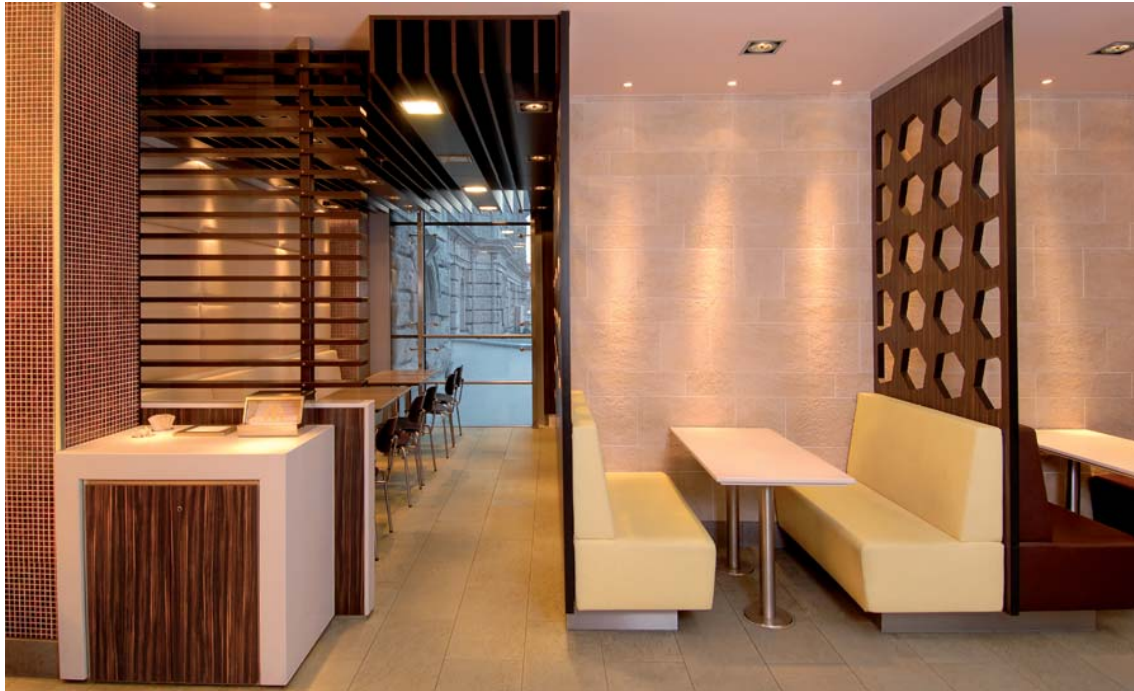


Fully automatic – without switches

Outside of your opening times, too, selective lighting effects create many interesting views. Light Control automatically reduces the brightness to selected ranges.

Light Control, a standardized Plug-in of our Mangelberger utilitec® concept.

Ambient and atmospheric | at every time of the day and night



As an experienced gastronome you know that only economic thinking leads to long-term success. Light Control and Plug & Play are not a technical toy, but strong arguments for your financial success!

Our well-conceived, up-to-date technology makes life easier for you and for your personnel. Apart from the clear advantages, like the reduction of day-to-day operating costs and fast, problem-free installation, it gives you one thing in particular: yet more satisfied customers from morning to night. Receive your customers in the morning with invigorating light and in the evening with a stylish atmosphere. The days of the throwaway culture are over - even in a fast food restaurant, the customer would like to feel comfortable, and then return.



The advantages of a lighting control at a glance



It would be an exaggeration if we were to describe our lighting solutions as light therapy for stressed customers. But without a doubt, they contribute to an all-round successful restaurant visit. Here once again the advantages of a lighting control briefly summarized:

Atmospheric emphasis of the interior decoration

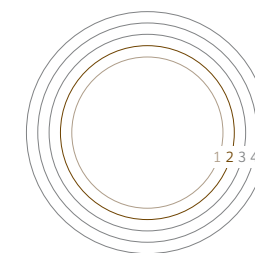
Feel-good ambience for satisfied customers

No operational expense, no switches, no faults

Significant reduction in the day-to-day operating costs

Extension of the life span of the illuminant

Clear reduction in the continuous service costs



More service | more value



Anyone can install lighting. Only very few also remember to adjust it correctly in order to obtain the optimal effect. Our technicians not only install the lighting for you, they also adapt each individual light optimally to the conditions in your restaurant!

Organized and standardized processes as well as the use of plug-finished installation components free up time slots during the construction period, during which we can provide this additional service without extra costs for you.

A few days after completion of the remodeling work, your personal project manager will agree upon a date with you, in order to visit you one evening. He will possibly discuss remaining open points with you and, if necessary, perfectly adjust the last light!



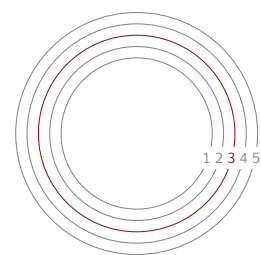
All-round service | Examination of your switchboard

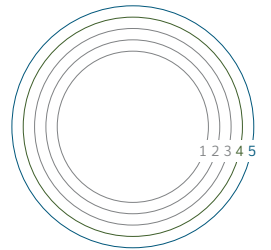
Interior design and electrical installation shining with a new gloss? Of course your Mangelberger switchboard needs to be attended to as well! During the remodeling time, our technician therefore examines your distribution system and replaces smaller wearing parts. Of course this service for you is free of charge!

For more than 15 years we have been supplying standardized switchboards with energy management systems for McDonald's in Europe, Asia and Africa.

But even the most efficient and most long-lived switchboard is subject to natural wear. During the remodeling time we use free time slots for the cleaning of your plant, replace defective relays, worn terminals and missing cover strips. We bring the existing energy management system up to date, and are otherwise also available to you for all questions related to electrical engineering.

You ask yourself, why? Now, your satisfaction is even much more important to us than the investment in a little material and time. With the choice of a Mangelberger switchboard for the construction of your restaurant, McDonald's has already shown a large amount of confidence in us. Now it is up to us to once again prove worthy of this confidence.





Double savings through upgrades | Mangelberger utilitec®

Like a responsible colleague, Mangelberger utilitec® takes care, independently and fully automatically, of the energy-saving switch-on of all consumers such as interior and exterior lights, ventilation, air conditioning system and kitchen equipment. You only enter the opening times of your restaurant and the entire energy management functions automatically - more reliably than individual humans ever could. With three modular components you have all utilities under control. Simply expand the central control EMS 9010 with Mangelberger utilitec® and you thereby combine energy management, light control and demand-related ventilation. The main advantages at a glance:

Mangelberger utilitec® thinks and acts! no light switches, no operating error

Your opening time determines the controlled and economical use of energy

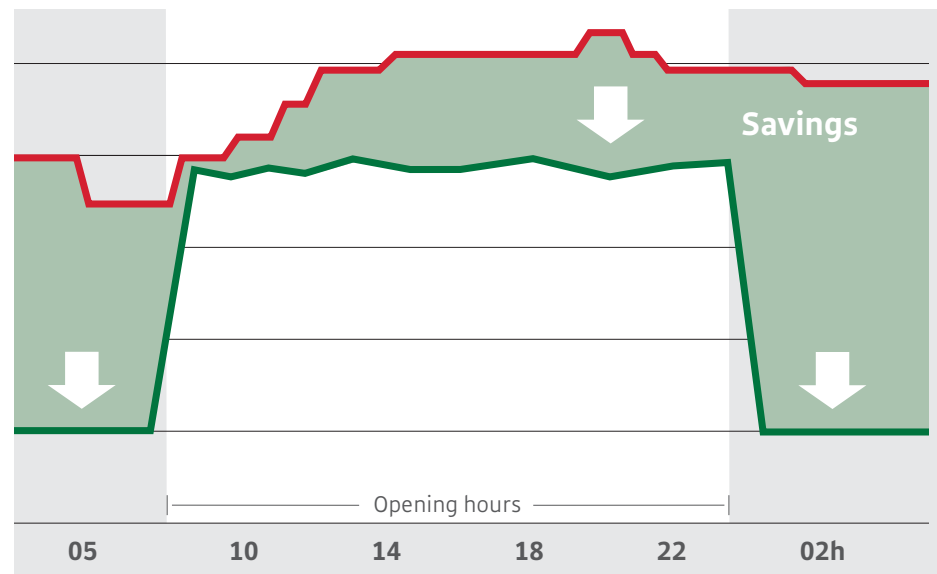
Automatic switch-on and control of the interior and exterior lights

Switch-on of ventilation and air-conditioning tailored to requirements reduces operating costs

The air quality in the restaurant determines the portion of fresh air and thereby reduces operating costs

Step-by-step switch-on of high-power consumers reduces your maximum power

HACCP documentation of the temperature values in cooling rooms as well as freezer rooms



Fully automatic cost awareness

If your restaurant manager enters the store in the morning, the basic lighting, as well as the intake air and exhaust air, switch themselves on in the kitchen. At the same time, the cooking equipment is enabled. Just a few minutes before the restaurant opens for the customer, the remaining restaurant lighting as well as the air-quality guided regulation of the intake and the exhaust air in the customer area and Playland switch themselves on automatically. "Air-quality guided" sounds complicated, but is just a function of Mangelberger utilitec®, which is as simple as it is economical!

Why should fresh air be blown all day long into the restaurant without a break? We only do it if the air quality in the guest area actually requires it. Thus in winter less cold fresh air must be heated, and in summer less warm fresh air cooled. The air-condition is not adjusted to an all-season set point but controls dependent on the outside temperature. Thus we avoid a far too wide temperature difference between inside and outside. Your advantage: feel-good atmosphere in the

guest area and at the same time decreasing energy consumption. Energy consumption only when necessary. The control of all consumers in the restaurant is designed according to this principle. The start-up of equipment, ventilation and air-conditioning is time delayed in each case. We thereby avoid expensive power peaks without impairing the comfort of the customers in any way. If your full restaurant lighting is on only during the opening time, or the ventilation in the lobby occasionally takes a break for a few minutes, you are the only one who will notice this consumption minimization - on your operating cost bill.

Sleep peacefully at night

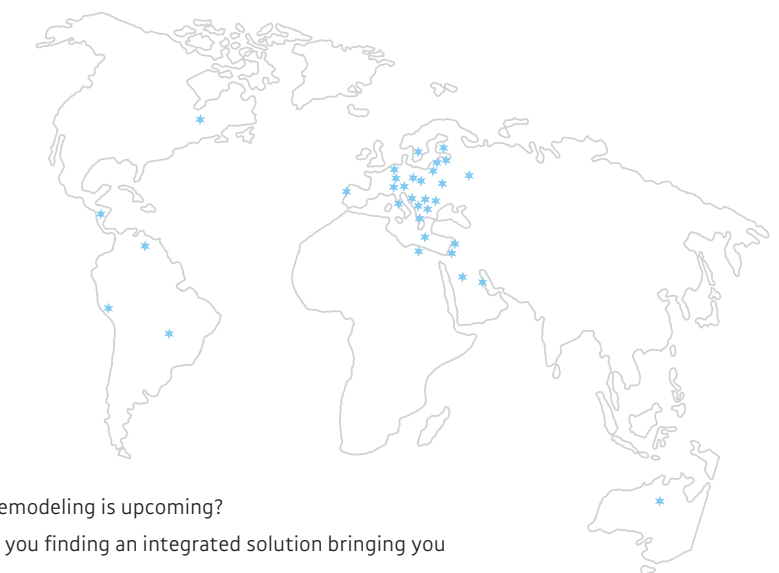
Soon after the restaurant is closed to your customers, we lower the power requirement to a minimum. The ventilation in the lobby switches to the night operation, the basic and cleaning lighting replaces the full lighting. A majority of the parking lot lighting switches itself off automatically. During this time the kitchen devices are also controlled again via the maximum and briefly switched off if necessary, e.g. if they are

Alarm is good | add-on saving is better



undergoing energy-intensive cleaning. With the locking of the restaurant by the store manager, or the cleaning team, the restaurant switches completely to night operation. Even the cleaning lighting, and the fresh and exhaust air of the kitchen, or the current feed to the cooking equipment is completely switched off. A completely new, but certainly modern method of restaurant control. Simple in function, Mangelberger utilitec® noticeably lowers the energy consumption due to the well-tested details, saves personnel costs and reduces the time expenditure for planning and installation of your remodeling. Mangelberger utilitec® can of course be fitted to an existing EMS 9010-Control. Talk to your on-site project manager about Mangelberger utilitec®. He will inform you about the advantages as well as about the costs which can be expected. Of course we are at your disposal for an introductory discussion by telephone.

The Mangelberger utilitec® concept is already installed in diverse restaurants, e.g. in the McDonald's restaurant in 91154 Roth/Germany. We would be happy to arrange an on-site meeting with you, because where could we explain the advantages of this user-friendly and energy-saving overall system better than in practice!



Your McDonald's remodeling is upcoming? We gladly support you finding an integrated solution bringing you added value. For an informative conversation we are at your disposal on phone: **+49 (0) 9171 / 97 99-0** or simply by e-mail to CS@mangelberger.com