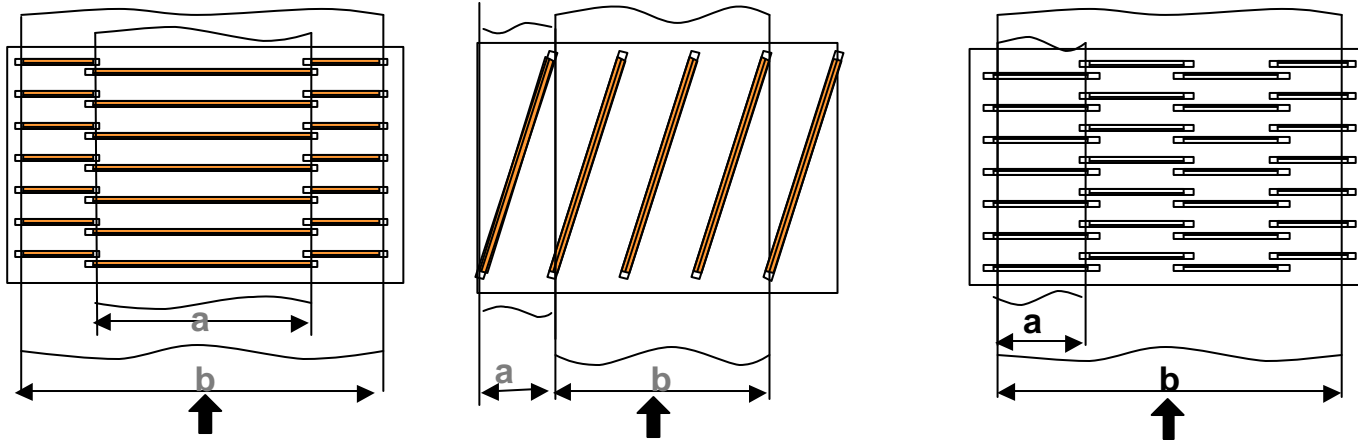


Technical Background

# Variable Installation of IR Emitters in Modules

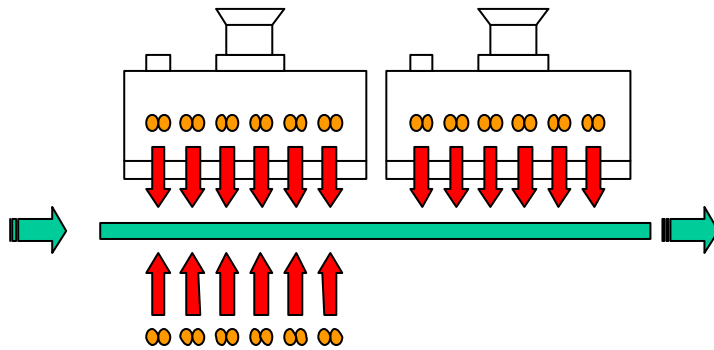
e.g. Adaptation to different fabric widths

Switching between a and b possible

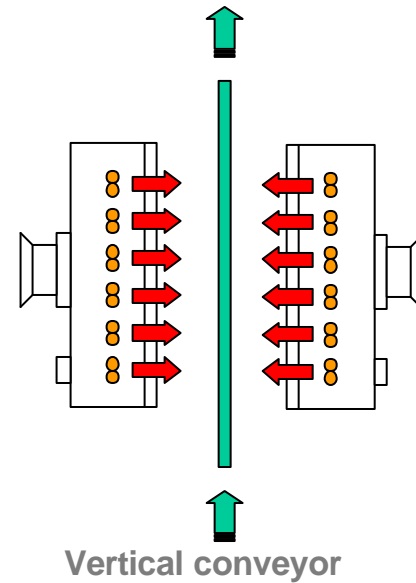


Direction of Conveyor

# Variable Installation of IR Emitters in Modules



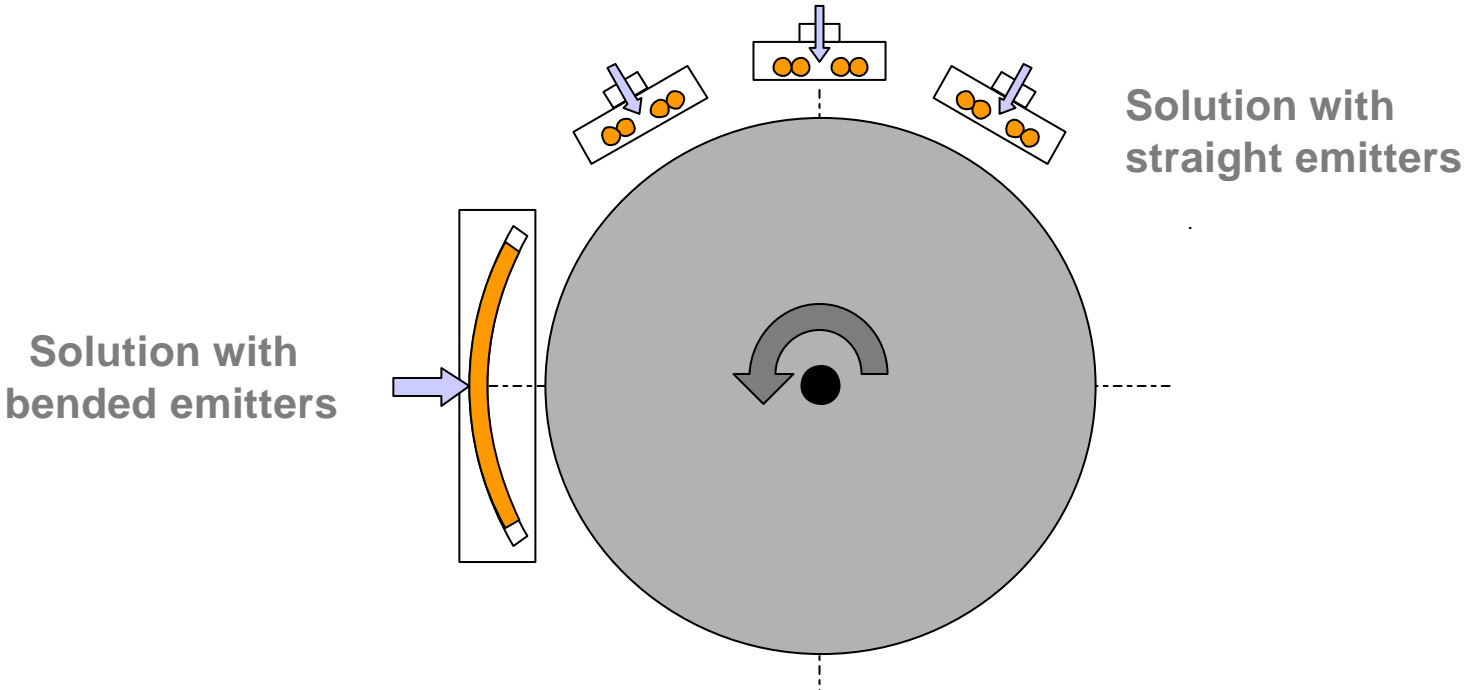
Horizontal conveyor  
with one sided or two sided IR modules



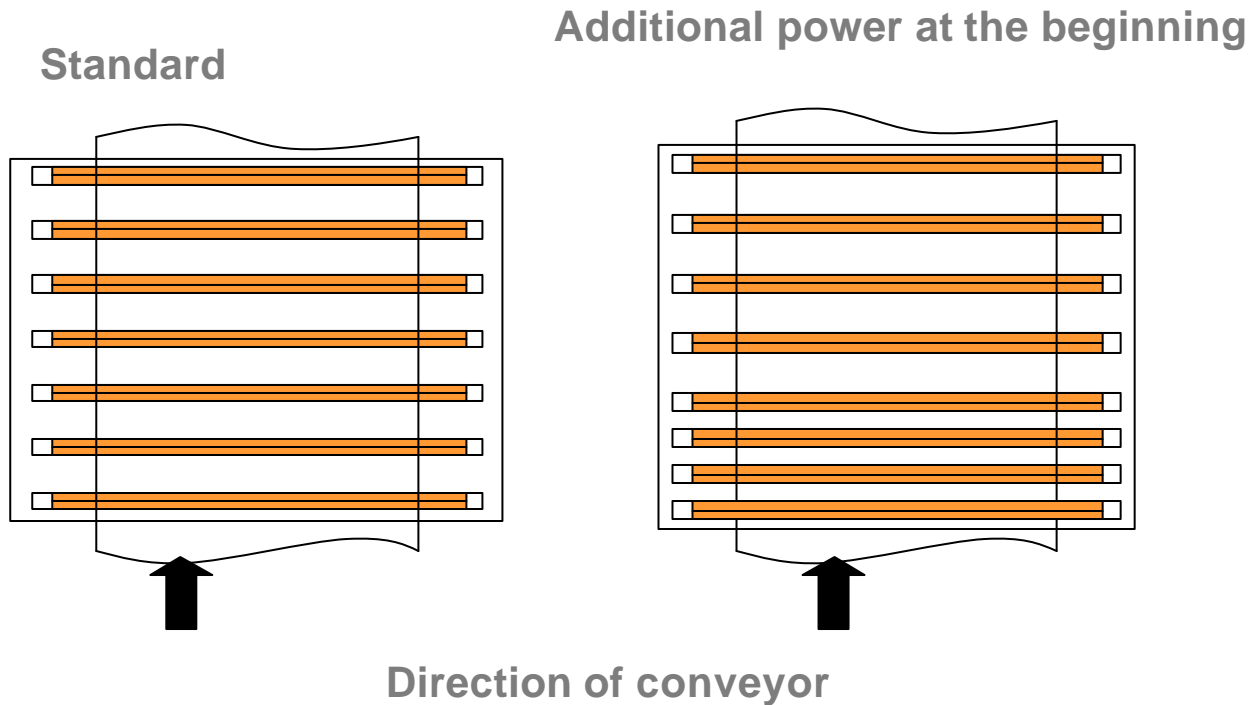
Vertical conveyor

# Variable Installation of IR Emitters in Modules

E.g. Standard modules adapted to a cylinder

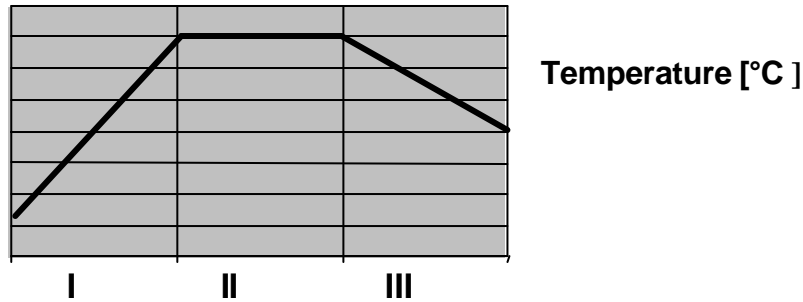
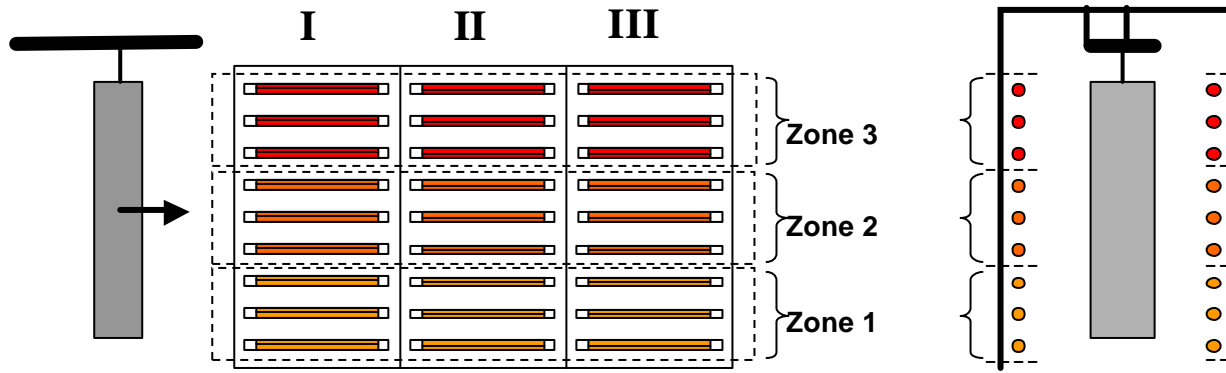


## Variable Installation of IR Emitters in Modules

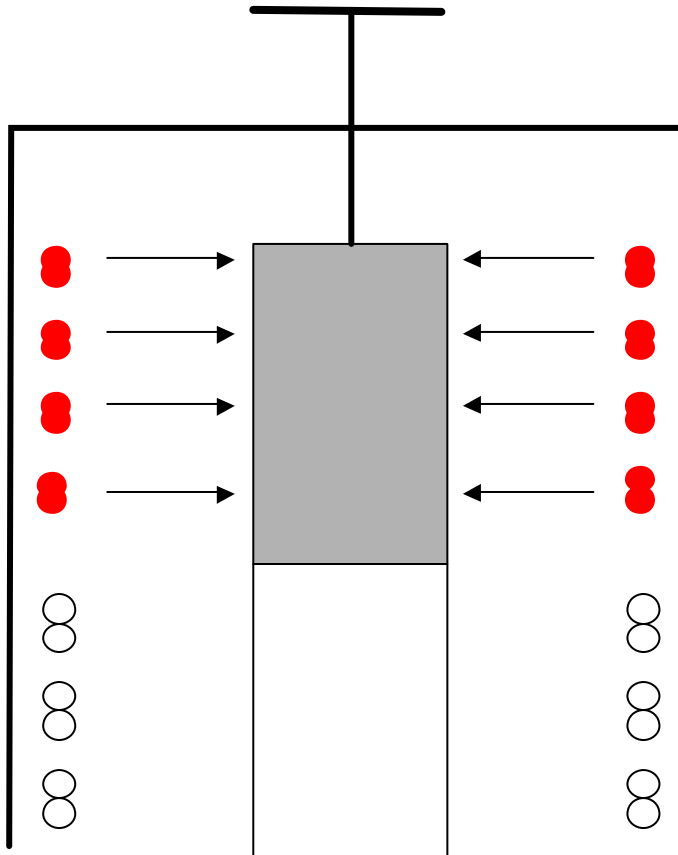


Technical Background

# Different Temperature Zones for Different Heat Requirements



# Optimized Module Design



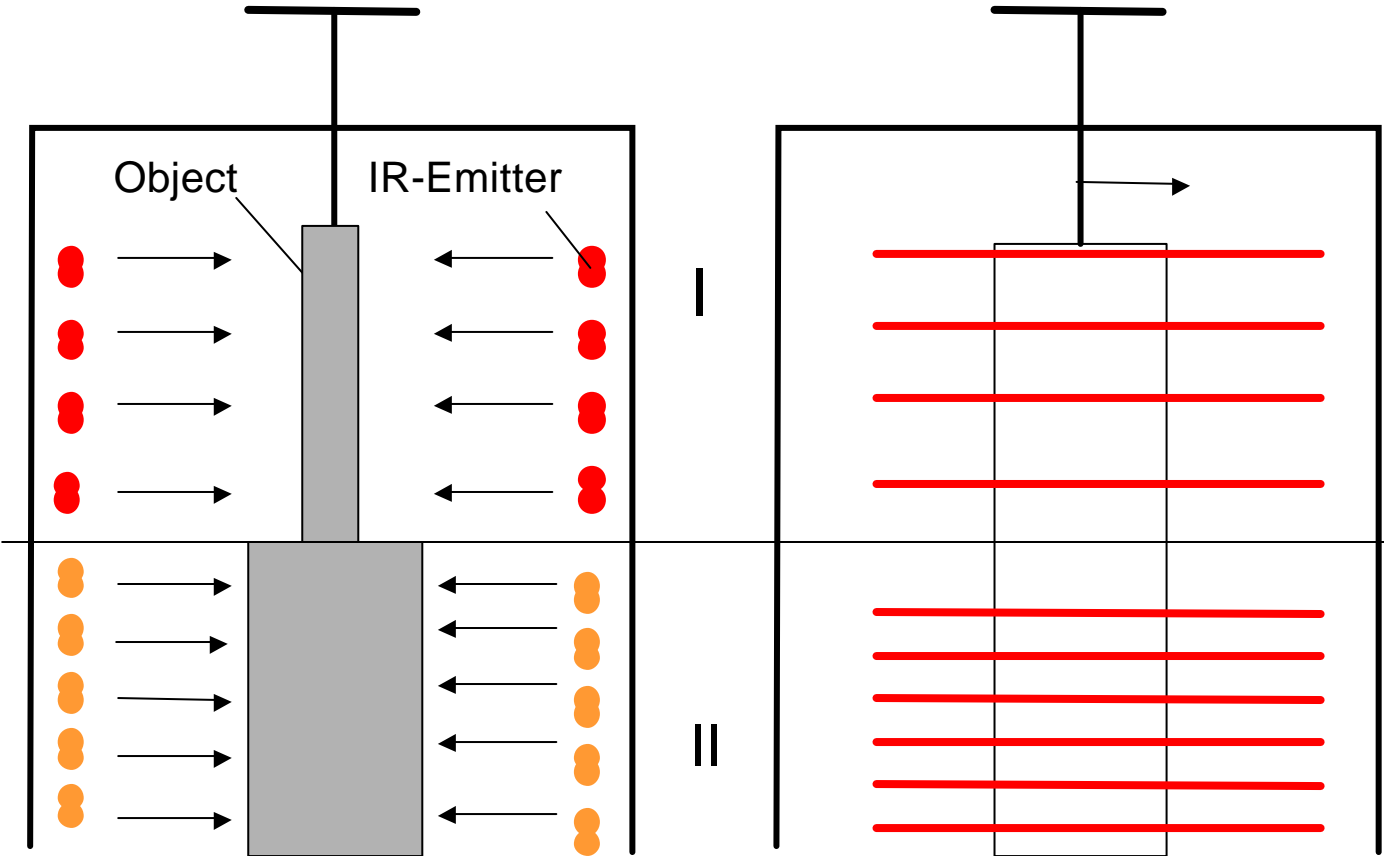
## Advantages:

- Energy saving:

Turn-on/Turn-off possibility  
of IR-Emitters for different  
object dimensions

Technical Background

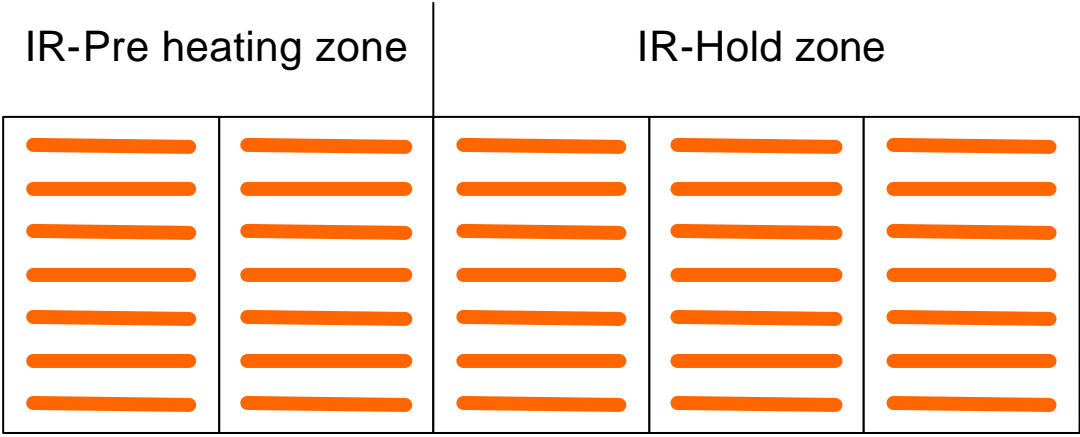
# IR Modules for Optimized Production



Advantages:  
- Energy saving:  
Turn-on / Turn-off possibility of IR-Emitters for different object dimensions

Technical Background

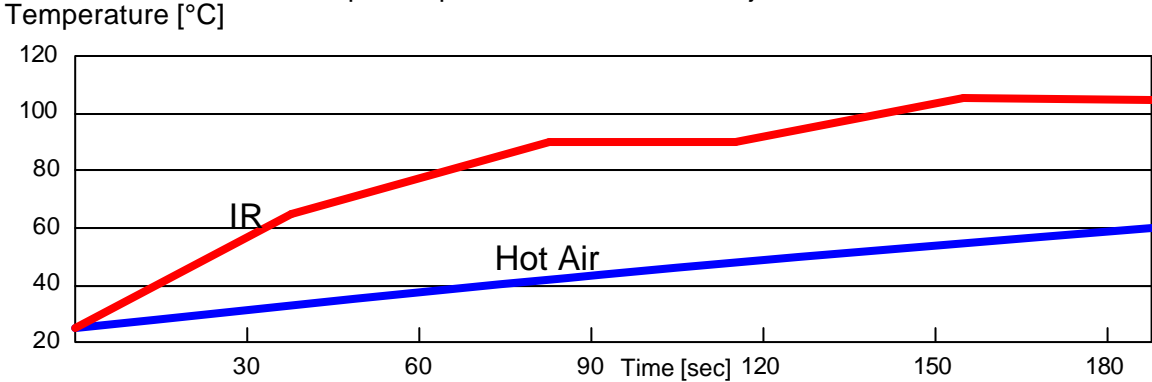
# IR Modules for Optimized Production



Advantages:

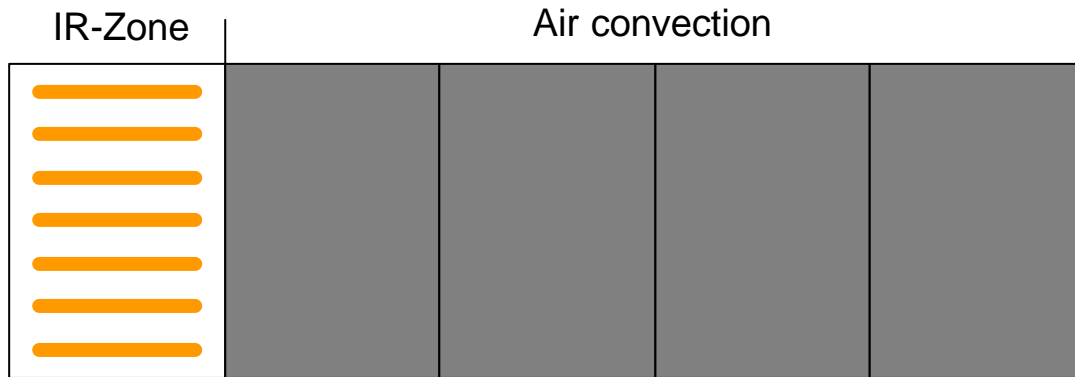
- Various temperature profiles possible
- Each zone can be controlled separately
- Turn-on/Turn-off possibility
- Short equipment lengths

Temperaturprofile of a continious object

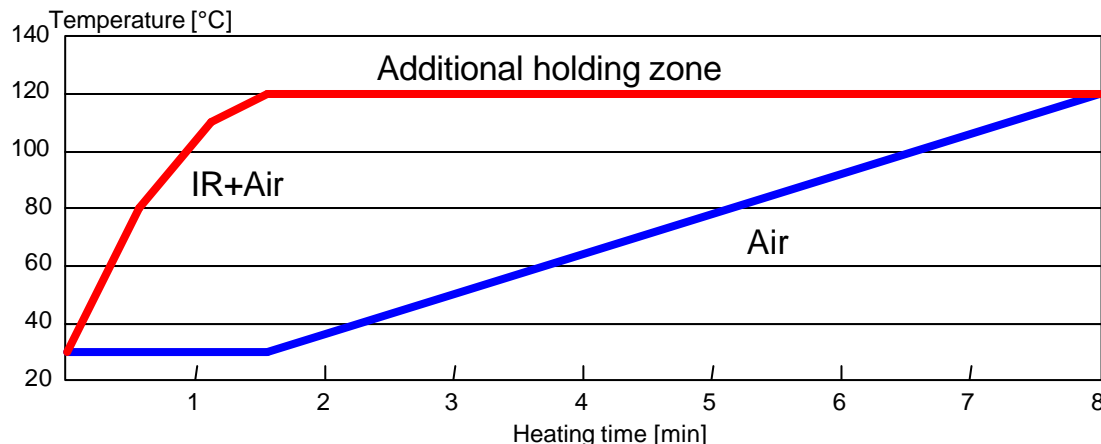


Technical Background

# IR Modules for Optimized Production



Temperaturprofile of a continuous object

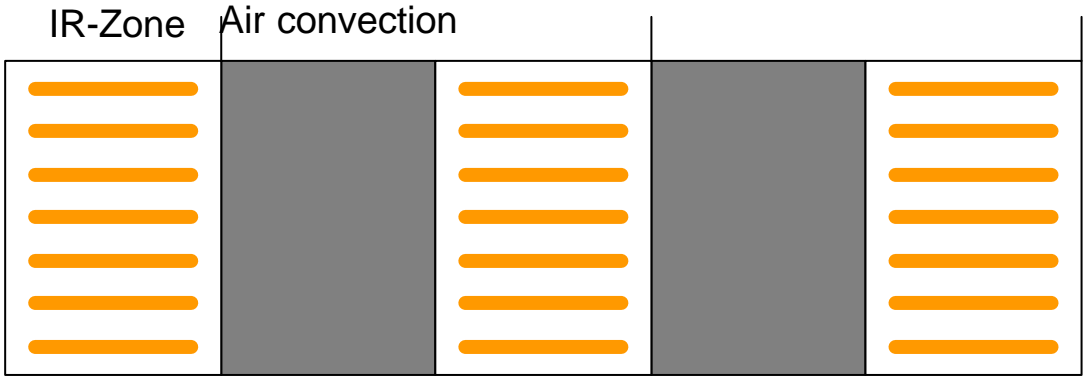


Advantages:

- Simple retrofitting of existing plants
- Integrated in new oven constuctions
- Turn-on/Turn-off the IR-heating
- Short pre-heating time: high productivity

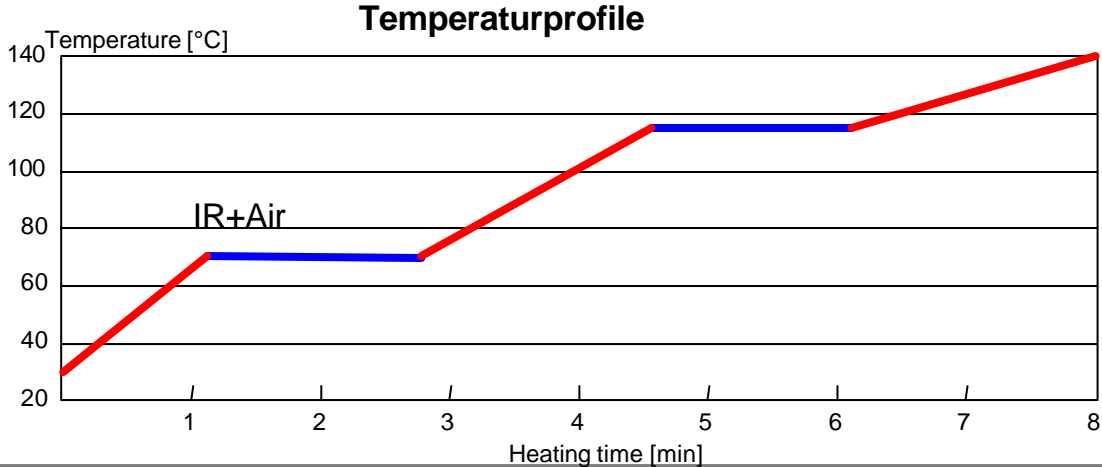
Technical Background

# Combination of IR-Heat and Hot Air



Advantages:

- Simple retrofitting of existing plants
- Integrated in new oven constructions
- Various temperature profiles
- Hot air holding zones
- Short equipment lengths



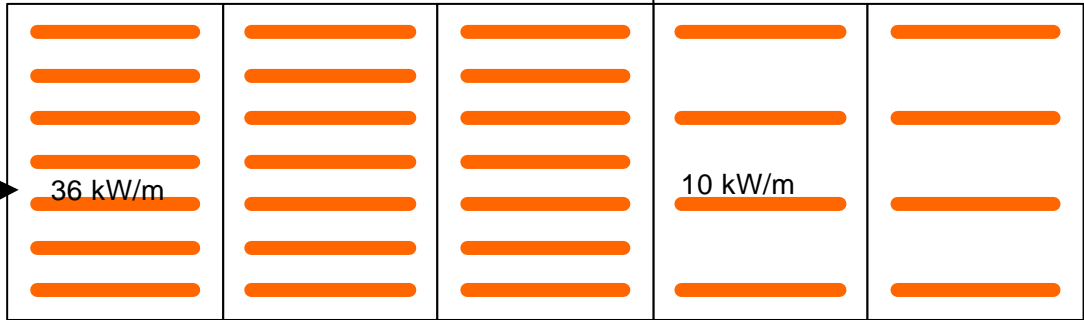
Technical Background

# Infrared - Power Control System

e.g. Powder coatings on engine blocks

IR-Preheating zone

IR-Holding zone



Advantages:

- Quick heating up
- Seperate control of Pre-heating and holding zone
- Individual Temperature profiles for different objects
- On/Off switching of IR-Zones for various conveyor speed

Temperatureprofile engine block

