



CleanS/GN

The LED signal tower specifically designed for the food processing industry and cleanroom applications

Hygienic Design - The Background

Why Hygienic Design?

In the **food, drink and pharmaceutical industries**, as well as in **cleanroom applications**, high demands are placed on hygiene. This applies to employees as well as the machinery, equipment and supplementary components.

The danger of food poisoning, contamination and product recalls intensifies the pressure, increasing the need for reliable hygiene standards and rigorously implemented norms and guidelines. This begins with the construction and planning of new components and equipment.

What is Hygienic Design?

The term "Hygienic Design" stands for the **hygienic and cleaning-friendly design** of all machinery, equipment and components, deployed in hygiene-relevant areas of food, drink, pharmaceutical, cosmetics and cleanroom production processes. In addition, Hygienic Design includes **design principles for the prevention of constructional weak spots** that could potentially increase hygiene related dangers or the risk of infection and disease transmission.

Only by applying such principles is it possible to ensure that no contaminated food and drink, cosmetics or medicine reaches the market.



What Directives and Regulations are there?

WERMA's Hygienic Design is based on the following directives:

- Machine Directive 2006/42/EG (Appendix I, Point 2.1): Food processing machinery and machinery for cosmetics or pharmaceutical products
- DIN EN 1672-2-2005: Food processing machinery basic concepts, Part 2: Hygiene requirements
- EHEDG* Document 8: Hygienic equipment design criteria
- EHEDG* Document 13: Hygienic Design of equipment for open processing

* EHEDG = European Hygienic Engineering and Design Group. The goal of this consortium, made up of equipment manufacturers, food processing industries, research institutes and public health authorities, is the development and publishing of directives on hygiene technology for the processing and packaging of food products.

WERMA has the Solution

WERMA already has the appropriate solution to the challenges engineers and food manufacturers will have to face in the future: **The new LED signal tower CleanSIGN** from WERMA has been specially developed and constructed for use in **food and hygiene areas as well as cleanroom applications**.

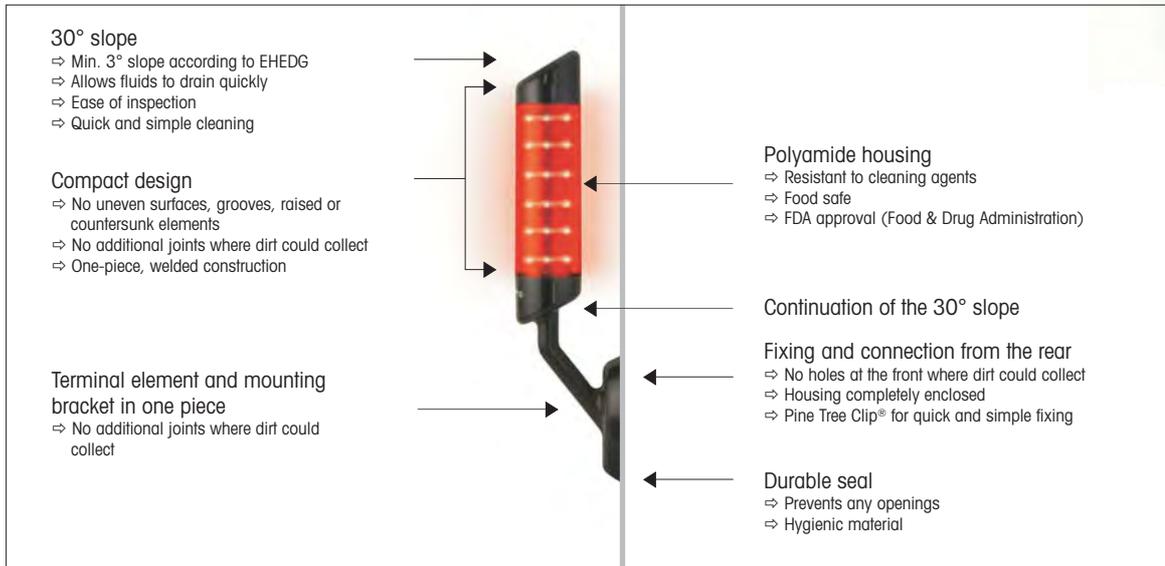
Right from the start, existing standards and guidelines were given careful consideration and **experts** in the field of Hygienic Design were called upon for advice.

Thanks to its revolutionary form, its smooth surfaces and the materials employed, CleanSIGN meets the high requirements of Hygienic Design, thus making a significant contribution to the safe and clean manufacture of food and drink, cosmetics and pharmaceutical products.

The Solution: LED Signal Tower CleanSIGN

The new CleanSIGN from WERMA has been specifically conceived and developed for use in areas with strict hygiene requirements. Consequently, it is equipped with a series of **sophisticated technical, constructional and design features** which make a significant contribution to the safety of your products. For example, the CleanSIGN has **no grooves or joints** where dirt could collect, facilitating **quick and easy cleaning**.

Unique "Hygienic Design" Signal Tower



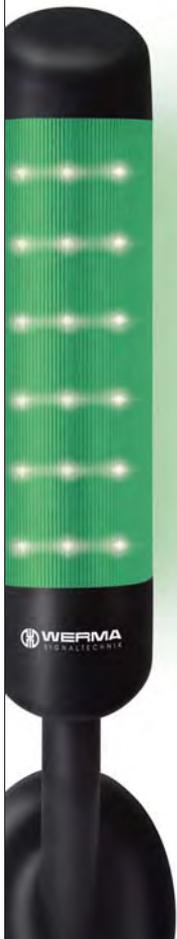
What advantages does the new CleanSIGN offer?

- Food safety due to the absence of uneven surfaces, raised or countersunk elements where dirt could collect
- Cleaning-friendly and hygienic design for optimal cleaning and disinfection
- Use of food safe materials (FDA approval) and resistant to cleaning agents
- Maintenance-free LED technology with a long life duration of up to 50,000 hours
- EHEDG and Fraunhofer IPA approved
- IP 67/IP 69k protection rating
- Fulfills Air Cleanliness Class 2 for Cleanroom applications in accordance with DIN EN ISO 14644-1
- Simple fixing and connection
- Pine Tree Clip® for quick and simple fixing
- Electronic modularity of the individual tiers



What benefits do you enjoy?

- ① High safety and quality of your products
 - Prevents impurities
 - Reduces the risk of contamination
- ② Reduces the cleaning workload
 - Cleaning-friendly design simplifies residue-free removal of contaminants
 - Quicker, more efficient cleaning saves energy, material and cleaning agents
- ③ Higher productivity
 - Reduction of equipment down-time leading to lower operating costs
 - Maintenance-free LED technology with a life duration of up to 50,000 hours



695 LED Signal Tower CleanSIGN

- LED signal tower for use in the food and cosmetic industry as well as in cleanroom applications
- Hygienic and cleaning-friendly design
- Developed on the basis of EHEDG directives
- Resistant to cleaning agents
- Flexible colour distribution thanks to electronic modulation
- Integrated, high output buzzer (85 dB)
- LED permanent light with additional light effects depending on variant
- User-friendly mounting



TECHNICAL SPECIFICATIONS:

Dimensions (WxHxD)	112 mm x 485 mm x 125 mm
Housing:	PA, black
Dome:	PA, transparent
Fixture:	Wall mounting, integrated mounting bracket
Connection:	RGY and RGB LED versions: Screwable connection, max. 1.5 mm ² SMD technology version: Cable, 2m long, included in the delivery
Operating voltage:	24 V =
Current consumption:	Optical: Max. 500 mA per tier (depending on colour/variant) Buzzer: 20 mA



VARIANTS AND ORDER SPECIFICATIONS:



CleanSIGN - SMD technology

- ▶ LED signal tower with permanent lights in red, yellow and green (SMD technology)
- ▶ Preset, three-tier colour distribution
- ▶ Integrated, high output buzzer (85 dB)



Order No.
695 300 55



Fixed colour distribution
with SMD technology



CleanSIGN - RGY LEDs

- ▶ LED signal tower with permanent lights in red, yellow and green (RGY LEDs)
- ▶ Complete illumination in one colour possible (can be triggered externally)
- ▶ Colour distribution can be selected and adjusted via DIP switch as required
- ▶ Integrated, high output buzzer (85 dB)



Order No.
695 200 55



Completely flexible colour
Distribution thanks to RGY LEDs



CleanSIGN - RGB LEDs

- ▶ LED signal tower with permanent light and additional light effects
- ▶ 7 colours: red, yellow, green, clear, blue, violet, turquoise (RGB LEDs)
- ▶ Complete illumination in one colour possible (can be triggered externally)
- ▶ Colour distribution can be selected and adjusted via DIP switch as required
- ▶ Integrated, high output buzzer (85 dB)



Order No.
695 000 55



7 colour settings
from RGB LEDs