

GKPIA / GKPIAa Induction lamp

1/3 Energy consumption and 10x lifespan – compared to conventional lighting



RED DOT SCANDINAVIA

IN PARTNERSHIP WITH



Grüne Kuh®



40 W - 200 W
2720 - 6500 Kelvin



TÜV CERTIFIED TECHNIC



“Replacement of 500W-Halogen to 200W Induction lighting create a better work environment – the light experience is better. The lamps have proven to be a longlasting solution and the operation cost is reduced significantly, not only in energy savings but also in terms of bulb replacements which is reduced to none.”

Lars Helleberg, Marine Engineer

Economics

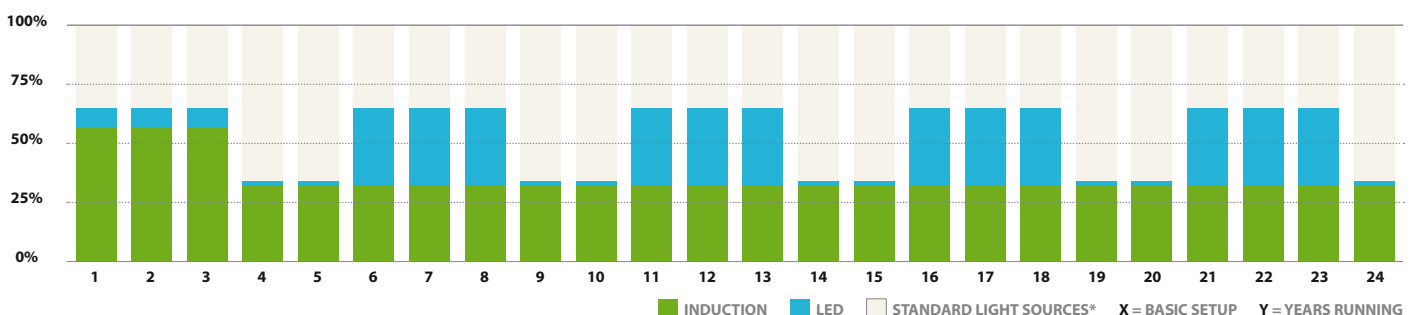
Investment

- **RDS Finance Solution** with ownership after 2-3 years, no down payment and over 40 % savings from day one (compared to before lamp replacement)
- Low investment – up to 30 % cheaper than comparable LEDs

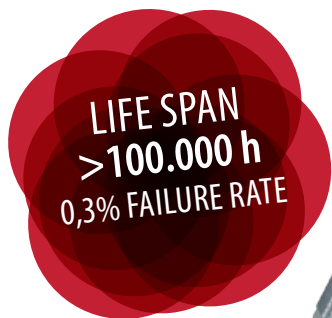
Operation

- On average 75 % cheaper in operation than HPS lamps, fluorescent tubes and mercury bulbs
- Long life – up to 5 times longer than LED (>100.000 h)

The overall economic aspects of the induction lamps from RDS are exceptional. Profit and better work environment can be achieved instantly, which will lead to a solid production platform form where people and companies will benefit.



*) In this example, fluorescent light with 3 X 58W tubes is used



GKPIA
Front in curved,
tempered glass



GKPIAa
Front in Polycarbonate



Specifications

Housing made of die-cast aluminum alloy with powder coated finish. High corrosion resistance and durability. IP 65 approved. Can be delivered with various dimming controllers for energy optimization.

Lamp type	Lumen effect (LM/W)	Power Factor*	Life span (hours)	Start up	Restart	Colour Rendering Index (CRI/RA)	Perception	Failure rate**
Induction GKPIA	70-98	98 %	>100.000	0 sec.	0 sec.	>80	Soft	0,3 %
Fluorescent tube	90	30 % - 40 %	8.000	0 sec.	0 sec.	70	Soft	10 % - 20 %
HPS	70-120	44 % - 67 %	8.000	8 min.	10 min.	<40	Blinding	15 % - 25 %
Metal Halide	60-80	90 %	12.000	0 sec.	0 sec.	>90	Strong blinding	> 20 %
LED	65-105	92 %	15-30.000	0 sec.	0 sec.	>80	Strong blinding	10 % - 20 %
Mercury bulb	50	65 % - 70%	6.000	8 min.	10 min.	45	Blinding	20 % - 50 %
Standart A-bulb	8-14	100 %	1.000	0 sec.	0 sec.	>95	Blinding	N/A (high)

*) Power Factor is the value of electrical appliances ability to draw power from the grid in synchrony with the voltage. 100 % is optimal. **) Failure rate is variable due to environment and usage.

Induction vs. Metal Halide and High Pressure Sodium

Comparison	GKPIA Induction Lamp	Metal Halide	High Pressure Sodium
Warranty	Up to 5 years Lamp, Ballast, Fixture	Lamp: 0 - 1 year Ballast: 3 - 5 years	Lamp: 0 - 1 year Ballast: 3 - 5 years
Bulb hour replacement	>100.000 hours 1 every 11 years	12.000 hours 1 every year	24.000 hours 1 every year
Lumen Failure Rate	10 % @ 70.000 hours	> 30 % @ 6.000 hours	> 30 % @ 6.000 hours
Lamp Operating Temperature	60-90 Degree C	315-425 Degree C	315-425 Degree C
Watts Used	100 W - 200 W	400 W - 600 W	400 W - 600 W
Re-strike	Yes - Instant	No	No
Flicker / Glare	None	High	High
Environmental Impact	Low	High - high mercury content	High - high mercury content
Lamp Failure rate	0,3 %	> 20 %	> 20 %

References



AquaPri
Europe's largest indoor fish farm



Beijing Airport
Terminal #3



Beijing Olympic Stadium



O'Hare International Airport
Chicago



IKEA Shanghai