GKHIA(a/b/d/e) Induction lamp

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

RED DOT SCANDINAVIA

Economics

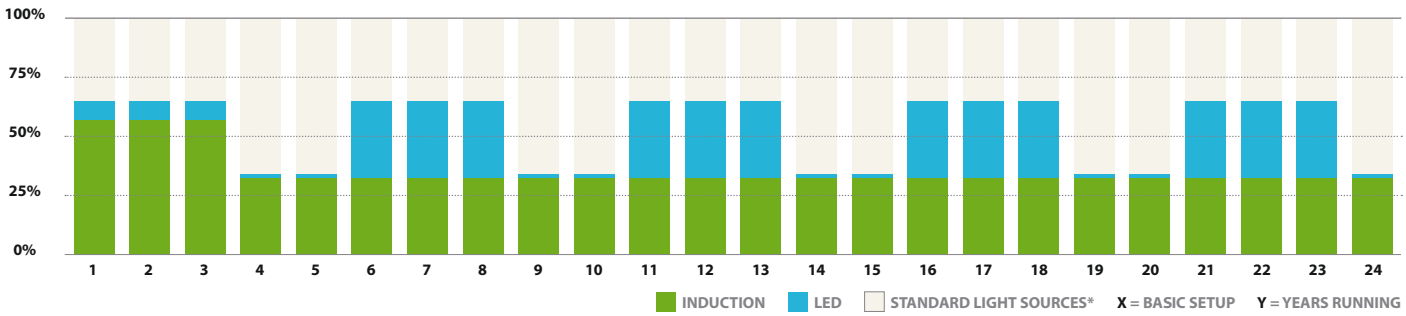
Investment

- **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 then 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

LIFE SPAN
>100.000 h
0,3% FAILURE RATE

Specifications

Housing made of die-cast aluminum alloy with powder coated finish. High corrosion resistance and durability.
TÜV Certified. 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 GKHIA	**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	GKHIA(a,b,d,e) 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 - 400 W**	600 W - 1.000 W	600 W - 1.000 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 Stadion

O'Hare International Airport
Chicago

IKEA Shanghai