

Burners for gaseous and high-viscosity fuels

Compact, reliable and versatile: the SAACKE SKVG-A

The SKVG-A combines the benefits of a compact burner with rotary cup atomizer technology. On the one hand, it is extremely efficient when dealing with high-viscosity substances and super-heavy oils (e.g. heavy oil, bio-oil, crude or waste oil). On the other hand, the all-rounder impresses with its versatile application options: the SKVG-A burns up to five different fuels also in simultaneous firing operation — whether oils or a number of different gases. The high control range allows for the lowest possible operating costs, provides for an extremely efficient operation and also ensures that strict emission limits are complied with.

Versatile solution for land and sea

The SKVG-A has a wide range of applications thanks to its robust design – from industry through to commerce and shipping. It even reliably burns super-heavy fuel oil with low soot and pollutant emissions. The compact burner also only requires very low upstream oil pressures as the atomizing energy is fed through the rotary cup. This is particularly beneficial for marine installations, as often only low upstream pressures are available.

Standard ships and offshore plants

Energy and heat supply

Foods

Chemical industry

Refineries

Building industry

Wood processing

All benefits at a glance

- → Short planning and delivery times
- → Outstanding cost-effectiveness
- Y Easy and quick commissioning
- Proven compact design, for ease of operation and low maintenance costs
- ☐ High operational reliability thanks to robust mechanical compound control, e.g. for emergency electrical operation on ships
- Electronic compound control for the precise microprocessor control of control elements and operating data is also available
- ☐ Increased flexibility and independence with regard to fuel utilization and fluctuating market prices
- → High control range
- → Complete fuel burnout due to fine atomization
- Automatic, uninterruptable fuel switching without the need for a subsequent prepurge
- → Optional additional components: electronic fuel-air compound control, water injection for extremely low-dust combustion, sound absorbing system to reduce the sound pressure level
- ➤ Complies with European standards and the regulations specified by the marine classification societies

The SAACKE solution in detail

The integrated central valve provides a direct safety shut-off in the rotary cup and prevents oil spills — especially useful for frequent set point shutdowns. Also includes: a fan perfectly adapted to the burner. The gas version of the SKVG-A provides fuel slagging for a particularly large control range. The SAACKE UV flame sensor FLS 09 UV with FLUS 06 flame amplifier is provided for flame detection. Compared to the infrared flame scanner, the UV flame scanner can monitore a wider frequency spectrum and offers a 72-hour operation without supervision.

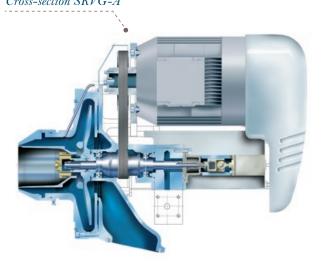
Conclusion

The SKVG-A, on the market since 2001 as a further development of the series, has become a true classic in our firing solutions range. The standardized design gives users absolute planning reliability. Easy, compact and reliable – there are various reasons why many of our existing customers order additional burners of this model. No other combustion system burns high-viscosity substances with the efficiency and the low emission levels ensured by the SKVG-A.

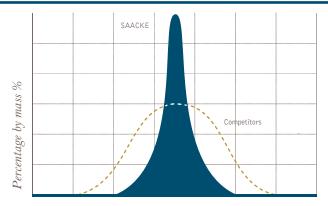
Technical data: SKVG-A

Fields of application	Shell boilers, water-tube boilers, marine boilers, thermal fluid heaters, hot gas generators
Burner capacity (max.)	4-17.3 MW
Control range for oil	max. 1:8

Cross-section SKVG-A

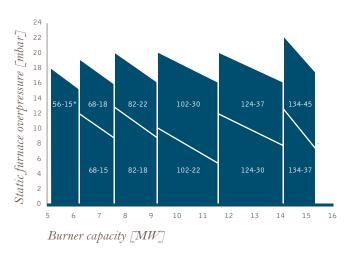


SKVG-A: Droplet range*



Droplet diameter [µm]

SKVG-A: Fields of activity for compact burners with integrated fan



^{* 56 =} installation size, 15 = fan motor capacity

Power and control range

Installation sizes burner*		Qmax	Qmin	Control range**
Compact	Duoblock	MW	MW	oil/gas
_	46	5.2	1.0	1:5 (1:4.5)
56-15	56	6.3	1.0	1:6 (1:5)
68-15, 68-18	68	7.6	1.1	1:6.5 (1:5)
82-18, 82-22	82	9.2	1.2	1:7 (1:6)
102-22, 102-30	102	11.5	1.4	1:7.5 (1:6)
124-30, 124-37	124	14.0	1.6	1:8 (1:6.5)
134-37, 134-45	134	15.2	1.7	1:8.5 (1:7)
_	152	17.3	1.9	1:8.5 (1:7)

^{*} Installation sizes 46-15, 68-22, 82-30, 102-37 and 124-45 are also available on request.



^{*} A homogeneous droplet distribution ensures complete combustion and consistently good emissions.

^{**} Values in brackets are valid if the emission requirements apply.