

A new level of efficiency: BOGE effilence!



BS 62

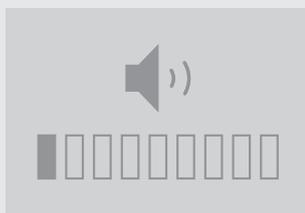


BS 102



BS 152

efficiency
+ silence =



EFFICIENT

The BOGE-developed 5:6 screw rotor profile BOGE effilence is the most efficient air end ever employed by BOGE. Silky smooth rolling characteristics, optimal configuration of the performance ranges, low performance losses and high volumetric efficiency are hallmarks of a new level of efficiency.

QUIET

The speed of BOGE effilence is significantly lower than previous air ends. This results in reduced vibration and oscillation which, in turn, makes for extremely quiet operation. Sound insulation is ensured at the very core and not just in the environment of the second stage. This allows BOGE effilence to attain a new level in silent running.

LONG LIFE

The BOGE effilence air end is designed for long operating life: this is an integral part of BOGE's quality promise. At the same time, the air end is very low maintenance. The advantage for you is that: if you use a BOGE effilence to compress the air for your compressor, you will definitely be on the safe side – after all, you will benefit from a new level of longevity.

MADE BY BOGE

BOGE effilence is wholly developed and built by BOGE. Temperature-compensated processes which lead to particularly low manufacturing tolerances are used during production. BOGE effilence has attained new lofty heights – setting a new benchmark in the development of efficient and quiet compressed air production.

The new premium air end from BOGE: BOGE effilence is the most efficient air end ever employed by BOGE. Its name stands for two of its hallmarks: efficient compression (efficiency) and incomparably quiet operation (silence).

This wholly BOGE developed and built air end will guarantee highest standard state-of-the-art technology: take advantage now of a new level of efficiency!



BOGE effilence: The Design Benefits.

EXTREMELY SMALL BLOW HOLE

The very small radius of the secondary rotor teeth means that the blow hole is very small, thus ensuring high efficiency.

FLOW-OPTIMIZED OUTLET SHAPE

The design is optimized for outlet pressures from 8 to 9 bar. This prevents overcompression and backflow that causes high losses.

AXIAL SUCTION

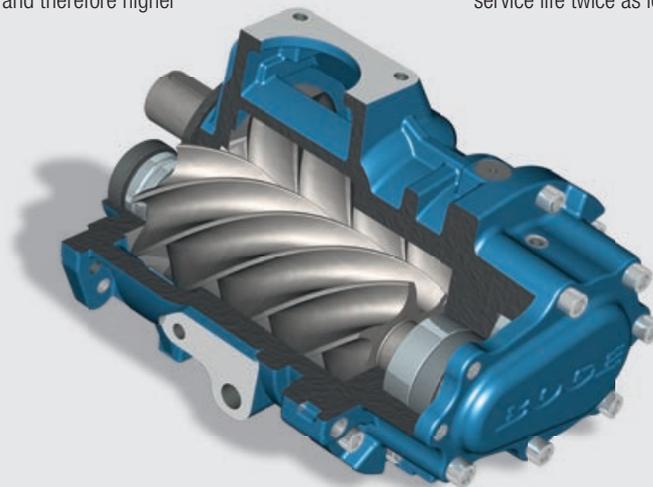
An axial suction that has been calculated with flow simulation software takes place right from the BS 102: for maximum intake and therefore higher volumetric efficiency.

LARGE BEARINGS

The high-quality bearings have been selected in the largest possible size. This leads to a calculated service life twice as long as previous models.*

CIRCUMFERENTIAL SPEEDS

The speed design point has been optimised and is clearly lower when compared to previous stages. As a result, efficiency losses caused by splashing are reduced. The stages do not only offer a quieter operation, but also increased running-life, as the bearing service life depends on the size as well as on the rotations performed.



5:6 PROFILE

The 5:6 screw profile of the rotors developed by BOGE (5 teeth primary rotor, 6 teeth secondary rotor) ensures low differential pressure between the chambers and therefore only minimal flow rate losses. Due to the innovative profile geometry with low leakage between the rotors, the blow hole is extremely small, ensuring a high volumetric efficiency.

VERY SMALL MANUFACTURING TOLERANCES

Due to the low tolerances the stage has a long service life, is efficient and quiet. Efficiency losses through gap and blow hole are minimized; the rattling noise through backlash, particularly during no-load times, do not occur any more.

RATIO OF ROTOR LENGTH TO ROTOR DIAMETER

The rotor profile is optimally designed to achieve the ideal ratio of internal compression combined with the minimum rotor deflection.

OIL INJECTION

The oil injection is designed for an optimum cooling effect and minimum splash losses.

BOGE effilence range

The range of the BOGE effilence air ends now also includes the compact compressors BS 22 and BS 32, which have been used in the C-series for some years.

*BOGE recommends checking the condition of the bearing using vibration diagnosis after 35 000 hours as part of a proactive maintenance.