

# Reciprocating Compressors

Boosters

Sigma Pet Air

All-round carefree package for PET container production



## Why boosters

The SIGMA PET AIR complete booster system combines blow and control air production in a single operation-ready system. An air-cooled rotary screw compressor produces the control air whilst simultaneously serving as a pre-compression stage for the blow air. Blow air booster, system controller and all compressed air treatment components for both pressure systems are installed operation-ready on a base frame. The SIGMA PET AIR complete booster system is the perfect choice for operators of PET container blow-moulding equipment with high expectations when it comes to reliability, cost-effectiveness and compressed air quality.

### SIGMA PET AIR delivers the following performance parameters:

- Flow rate up to 2772 m<sup>3</sup>/h
- Blow air up to 45 bar

### The SIGMA PET AIR system comprises five components:

#### Energy-saving rotary screw compressor

- The energy-saving SIGMA-Profile was developed and optimised by KAESER KOMPRESSOREN and provides the basis for production of control and process air.

#### High efficiency booster

- Booster compression ratios are kept to a minimum by precisely matching the booster to suit rotary screw compressor performance, which in-turn increases energy efficiency.

#### Class 1 compressed air quality

- The SIGMA PET AIR system produces technically oil-free compressed air, whilst the oil and solid particle content is reliably kept below Class 1 limits as per ISO 8573-1.

#### Complete air receiver package

- High- and low-pressure air receivers are both equipped with all necessary fittings, including an electronic condensate drain.

#### Automatic control

- The KAESER CONTROL monitoring and control unit is located in the main control cabinet, which also contains the booster controller (star-delta) and fuses for all drives.

#### Advantages

##### Rapid delivery, ready for immediate operation:

- Installation on a base frame reduces the unit footprint whilst also streamlining transport and setup. We are also capable of delivering complete, operation-ready SIGMA PET AIR systems installed in containers if desired by the customer.

##### Unparalleled cooling without high cost:

- The majority of our boosters are equipped with air-cooled aftercoolers. In air-cooled units, a separate cooler with its own fan motor ensures minimal temperature differential ( $\Delta T$ ) between the intake air and compressed air, allowing customers to dispense with expensive water-cooled systems.

##### Benefit from low maintenance requirements:

- Since the SIGMA PET AIR system has only two compression stages (rotary screw compressor and booster), significantly less service is required compared to multi-stage high-pressure reciprocating compressors with atmospheric compression.