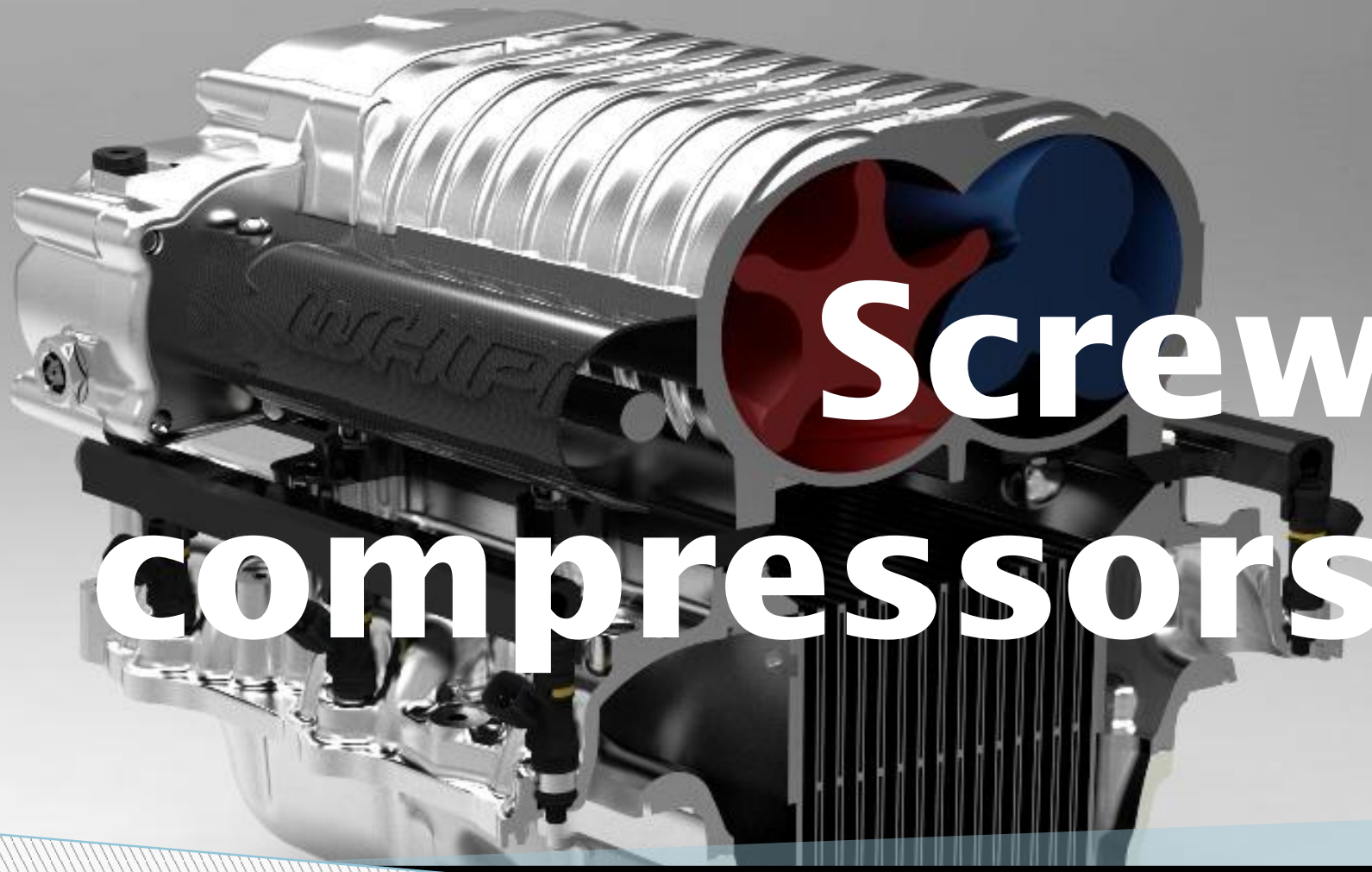
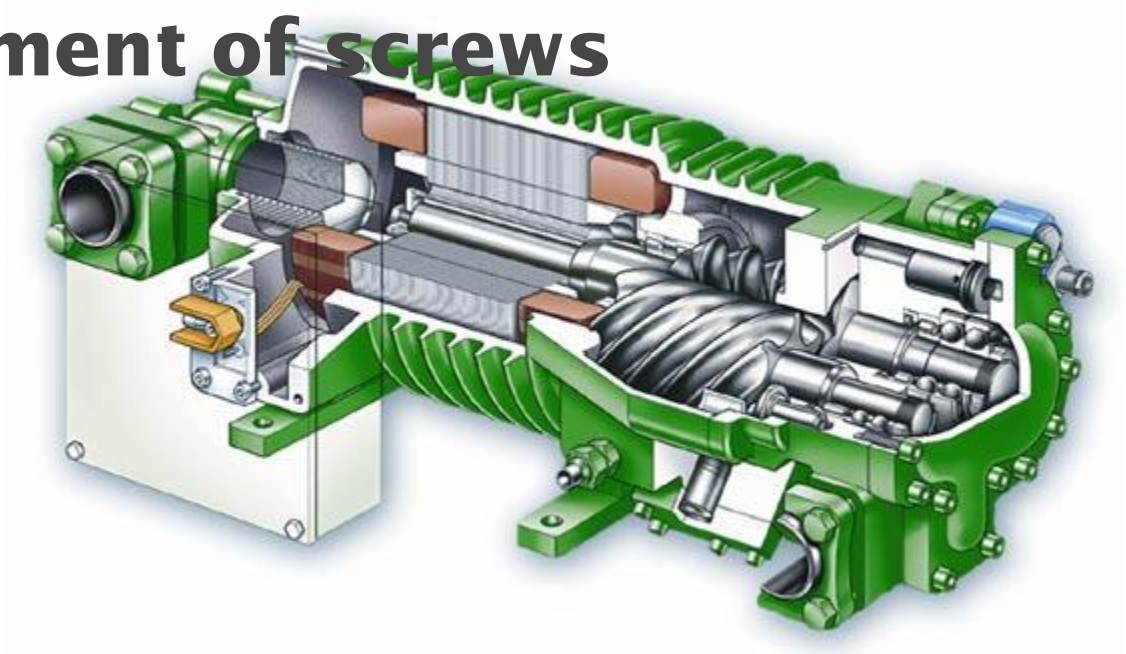


Screw compressors

Fulfilled: student groups LN-61-1
Khomenko Maryna

Screw compressor - a rotary compressor, which has screw-type rotors with conjugate and multi-directional teeth. It relates to a variety of dual-screw machines with the attachment of screws

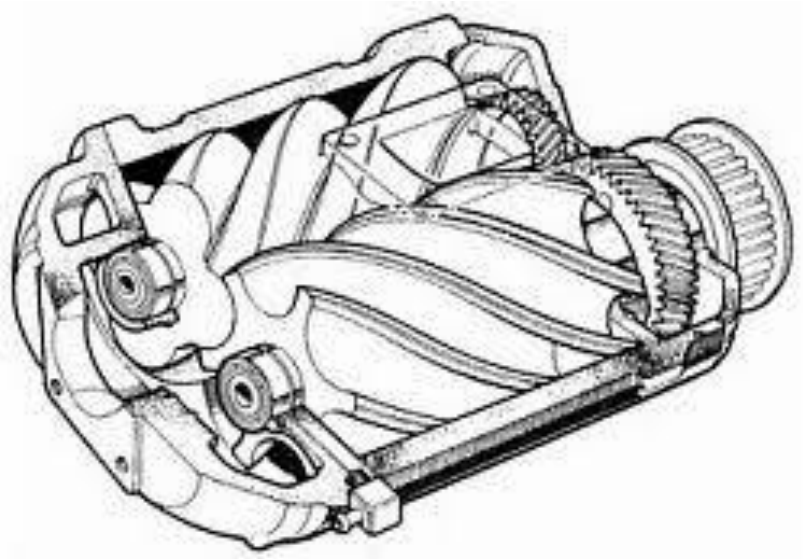


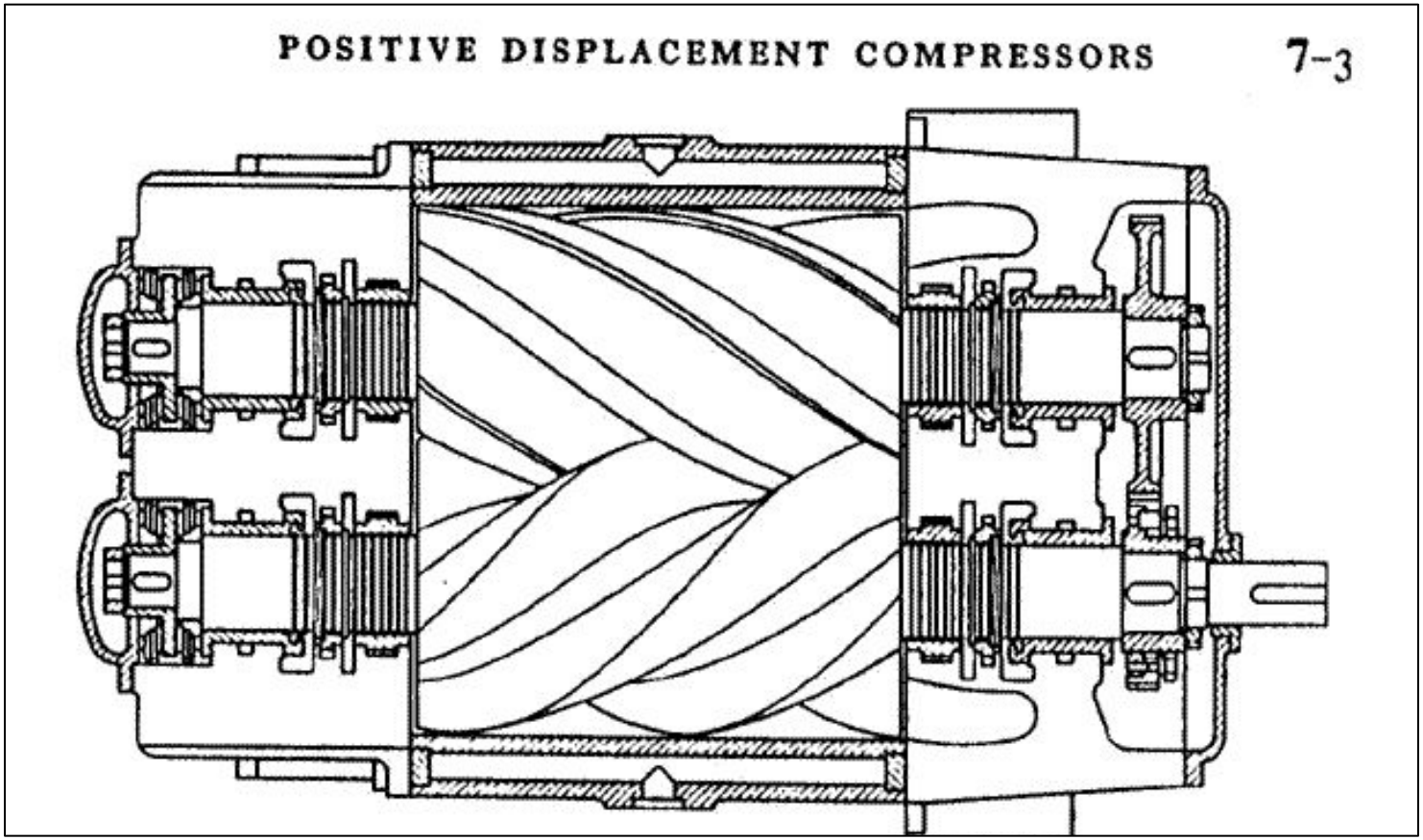
Introduction

Patents for the design of screw compressors appeared in the second half of the XIX century. At that time, it was impossible to make the rotors of the propeller pair with the necessary precision. The first workable design of a dual-screw compressor, also known as the compressor Lysholm, thatwas named after its inventor,Elf Lysholm, was created only in the early thirties of the XX century.

The structure

The compressor of dry compression (without supplying oil to the working cavity) has two screw rotors. The leading rotor has a convex cutting. It is connected directly through the gearbox with the drive motor. The running rotor has a cutting with concave hollows.





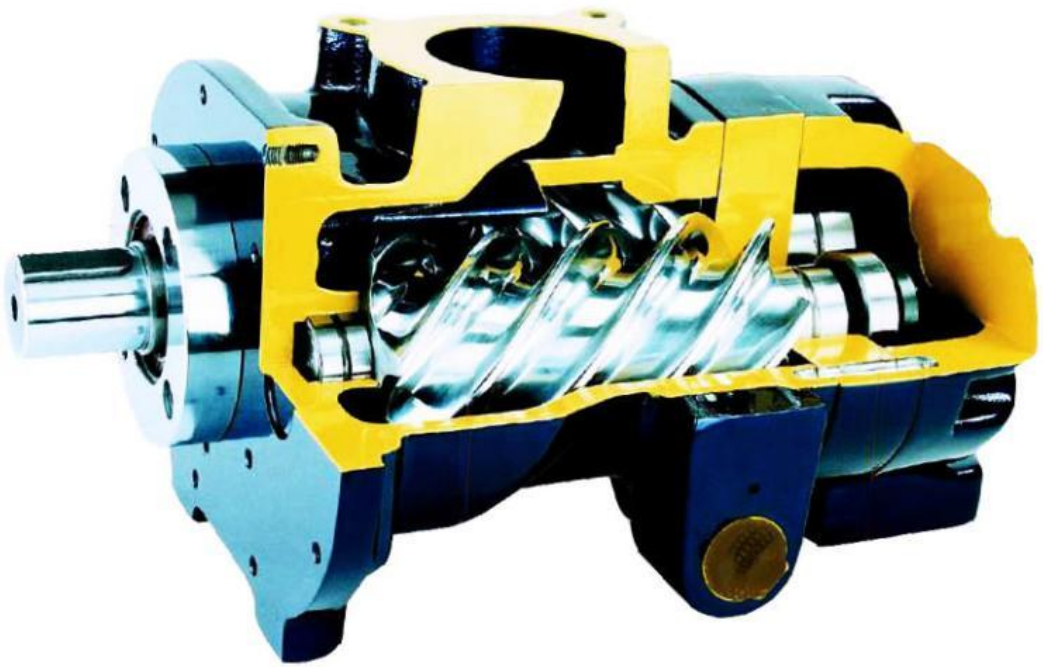
Contact of screws of rotors is not permissible, therefore, a minimal clearance is provided between them, which ensures the safe operation of the compressor.

Parameters

Used to supply gases.

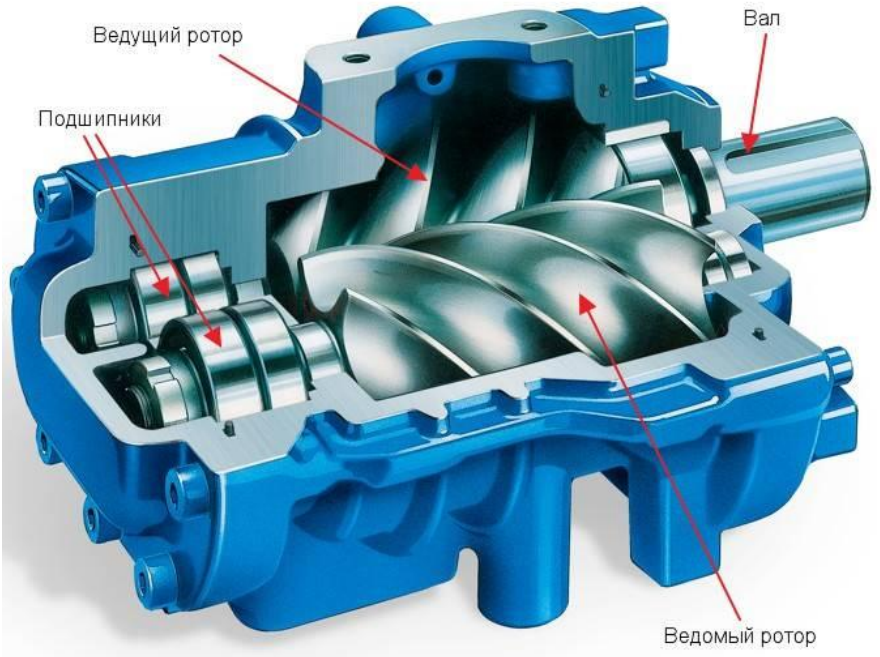
Basic parameters:

- working pressure up to 1.5 MPa
- with productivity up to 60 m³ / min



Benefits

- · Reliability at work,
- · Low metal content
- · Small overall dimensions
- · Energy saving up to 30%.
- · High frequency of rotation
- · Quite high productivity



Thank you for attention