

Mechanical expansion chuck Series 811

with individual expansion lugs or expansion leafs

The Vorwald expansion chucks of the Series 811 are standard expansion chucks with individual expansion lugs, that can be utilised for almost all winding processes.

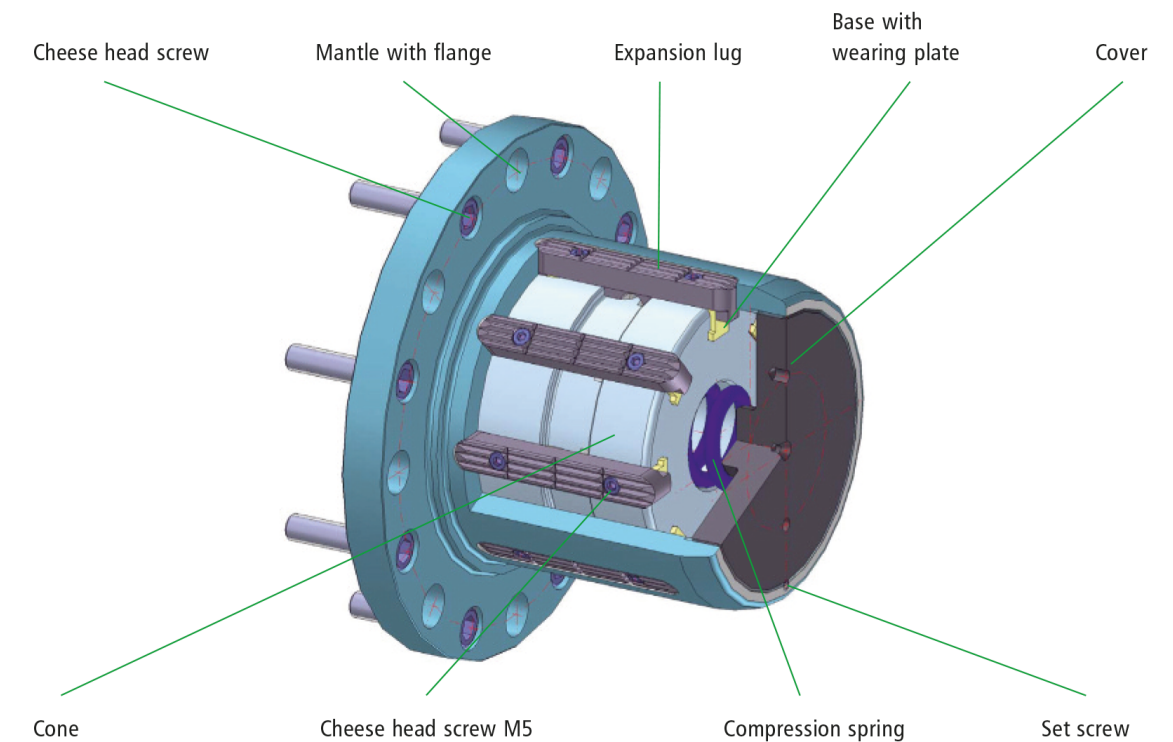
The very simple construction of the interface to the machine flange or to the existing cylinder permits quick change to other expansion chuck diameters.

Several different types of expansion lugs are available for covering all requirements: Lengthwise grooved expansion lugs made of steel and expansion lugs with smooth surface made of polyurethane or screwed versions with various surface profiles that are quickly interchangeable. The number and positions of the expansion lugs in the mantle are determined by the customer requirements.

The numerous different surfaces of the hardened steel expansion lugs ensure the greatest possible torque transmission into the various core materials. All expansion lugs are equipped with a retraction system ensuring reliable contraction. This makes push-on and push-off of the cores easy. Expansion leafs are also available as alternative to the expansion lugs. Expansion chucks with expansion lugs or expansion leafs are available for cores with internal diameter ranging from 50 to 500 mm.

The functional principle is based on the inclined plane. The clamping mechanism can be activated by an integrated pneumatic cylinder or by an external component mounted in the machine. Thereby the cone is pushed like a wedge under the expansion lugs. The cone and the expansion lugs have the same bevel. This produces a radial movement from an axial movement. This arrangement provides the expansion chuck with a very large clamping force. A further very important advantage is the absolutely concentric clamping of the cores, because all expansion lugs expand uniformly to the same extent. This makes very high winding speeds achievable.

The mantles of the expansion chucks can be made of numerous different materials with various wall thicknesses – depending on the application envisaged by the customer. Based on the Vorwald standard the expansion chucks are customised according to the modular design principle.



Options

- Expansion lug or expansion leaf with various surfaces
- Quick adaptation to various core diameters with adapters; see Section 4.3
- Special dimensions are possible on inquiry

Advantages

- + Transmission of highest torques
- + True running tolerance +/- 0.1 mm
- + Quick clamping and unclamping
- + Absolutely centred clamping of the core
- + Utilisable with a very wide range of external clamping systems

Available expansion chuck diameters ranging from 50 to 500 mm

