

Mechanical expansion chuck Series 860/861

with individual expansion lugs or expansion leafs

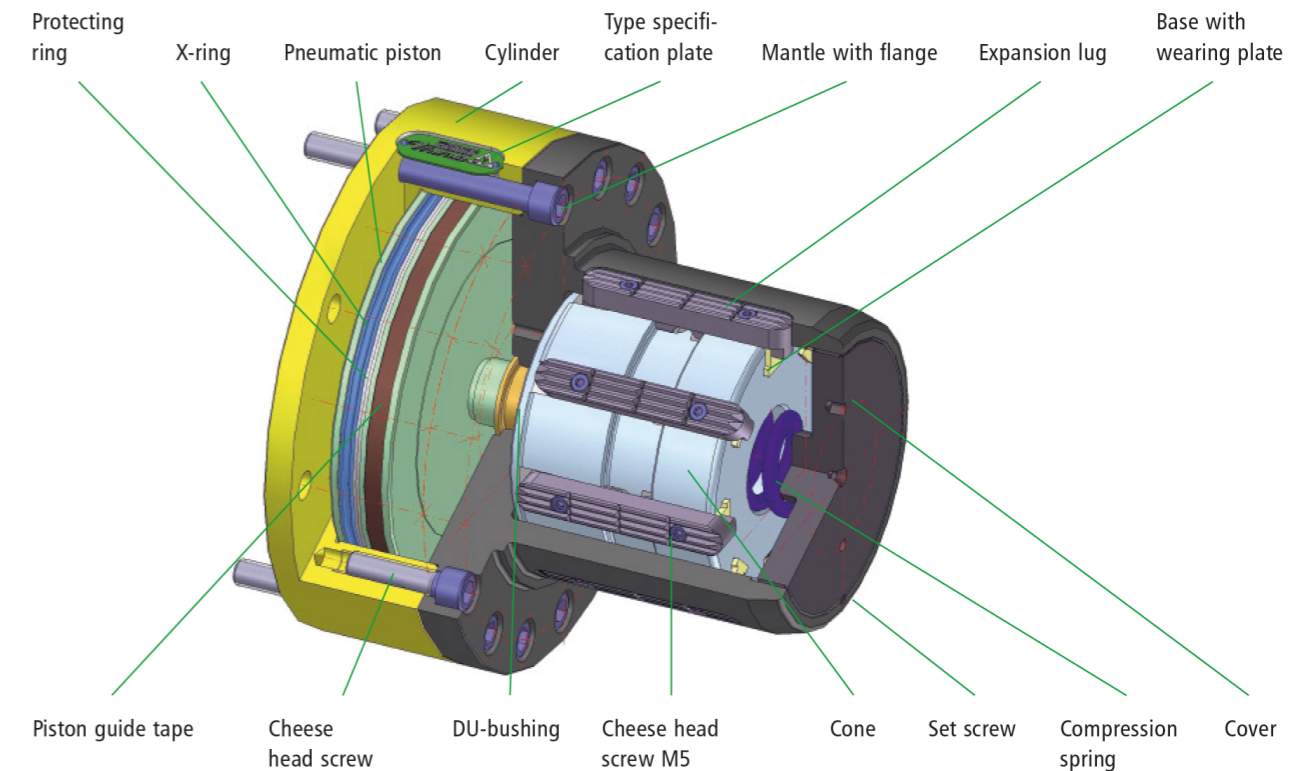
The Vorwald expansion chucks of the Series 860 are standard expansion chucks with individual expansion lugs, that may be used in almost all winding processes.

The simple construction ensures long service life. 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 positioning of the expansion lugs in the mantle are determined by the customer requirements.

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

The functional principle is based on the inclined plane. By feeding compressed air into the pneumatic cylinder the pneumatic piston pushes the cone under the expansion lugs like a wedge. The cone and the expansion lugs have the same bevel. Thus a radial movement is produced from an axial movement. This arrangement provides the expansion chuck with a very large clamping force. The expansion chuck can be optionally equipped with a hydraulic booster (Series 861) that further increases the clamping force. A further very important advantage of this arrangement is the absolutely concentric clamping of the cores, because all expansion lugs expand uniformly to the same extent. This makes very fast winding speeds achievable.

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



Options

- Flange or bearing shaft according to customer specification
- Available with and without booster
- Expansion lugs or expansion leafs 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
- + Absolutely centred clamping of the cores
- + Quick clamping and unclamping

Available expansion chuck diameters ranging from 50 to 500 mm

