The ideal connection

Categories : Chemicals, Mechanical & Thermal Processes, Plant Construction, Engineering & Components

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In the manufacture of metal bellows couplings, bellows and hub connections are a critical issue. While steel or stainless steel couplings can be combined with a special micro plasma welding process, this method is not suitable for combinations of aluminum and steel. Adhesive bonding processes can be used here, but they can fail under extreme operating conditions (chemicals, very high or low temperatures). Especially in the case of clutches on the input side of a planetary gear, high temperatures can occur in critical applications which could loosen the adhesive bonds.

The developed and long-time patented joining process (crimping-in-press process), on the other hand, is optimally suited for connecting multi-layer stainless steel bellows without clearance to aluminum hubs. Here the operation is certainly possible even in temperature ranges from -50 $^{\circ}$ C to + 350 $^{\circ}$ C.