The challenge of using composites and compounds is in creating a sufficient bonding between the materials. Thereby, not only an existing bonding is important but also a reliable transfer of stresses in operation, especially for components for industrial or safety applications. Al-Mg compounds with a good bonding quality can be produced by hydrostatic co-extrusion. Furthermore, the investigations revealed, that the material combination, process temperature, die geometry, and sleeve-core-ratio are decisive parameters in particular.