Held and Floating Type Bearings

Craft Split Roller Bearings, in all shaft sizes and series, are manufactured in two types. The types are *expansion, or floating* type, designated with the suffix "FL", and *held* or *fixed* type, designated with the suffix "HD".
Roller bearings support shafts in rotation, accepting radial (perpendicular) and axial (parallel) loads. *With Craft split cylindrical roller bearings, the held and floating types are separate entities.* There are no stabilizer (stab) rings utilized, as in spherical roller bearings. Nomenclature examples are below, followed by further explanation.

Held Bearing (fixed, non-expansion)
The held bearing accepts both radial (perpendicular to the shaft) and axial (parallel to the shaft) loads. The main purpose of the held bearing is to "anchor" a shaft in position, to prevent shaft drift during operation, and absorb limited thrust or "side" load imposed by the equipment in operation. The held bearing is normally mounted on the drive side, or drive end of a piece of equipment. In applications where a high thrust load is expected or realized, please contact our technical department for advice on proper bearing selection.

Non-Held Bearing (floating, expansion)
The floating or "expansion" bearing is designed to take radial (perpendicular) load only. It is designed to allow for thermal growth of a shaft during operation. The floating bearing is normally mounted opposite the drive end of a shaft and used in conjunction with a held or fixed bearing when both bearings are mounted on a common shaft section.

One of each type bearing is mounted to each solid shaft section in most applications. In the instance of line shafting, where solid flange couplings are used, one held bearing is used, with the rest being floating type. When shaft sections are coupled together using a flexible coupling type, one held bearing is utilized, with the remainder floating type, per shaft section. Exact placement of bearing types in extremely long line shaft sections can vary. Always, we invite you to discuss your applications with our technical department.

Note: When using both floating and held type Craft bearings in an application, be sure to maintain individual bearing components of each type as the separate entities that they are, as shipped. Because of the split nature of the components, it is sometimes assumed said components are interchangeable. Individual bearing components are manufactured — and matched — at our plant, for proper internal clearance and fit — as are their solid bearing counterparts. Mixing components during installation may cause less than desirable performance or premature failure.