




Belvac Production Machinery Technical Bulletin

Information for Customers Operating & Maintaining Belvac Machines

ISSUE 1 VOL. 1 SEPTEMBER 1996

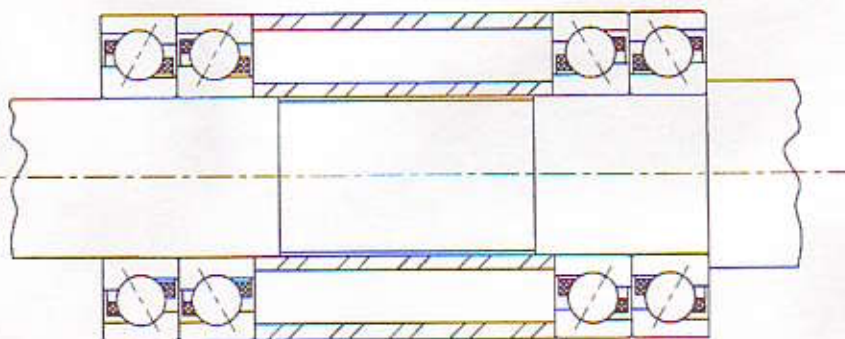
CT500 Trim Station: A Change in Bearing Installation

Belvac has communicated with bearing manufacturers because of customer concerns over premature bearing failures in some trim stations. Previous setup as stated in the manual has the matched bearings mounted with stamped face against stamped face in each end of the housings as so:  As has been observed, temperature differentials cause the preload of these inside bearings to increase during operation possibly breaking the bearing races and causing catastrophic failures.

Bearing manufacturers subsequently have recommended a different bearing arrangement as shown in the diagram below. The more acceptable arrangement has the matched bearings mounted with one stamped face against one unstamped outer ring face. Lateral expansion of the shaft and inner ring spacer of such mountings increase neither thrust nor bearing preload.

Therefore, in order to prevent increases in preload due to thermal expansion, back to back mountings are preferred on machine tool spindles. When two pairs are used, each pair would be mounted in tandem but the combination should be arranged back to back as shown.

*Bearing Arrangement Detail
Assemble as shown
DT-DB Align Dots*



NOTE: All 3MM207W1 (part #C22845) 25 degree angular contact bearings can be used without any adverse effects until any stock has been depleted. A new style 2MM207W1 (part #C22845) 15 degree angular contact bearing will be used in all future trim stations and also sent as spares when ordered from Belvac.