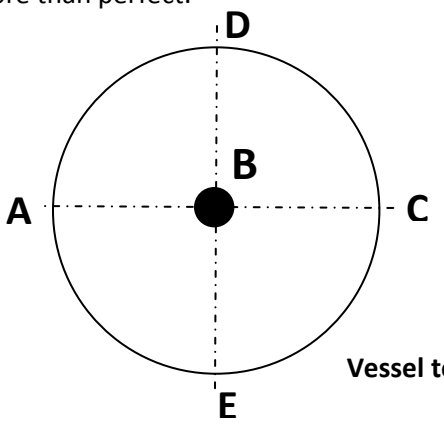
Service Note

Date	04 Jun 2012	Service Note #	MISC-1046	Revision	04 Jun2012
Product	Model 170	Description	Rational of CenterChek™ Usage		
Created By	J. Yangco				

Release	☑	Internal	☑	Distributors	☑	Customers

Parts Required	Serial Numbers Affected
N/A	N/A

In a perfect vessel and with a shaft perfectly centered within that vessel, the lines of AB, BC, DB, and BE would all be exactly the same length. Now, if we were to have the shaft slightly moved in the direction of A, then line AB would be slightly less than line BC. For example, if the shaft were moved 0.5mm toward A, then line AB would be 1.0mm less than line BC. This because line AB would be 0.5mm less than perfect and line BC would be 0.5mm more than perfect.



Vessel to Shaft representation

Perfect centering: Line AB=45.0mm, Line BC=45.0mm.

Moving shaft 0.5mm toward A would result with Line AB=44.5mm and line BC=45.5mm.

These move while only 0.5mm, results in a 1.0mm difference between the distances of AB and BC.

Our CenterChek™ works in this manner. Each division equals 1.0mm. In the example above, the needle would move 1mm or 1 division. The shaft is only off by 0.5mm but the total sweep is actually 1 full mm. This is the reason that any measurement taken by the CenterChek™ is divided by 2 to get the actual centering result.

As per USP Toolkit 2.0 and ASTM E2503-07, the centering should be measured in two different direction and be 90° apart. For this reason, the centering should be read in the AB direction (or BC) and in the DB direction (or BE). With the CenterChek™, both directions are measured as the gauge is spun within the vessel.

121 North Center Drive
North Brunswick, NJ 08902 USA
P: 732-422-7585 F: 732-422-7310 TOLL FREE: 888-234-7835