DISPERSE TECH

Disperser Blade Mounting Requirements

To transfer torque from the mix shaft to the blade, manufacturers use several configurations:

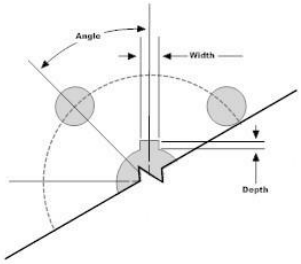


CENTER BORE ONLY:

A round hole is made in the center of the blade. The blade is sandwiched between an upper and lower surface (this could be a shoulder on the shaft and the retaining bolt, or a pair of washers or taper plates). As the bolt is tightened it applies pressure to the blade. It is this pressure that transfer torque to the blade. This design is used on none but the smallest blades, 4" and below. Typically found on aftermarket lab shafts and lab equipment.

Typical Manufacturers:

- DisperseTech: We use this design for our light-weight lab shafts with blades up to 3" in diameter.



CENTER BORE and KEYWAY:

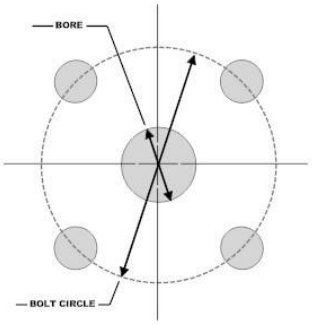
This configuration is primarily promoted by Hockmeyer Equipment Corporation. In this design a keyway is cut into the blade extending from the center bore. The dispersion blade is again sandwiched between a pair of taper plates, which are also keyed. A keyway is also cut into the shaft. Torque is transferred from the shaft through a key to the blade. Typically used through 60 HP with blades up to approximately 18" in diameter.

- DisperseTech: We use this design for our heavy-duty lab shafts with blades up to 4" in diameter.
- Hockmeyer

COMBINATION KEYWAY and PIN HOLES: Unique to Hockmeyer, this design is typically used with machines over 60 HP and blades over 18" diameter, the bore and keyway is supplemented by the addition of 2 or more pin holes.

Typical Manufacturers:

- Hockmeyer



CENTER BORE and PIN HOLES:

By far this is the most common configuration. A center hole is drilled in the blade. Two (2), three (3), four (4) or more holes (pin holes) are drilled around the center hole. Drive pins extend from a hub or taper plate through the blade and typically extend into a lower plate or washer. Torque is transfered from these pins to the pin holes in the blade. This design is used throughout the horsepower range and blade size range. As blade diameter increases, the distance between pinholes and/or the number of pinholes is increased.

Typical Manufacturers:

- Bowers Process Equipment
- Jaygo Incorporated
- Morehouse Cowles
- Myers Engineering
- Schold Machine Corporation
- Shar Systems



HUB MOUNT:

A collar is attached to the blade. This assembly is slid onto the shaft and secured with set screws. A key may also exist for better torque transfer. The hub can be either integral (welded to the blade) or removable (bolted to the blade). Torque is transferred from the shaft to the hub and to the attached blade. This design is used primarily for mid shaft mounting of a blade (a second blade positioned above the end mounted dispersion blade) but can also be used to attach a blade to the end of a shaft.

Typical Manufacturers:

- Various

We can produce blades to meet any of the standard bores as well as any of your custom mounting requirements.

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