

SERIES 89 GUIDE SPECIFICATION

ALUMINUM ADJUSTABLE PITCH FAN ASSEMBLY, TYPE A

The Aluminum Adjustable Pitch Fan Assembly, Type A, shall be manufactured by Hartzell Air Movement, Series 89. Standard sizes are 48" through 168". Sizes 39.5" through 72" may be packaged, completely assembled and ready to install.

The, Model A, propeller hub and blades of airfoil design, shall be cast of 319 aluminum in compliance with Federal Specification QQ-A-601E and ASTM B26. The blades shall be threaded into the partially split threaded hub and retained or clamped at a desired blade angle with S.A.E. Grade 5 bolts with Class 2A threads. The hub shall be retained on the fan or motor shaft utilizing a clamp block arrangement on sized 48" through 72" with S.A.E. Grade 5 bolts or a split taper bushing on sizes 85" through 168". The hub on Model AS (sizes 156" and 168") shall be constructed of heavy welded steel with "drop in" blade assembly and bolted steel cap blade retention.

Standard rotation shall be right-hand or clockwise. Maximum standard construction operating temperatures shall be 200° F. for sizes 48" through 144", and 300° F. for Model AS, sizes 156" and 168". All blades shall have manually adjustable angles by loosening hub or cap clamp bolts. Model AS hubs are painted with heavy black enamel.

The hubs shall be dynamically balanced. The blades shall be statically balanced against a master blade. The propellers shall be manufactured in accordance with Hartzell's standard quality assurance procedures. Fan performance shall be obtained by testing exact scale models in Hartzell's AMCA accredited test laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound.

ACCESSORIES:

- Left-Hand or Counter-Clockwise Rotation Blades - are available in sizes 72", 85", 96", 108", 120", and 132" only.
- High Temperature Construction - For up to 300° F. is available in sizes 85" through 144".
- Protective Coatings - Include epoxy, coal tar epoxy, and inorganic zinc.
- Sizes 85" through 144" are available with a straight keyed bore with clamp blocks on hub to secure to the shaft. Model AS hubs are available with a straight keyed bore with Grade 8 cup point cap screws for locking the key and shaft.