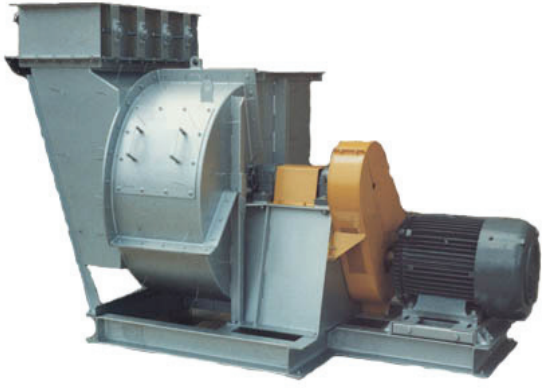


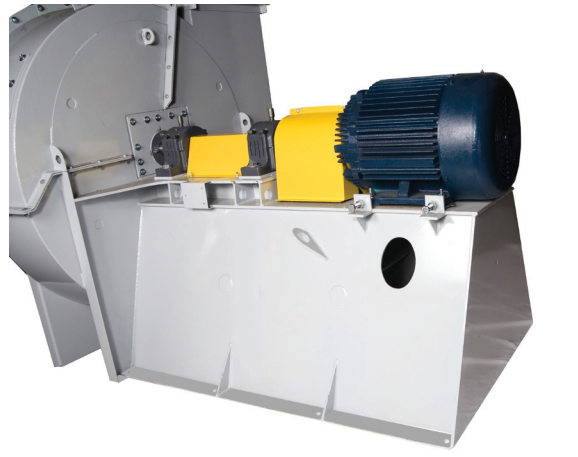
XBC - BACKWARD CURVED FANS

Highly efficient centrifugal fan, with superior static pressure capability. Designed for longevity in clean industrial process applications.



Type XBC backward curved fans have single thickness heavy gauge backward curved wheel blades. XBC fans utilize the same continuously welded heavy gauge housing configuration as the backward inclined and airfoil fans, but with heavier structural material and re-enforcement to accommodate higher static pressure capabilities. All welded fan construction braced with structural steel shapes reduces vibration and noise providing smooth operation. XBC fans are available in single (SWSI) and double (DWDI) width and inlet.

ARRANGEMENT 1 SWSI ON UNITARY BASE WITH INLET BOX AND DAMPER

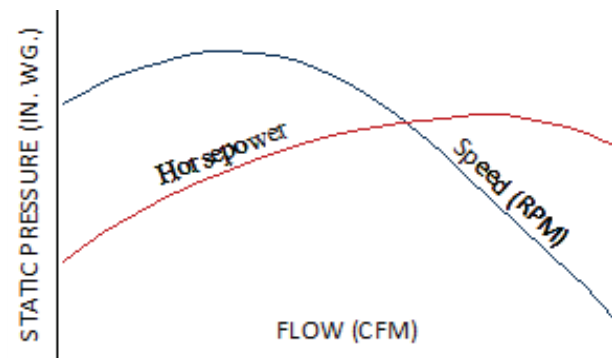


TYPE XBC centrifugal fans are non-overloading and suited for a wide range of industrial applications which include: AIR POLLUTION CONTROL, BOILER APPLICATIONS, INDUSTRIAL PROCESS AIR, SPRAY DRYERS, COMBUSTION AIR SUPPLY, HEAT RECOVERY, WASTE TO ENERGY AND INCINERATION.



XBC backward curved fans combine the benefits of both the airfoil and backward inclined style fans. Backward inclined fans run at slower speeds to develop the same static pressure as airfoil fans, while airfoil fans are structurally stronger than flat bladed backwardly inclined fans. IAP combined the benefits of both in developing the XBC with single thickness die formed curved rigid blades in a wheel with a spun shroud that is coupled with an aerodynamically spun inlet cone for a fan with superior efficiency and high static pressure capability.

BACKWARD CURVED FANS ARE NON-OVERLOADING TO FREE DELIVERY DEVELOPING HIGH STATIC PRESSURES WITH SUPERIOR STATIC EFFICIENCY



Fans with blades slanted away from the rotational direction of wheel travel, as the XBC has, are considered non-overloading. As the point of operation moves further down and to the right, on the fan speed curve, horsepower consumption peaks and then reduces to the point of WOV. Therefore, if system resistance (static pressure) drops horsepower consumption changes only slightly or is reduced.



Arrangement 8 (left) direct drive fan. Fan shown includes an acoustical blanket to reduce radiated noise.

Arrangement 3 fan DWDI (below left) with downblast (180°) discharge. FEA (Finite Element Analysis) of the XBC wheel (below right), insures integrity and reliability of design.

