

## PROJECT SOLUTIONS

**Vibro-Acoustics designed and tested six 200 HP fan-silencer packages for NASA clean room application.**

**PROBLEM: Insufficient duct length**

There was limited length of duct to control noise from 153,000 CFM, 200 HP flow fans.

**SOLUTION: Close-coupled rectangular silencers**

10 ft. X 10 ft. rectangular silencers were close-coupled to the axial fans. Splitters were designed to be full height and rugged construction to distribute the airflow.

**PROBLEM: Excessive energy consumption**

Since the fans were to run continuously, minimum energy consumption was the objective.

**SOLUTION: Optimizing design and testing**

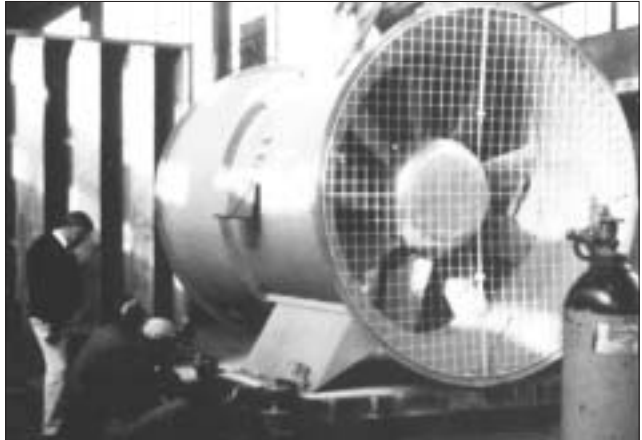
Full scale testing and optimization of all the designs were completed before shipment. Performance witness tests were also completed.

**PROBLEM: Undivided responsibility**

Undivided responsibility for the supply of fans, silencers, acoustic enclosures, structural steel, vibration bases and electrical work.

**SOLUTION: Fan/silencer package supply**

The six units were tested and supplied as packages, each 10 ft. x 10 ft. x 36 ft. long.



Fan silencer and vibration isolation components.



Fan/silencer package and test duct.