# $F_{M}$

# SAFETY-RELIEF VALVE

**MODEL 1600** 

\*ASME UV CODED NATIONAL BOARDED

\*ASME UV CODED PER SEC. VIII DIV. I AIR & GAS SERVICE.(PLASTIC SEATS ONLY)

FLUID MECHANICS SAFETY RELIEF VALVES ARE DESIGNED TO GIVE BUBBLE TIGHT SHUT-OFF OF CLEAN DRY GASES WITH CONSISTENT PERFORMANCE AT PRESSURES UP TO 6,000 PSIG.

CONSULT FACTORY FOR CRYOGENIC TRIM

# **INNER VALVE UNIT**

THE INNER VALVE UNIT IS EASILY REPLACED. BY REPLACING THIS UNIT, THE NOZZLE, SEATS, DISC AND ALL GUIDE AREAS ARE REPLACED.

## **GUIDE**

THE GUIDE AREA ON THE SLEEVE AND ON THE DISC ASSEMBLY ARE BEAD BLASTED TO PREVENT GALLING.

## PLASTIC SEAT

THE SOFT SEATED VALVES
CONTAIN A SPECIAL CAPTURED
PLASTIC SEAT. THIS SEAT
IS SPECIALLY MACHINED WITH
THE METAL BACK-UP SECTIONS
TO ASSURE PERFECT HEIGHT AND
WIDTH FOR BUBBLE TIGHT
SHUT-OFF AND TO PREVENT
SEAT BLOWOUT UNDER SONIC
VELOCITIES.

#### NOZZLE SEAT

THE NOZZLE SEAT IS POLISHED TO OPTIMAL FLATNESS.

#### **SEALS**

THE EXTERNAL SEALS PREVENT ANY EXTERNAL LEAKAGE.

#### INTERNAL CAVITY

THESE VALVES WERE DESIGNED WITH A LARGE INTERNAL CAVITY. THIS DESIGN FEATURE PREVENTS PRESSURE BUILD-UP INSIDE THE VALVE. PRESSURE BUILD-UP INSIDE THE VALVE CAN CAUSE CHATTERING OF THE INNER VALVE UNIT WHICH RESULTS IN REDUCED CAPACITY AND DAMAGE TO SEALING SURFACES.