

1976

# Attenuation of Gas Pulsations Using a Perforated Tube

J. Brablik

Follow this and additional works at: <https://docs.lib.purdue.edu/icec>

---

Brablik, J., "Attenuation of Gas Pulsations Using a Perforated Tube" (1976). *International Compressor Engineering Conference*. Paper 214.  
<https://docs.lib.purdue.edu/icec/214>

This document has been made available through Purdue e-Pubs, a service of the Purdue University Libraries. Please contact [epubs@purdue.edu](mailto:epubs@purdue.edu) for additional information.

Complete proceedings may be acquired in print and on CD-ROM directly from the Ray W. Herrick Laboratories at <https://engineering.purdue.edu/Herrick/Events/orderlit.html>

## ATTENUATION OF GAS PULSATIONS USING A PERFORATED TUBE

Josef Brablik  
CKD Praha  
Compressor Division  
Prague, Czechoslovakia

### ABSTRACT

Pressure pulsations in reciprocation compressor piping systems are integral part of the working process. They are generated during the operation of the reciprocating compressor having a reverse influence upon it. The greatest effect on the working process is exerted in the space between the valve chambers and damper. This effect being to a great extent unfavourable, the efforts are made to find a suitable damping. One of the ways to achieve this is to extend the discharge or the suction pipe of the compressor into the space of the damper and provide perforation in this section. This paper deals with the choice of the optimum perforation parameters by means of a simulation procedure using a digital computer, some results of which are proven experimentally.

The results show that it may be possible to attain a considerable attenuation of the pulsation level without deteriorating the conditions of the gas flow.