

EXAMINATION ON ENERGY-SAVING OF PNEUMATIC SYSTEMS

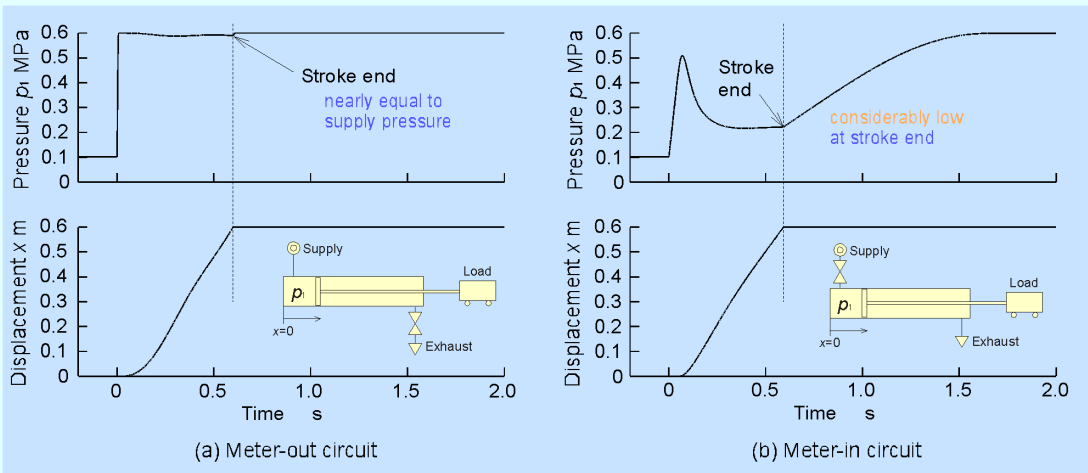
FEASIBILITY OF ENERGY-SAVING ON PNEUMATIC SYSTEMS

- (1) [The reduction in the air consumption of the pneumatic systems](#)
- (2) The effective utilization of the exhaust air
- (3) Measures to reduce the pressure loss and to prevent the air leakage from the air source to the equipment
- (4) The pressure reduction of the air blow

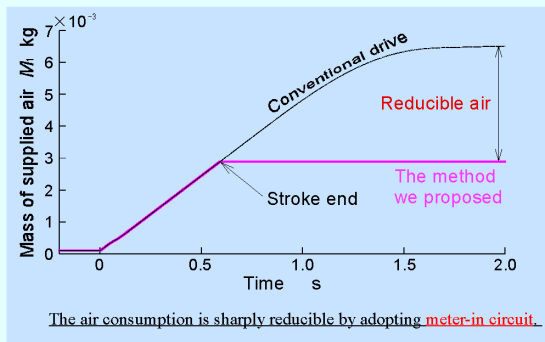


Our group has concretely suggested energy-saving applications for pneumatic driving systems, according to comparing with characteristics between meter-out circuit and meter-in circuit.

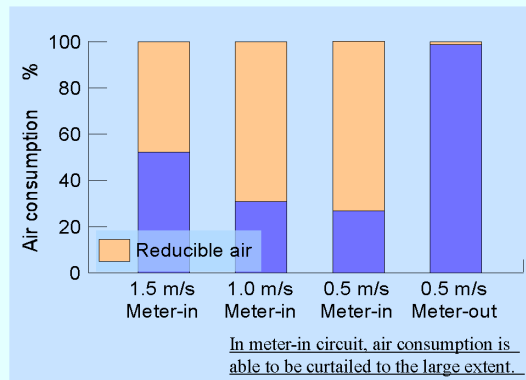
THE DIFFERENCE OF THE RESPONSES BETWEEN METER-OUT AND METER-IN CIRCUIT



THE METHOD FOR ENERGY-SAVING BY CUTTING OFF THE SUPPLY AIR WHEN THE PISTON REACHES THE STROKE END



EFFECTS OF THE REDUCTION IN THE AIR CONSUMPTION



Yukio KAWAKAMI (Shibaura Institute of Technology, JAPAN)
&
Tsuyoshi ARINAGA (Waseda University, JAPAN)