



Mechanical Services Inc.

Ultrasonic Air Conservation Program

Most Maintenance Managers and Plant Engineers are aware that compressed air is the most expensive utility in their facility – but few know just how expensive it really is. It is not at all unusual, in a manufacturing facility, for this cost to be in excess of 30% of the total electrical cost for the whole plant.

One of the reasons compressed air is so expensive is that it costs so much to produce. According to the USA Department of Energy, about 7 – 8 hp of electrical energy is required to operate a 1 hp air motor at 100 psig. Compounding the cost of air is the huge waste of compressed air which is conservatively estimated to be about 25% for average plants that do not have an Air Conservation Program in place. This is why losses through pinhole leaks are so important to discover and correct.

The following chart shows how even the smallest leak is robbing your operating dollars:

Diameter Of Leak	Cubic Feet /Minute	Cubic Feet /Day	\$ Loss Day	\$ Loss Month	\$ Loss Year
1/64"	0.45	576	\$0.13	\$3.90	\$47.00
1/32"	1.60	2,304	\$0.55	\$16.50	\$198.00
3/64"	3.66	5,270	\$1.26	\$37.80	\$454.00
1/16"	6.45	9,288	\$2.22	\$66.60	\$800.00
3/32"	14.50	20,880	\$5.01	\$150.30	\$1,804.00
1/8"	25.80	37,152	\$8.91	\$367.30	\$3,208.00
3/16"	58.30	83,952	\$20.14	\$604.20	\$7,250.00
1/4"	103.00	148,320	\$35.59	\$1,067.70	\$12,812.00
5/16"	162.00	233,280	\$55.98	\$1,679.40	\$20,153.00
3/8"	234.00	336,960	\$80.87	\$2,426.10	\$29,113.00

Based on 100 PSIG with an estimated cost of \$0.24/MCF running 8,700 Hours/Year

Vibtech, using Ultrasonic leak detection equipment, can identify and mark the sources of air leaks for your correction – all done during normal operating hours. Leaks are tagged and a full report will then be issued with digital pictures positively identifying the problem, and estimating the air leak cost.

Stop blowing away money! Call Vibtech Mechanical Services now and eliminate unnecessary air losses

Vibtech's Ultrasonic Air Conservation Program:

- Lower Energy Consumption
- Immediate payback
- Decrease compressor load
- Non interruptive to production