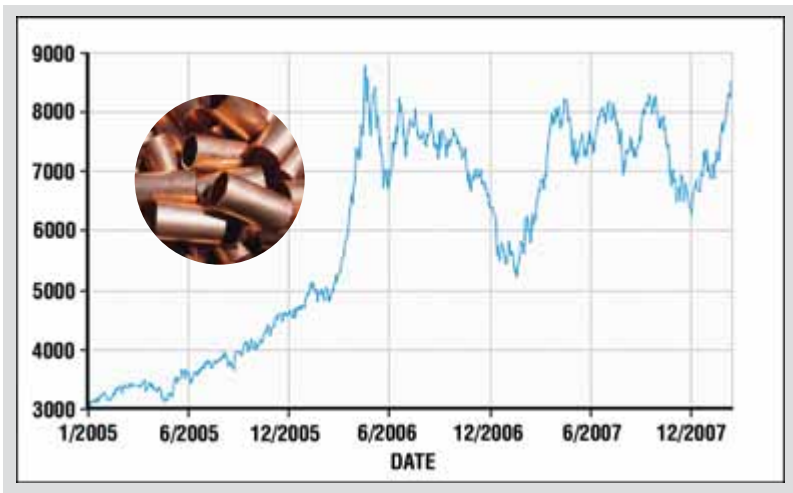


SmartPipe™ Beats Copper and Steel



Copper Price Graph courtesy of London Metal Exchange.

Struggling With the High Cost of Copper?

Copper prices have increased more than 50% since January 2006 and more than 130% since January 2005. Steel prices have also risen significantly. The result is that the costs for copper and steel compressed air piping are up sharply.

Kaeser's aluminum SmartPipe™ has always been cost effective if you consider the labor costs for installation and its performance advantages. Now, even those who only focus on the cost of materials are rethinking their choices.

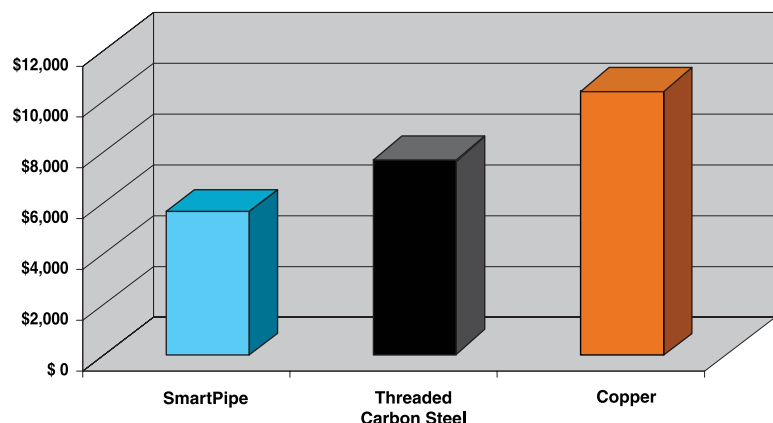
In a SmartPipe™ system, installation labor accounts for only 20-30% of total cost. By comparison, labor accounts for 60-80% of a steel/iron and 40-70% of a copper installation. Even when copper

and steel were cheaper, SmartPipe™ already made good sense. Now that they are more expensive, SmartPipe™ is the best choice all around!

SmartPipe™ Advantages:

- Lower installation cost
- Modular design
- Push-to-connect fittings for fast assembly
- No pipe preparation
- No threading, welding, or brazing (no open flame)
- Completely reusable materials
- Can connect to existing copper and steel systems
- 1/2" to 4" Pipe Sizes

SmartPipe™ Installed Cost Advantage



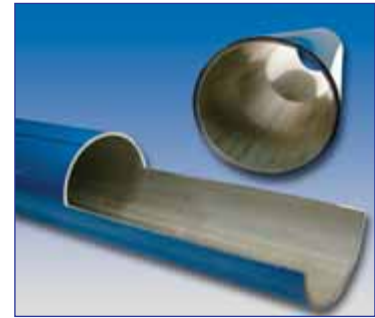
Cost Comparison

	SmartPipe	Threaded Carbon Steel	Copper
Pipe Schedule	Painted Aluminum	Schedule 40	Type L
Material			
Pipe	\$2164	\$1336	\$5500
Fittings	\$1188	\$ 227	\$ 319
Material Total	\$3352	\$1563	\$5819
Labor			
Labor Hours	22	82	60
Labor Cost @ \$65/man hour	\$1460	\$5344	\$3928
Total Cost (Material & Labor)	\$4812	\$6906	\$9746
The SmartPipe™ Savings			
Labor Hour Savings with SmartPipe™		60%	35%
Total Installed Cost Savings with SmartPipe™		30%	50%

MATERIAL LIST:
500 feet of pipe, 16 elbows, 7 tees, and 10 couplings (unions).
Comparison is SmartPipe 40mm versus 2" pipe.
Labor rates from MCAA manual are factored by 0.70, which is typical for estimating field jobs.

Optimum Air Quality and Efficiency

SmartPipe™ is ideal for installations requiring even the highest quality air. The coated aluminum will not rust or corrode. Smooth interior and full bore fittings reduce pressure drop and will not trap contaminants.



Cutaway of 5 year old SmartPipe. Inside remains smooth and clean with no contaminant build up or pressure loss.

Time Saved is Money Earned

As the chart above shows, one of SmartPipe™'s biggest cost advantages is in saved labor. SmartPipe™ can be installed much faster than steel or copper. Here's a quick installation time comparison:

Steel system: 6 feet per hour

Copper system: 8 feet per hour

SmartPipe™ system: 45 feet per hour

The keys to SmartPipe™'s quick installation are in its low weight and also in the fast preparation of pipe, fittings and mounting hardware.

Connecting pipe at fitting: **1 1/2 min**

Mounting pipe bracket: **3/4 min**

Drilling pipe (new drop or modification): **2 1/2 min**

Replacing straight union with T fitting (modification): **1 1/2 min**



SmartPipe's light weight speeds overhead installation



This actual cutaway of black iron air piping shows typical rust and contaminant build-up after just a few years of operation. Inside diameter may be reduced 40% over its lifetime.

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