## SPRAY WITH HVLP GUNS AND SAVE

Spraying with HVLP guns is like holding a winning lottery ticket, worth thousands of dollars. The exact payoff depends on a number of factors--how you calibrated the gun, spray technique, and very importantly, remembering to mix less paint! But just by switching to HVLP guns you save-many thousands of dollars a year at a typical shop.

Improving transfer efficiency and cutting overspray with a HVLP gun also has other important benefits. You help keep your painter, technicians, and neighbors healthier by reducing their contact with the harmful chemicals in paints and coatings.

The chart on this page offers a handy guide for estimating how much you'll save with a HVLP gun. The Spray Technique and Analysis Research (STAR) Program at the Iowa Waste Reduction Center (University of Northern Iowa) has carefully studied the painting efficiencies of different spray guns. Their conclusion: On average, an HVLP gun will improve paint transfer from 40% to 49% over a conventional gun. And if you adopt recommended HVLP spraying techniques (the DfE site visit team has helpful pointers and advice), transfer efficiency will increase to 61%.

For a typical shop using 10 gallons of paint and coatings a week, savings would add up to \$17,000 a year! (\$15,500 in paint<sup>1</sup> and \$1,500 in filter replacement and disposal<sup>2</sup>)



<sup>1</sup>Assuming an average coating cost of \$90/gallon (1998\$s) (obtained through discussions with Philadelphia area auto refinishing shops) and 50 weeks/year. <sup>2</sup>Assuming \$5/filter, \$350/drum of waste filters disposed, and \$15/hour labor rate (based on estimates obtained from the STAR program).



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## **Detailed Example of Cost Savings**

In an example, XYZ Auto Body uses 10 gallons per week of coatings (primer, basecoats, and clearcoats) to spray cars using conventional spray guns (at 40% transfer efficiency)<sup>1</sup>. The shop is spending approximately \$45,000 per year on coating purchases<sup>2</sup> and approximately \$4,300 annually on spray booth filter replacement and disposal<sup>3</sup> for a total expense of \$49,000 per year.

By simply switching from conventional spray guns to HVLP spray guns (achieving 49% transfer efficiency)<sup>1</sup>, XYZ Auto Body will use *ALMOST 2 GALLONS OF COATING LESS PER WEEK*: a switch that results in a savings of approximately \$8,300 per year in paint<sup>2</sup> and another \$800 per year in filter replacement and disposal costs<sup>3</sup> for **a total savings of \$9,100 per year**.

If XYZ Auto Body takes the next step and trains their painters on the proper use of HVLP spray guns (achieving 61% transfer efficiency)<sup>1</sup>, XYZ will save *ANOTHER 1.6 GALLONS OF PAINT PER WEEK* for an additional savings of \$7,200 per year in paint<sup>2</sup> and \$700 per year in filter replacement and disposal costs<sup>3</sup> -- a total additional savings of \$7,900 per year.

So, by switching from conventional to HVLP spray guns and by training their painters on the proper use of HVLP spray guns, XYZ Auto Body cut paint usage from 10 gallons per week to 6.6 gallons per week and **saved approximately \$17,000 per year**<sup>2,3</sup>.

<sup>1</sup>Transfer efficiency estimates provided by the Spray Technique and Analysis Research (STAR) program at the Iowa Waste Reduction Center (IWRC). <sup>2</sup>Assuming an average coating cost of \$90/gallon (1998\$s) (obtained through discussions with Philadelphia area auto refinishing shops) and 50 weeks/year. <sup>3</sup>Assuming \$5/filter, \$350/drum of waste filters disposed, and \$15/hour labor rate (based on estimates obtained from the STAR program).



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