

Efficiency Performance Contracting

Reducing Wastes and Costs through Innovative Supply Contracts

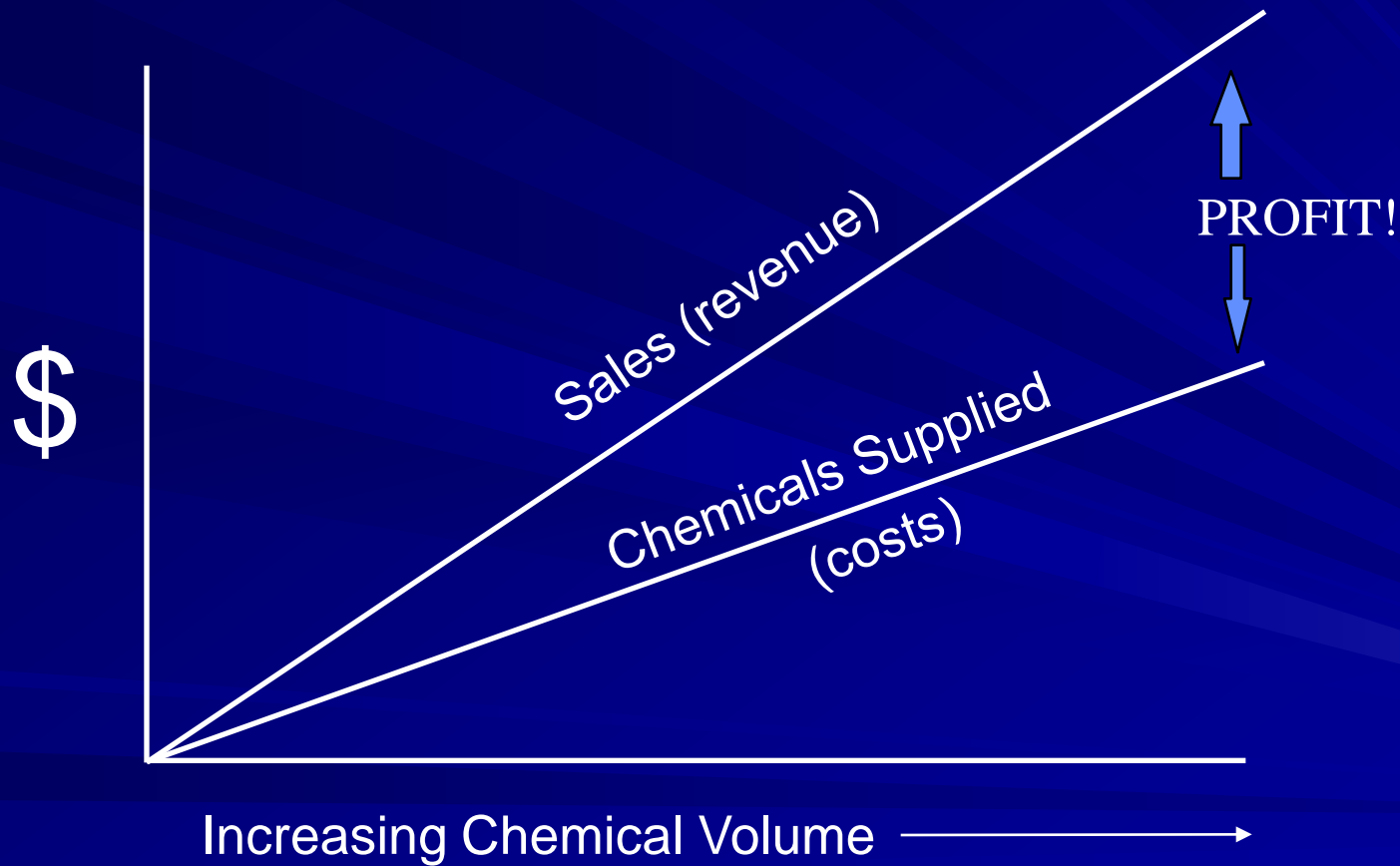
ISU

Illinois Sustainable Technology Center
Sept 9, 2009

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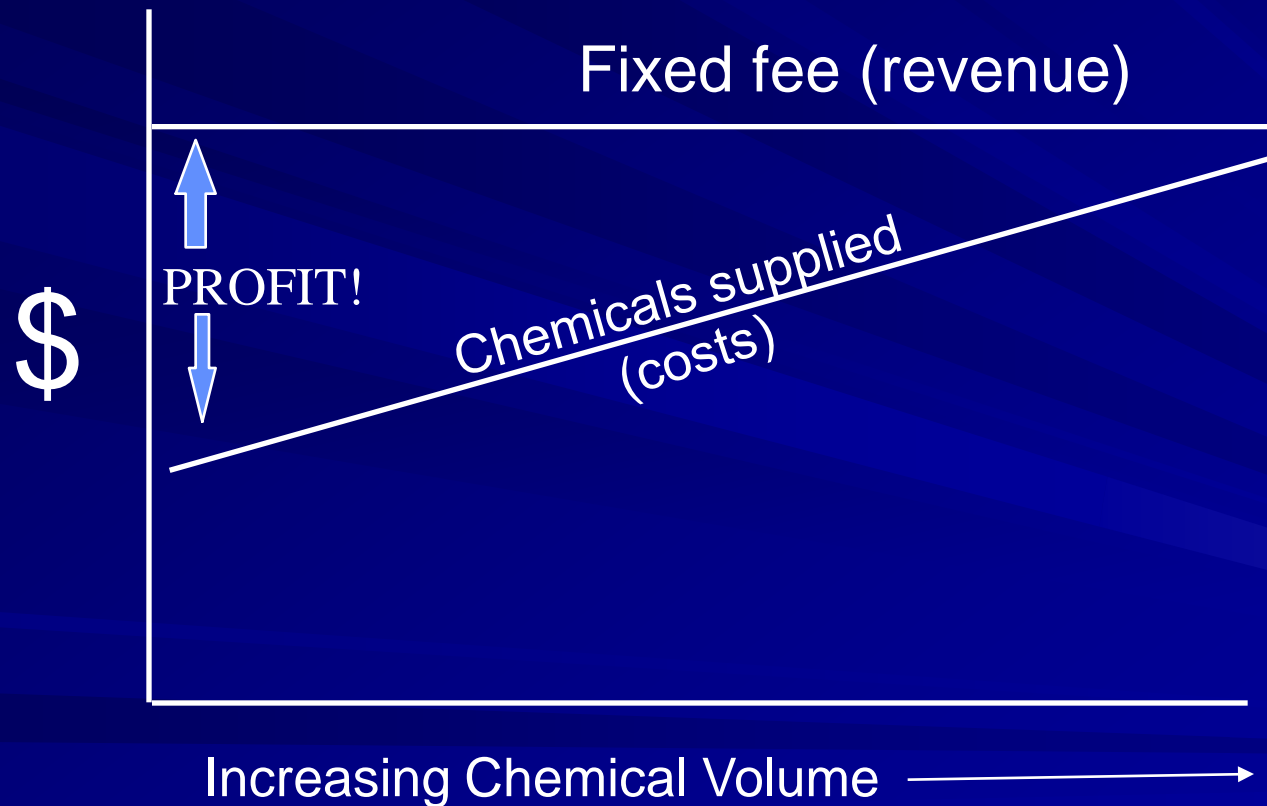
Traditional Chemical Supply

iSU



Chemical Management Services (CMS)

iSU



Another important feature...

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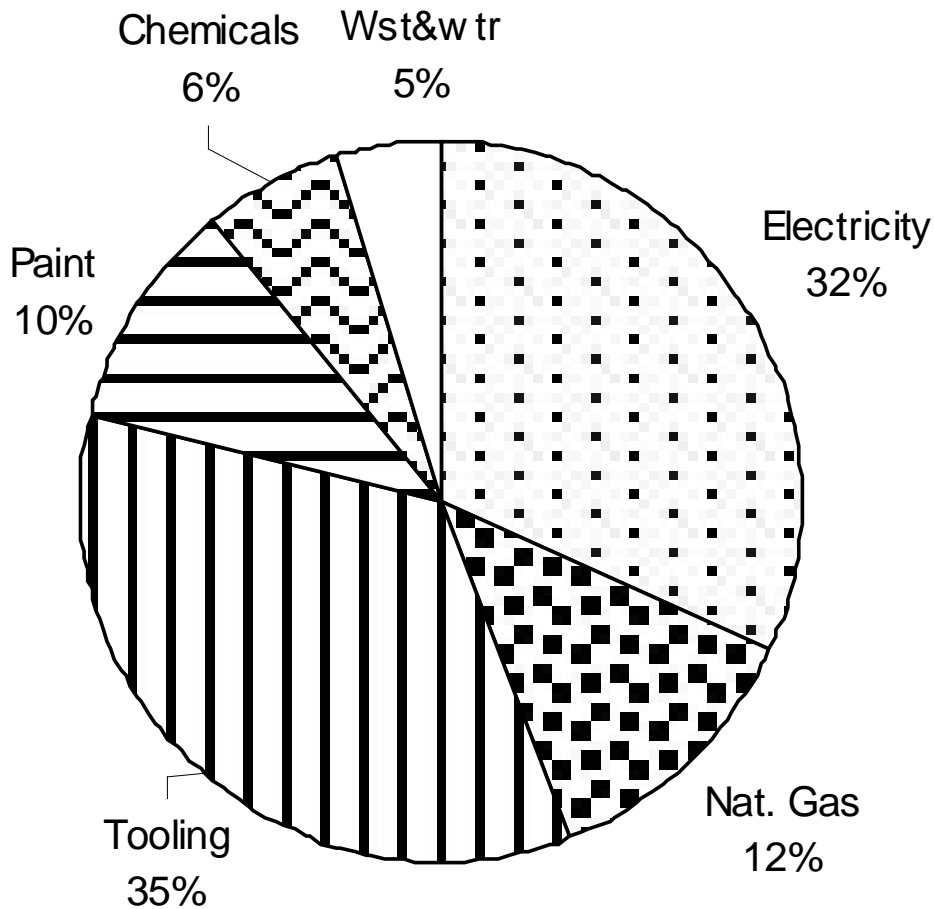
Core Competence

“The key skills or knowledge needed to build and maintain a competitive edge.” (Quinn 1994).

Many technologies lie outside the core competence of the business, so time and money go elsewhere.

Manufacturing SME

Typical Spend in Key Non-Core Areas



Total spend:
\$0.5 – \$2 million/yr

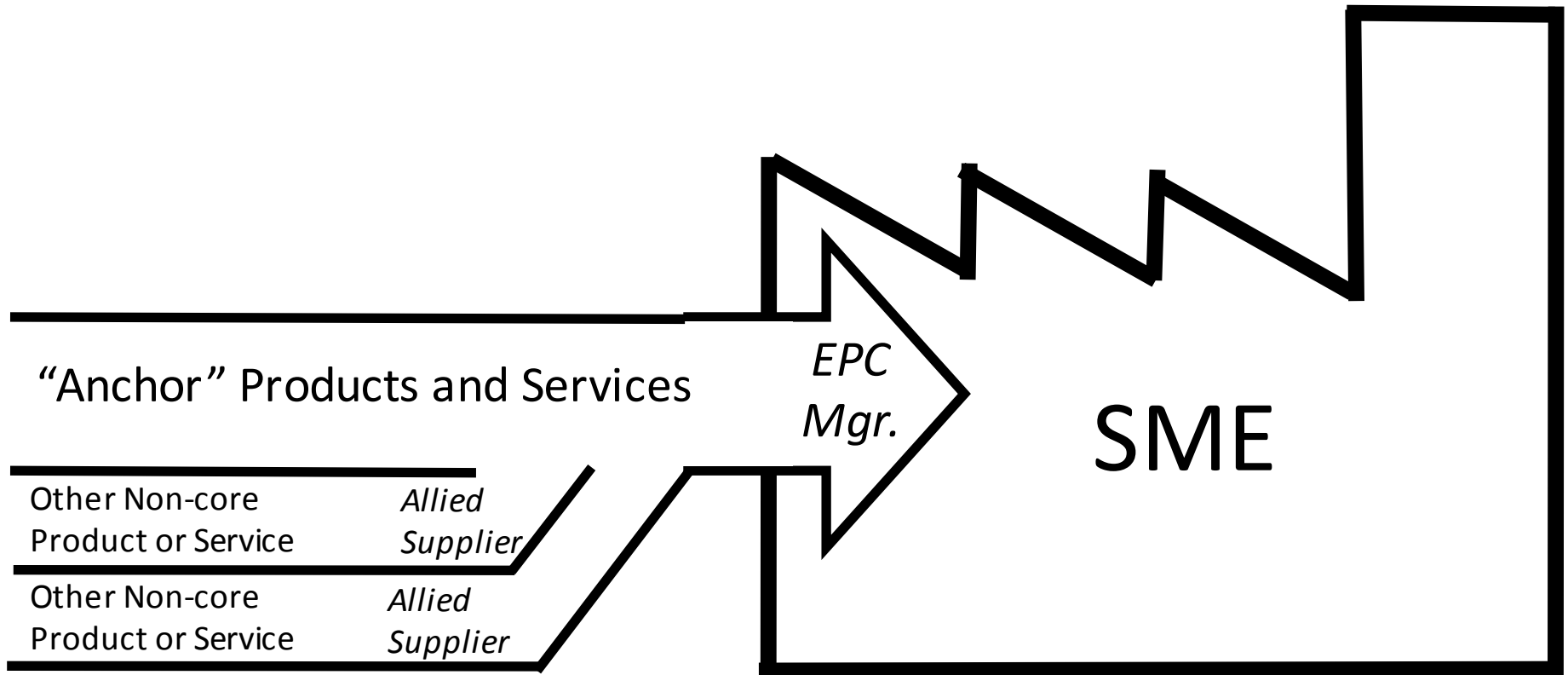
Energy spend:
\$0.2 – \$0.9 million/yr

Question...

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Can multiple spends be grouped under one supplier (or alliance of suppliers) to support an efficiency performance contract?

General structure of an efficiency performance contract (EPC) for small and medium enterprises (SMEs).

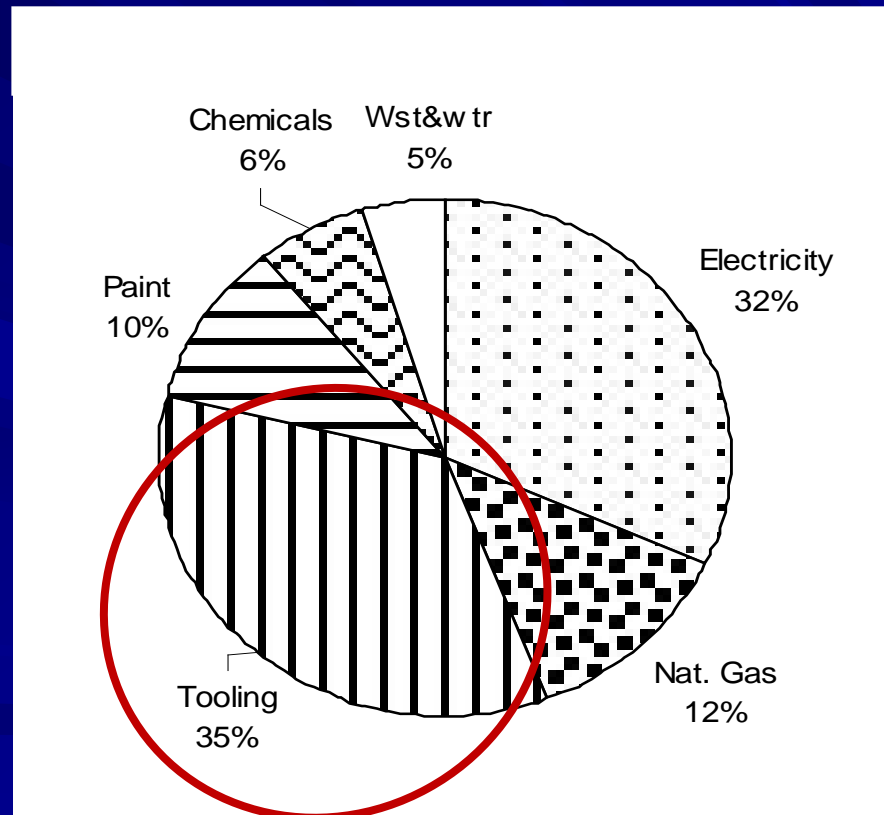


Candidates

iSU

Tooling – plus chemicals and possibly electricity.

Tooling
Management
Contracts

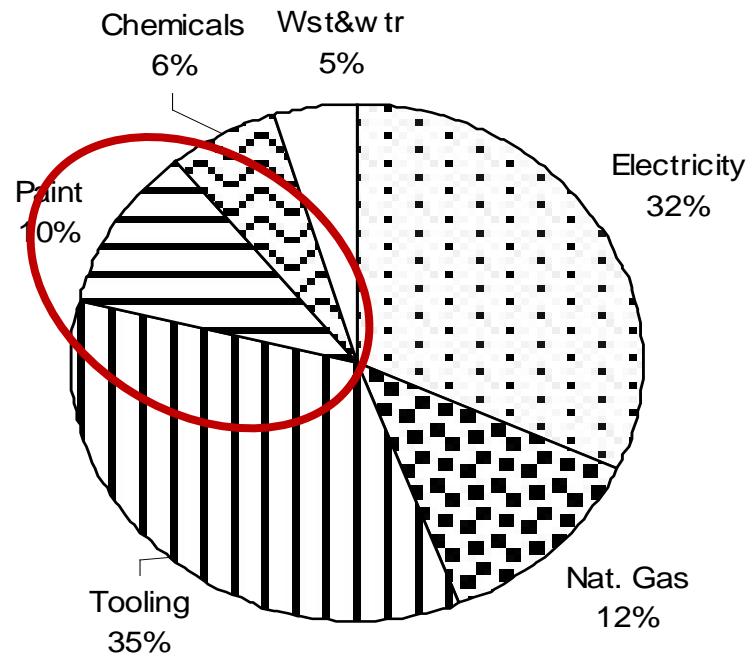


Candidates

iSU

Paint – plus chemicals and possibly natural gas.

Paint
Management
Contracts

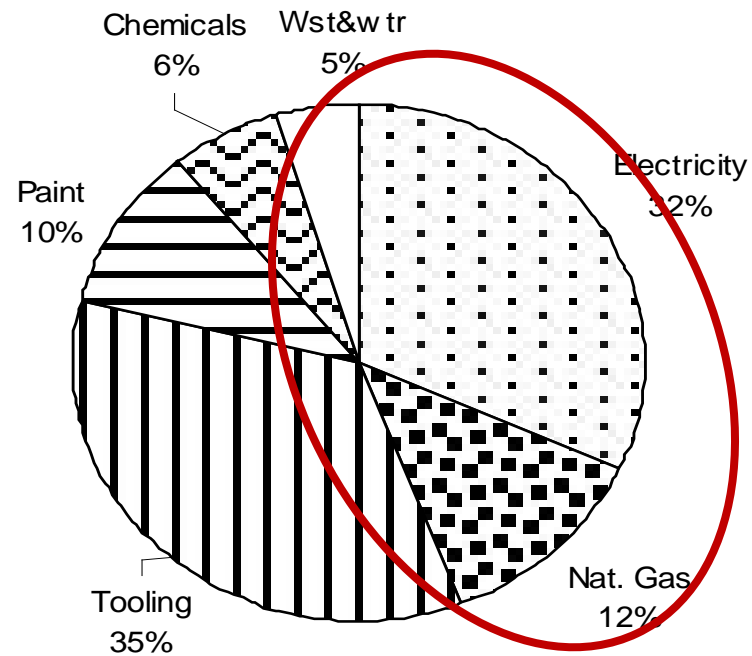


Candidates

iSU

Energy

Energy Management Contracts



Our Research

with Dan Marsch of ISTC

iSU

Work with SMEs and suppliers to
initiate pilot projects.

Results

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Tooling management very successful, but not able to expand into chemicals.

Paint management – suppliers were not sufficiently interested.

Energy management still promising.

Plant A

iSU

Metal products fabricator for auto industry.

Employees: 120

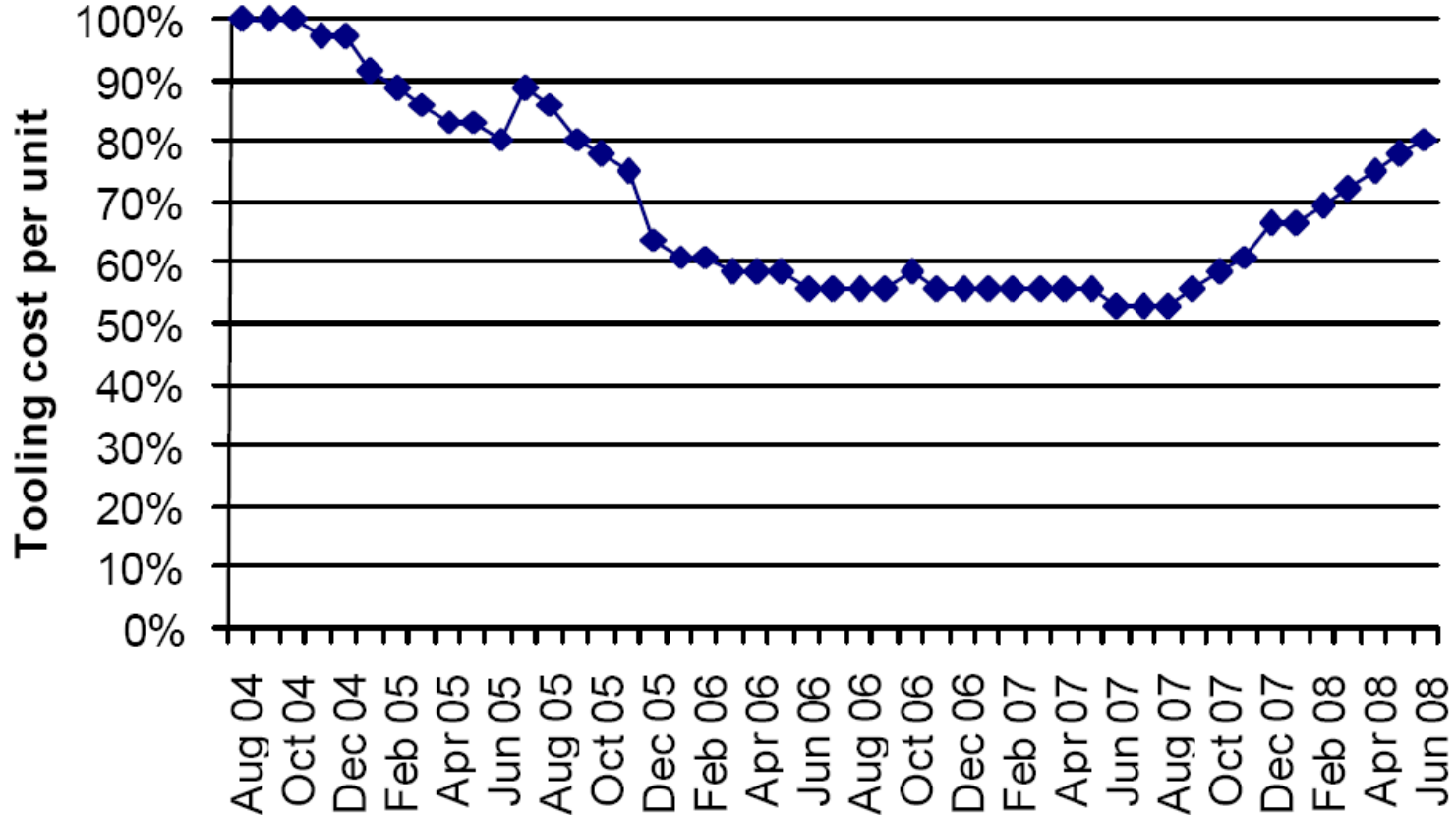
Square footage: 130,000

Tooling management successful

Incorporating coolant was not.

Plant A – Tooling management

Figure 6. Moving yearly average tooling cost-per-unit produced under the tooling management program (August 2004 is baseline).



Plant B

iSU

Metal products fabricator for heavy equipment industry.

Employees: 450

Square footage: 125,000

Tooling management successful
Incorporating coolant was not.

Plant C

iSU

Metal products fabricator for heavy equipment industry.

Employees: 35

Square footage: 40,000

Tooling management good start.

Then plant closed.

Plant D

iSU

Metal products fabricator for heavy equipment industry.

Employees: 400

Square footage: 225,000

Tooling management pursued

But chose 2 suppliers, included no efficiency incentives.

Results

iSU

Tooling management very successful, but not able to expand into chemicals.

Paint management – suppliers were not sufficiently interested.

Energy management still promising.