

Drivers for Cost Effective Supply

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Good afternoon, ladies and gentlemen,

I would like to introduce myself a little bit more. I am responsible for all of the sourcing in Asia-Pacific for the Electrolux Group. As I go through the presentation, I will give you more details on our direct material spent profile. What I want to focus on is how we are evolving and changing our approach to manage our supplier base while striving for optimum cost for ourselves. I stand here as an OEM at the end of the chain for using components and cables. At the end of the day, everyone in the audience is our customer. So it is a very big circle.

For white goods, where we are involved, nobody expects to pay more for the product when they replace it. So we have a very cost-competitive business to work in.

Electrolux – the world's No. 1 choice

 **Electrolux**

Position

- Sales USD 17b
- Sales in more than 150 countries
- Op income USD 1b



Market position **professional chain saws**



People

- 77,000 in 60 countries
- No 165 on global Fortune 500

Products

- 55 million products per year



Our business areas

 **Electrolux**

Consumer durables

- White goods
- Vacuum cleaners
- Air-conditioners



- Food-service equipment
- Laundry equipment

- Light-duty chain saws
- Garden equipment

- Chain saws
- Trimmers etc.
- Turf-care equipment
- Power cutters

Professional Products

Traditional Purchasing

1. Price
2. Price
3. Price
4. Delivery Conditions
5. Payment Terms
6. Penalties
7. Rebates
8. “Prebates”
9. Price

Now I would like to move the discussion on to purchasing. For those of you who are selling to an industry such as our own, the traditional approach to negotiations is, we will ask you for a price. Then we will ask you again for price, probably a third time, then we will start to negotiate the delivery conditions, then we will probably come back with demands on payment terms, trying to push all of our net assets and working capital back down the supply chain. Then we want to have a lot of penalties built in, just in case of late delivery or quality problems. Then we are getting somewhere. What about a rebate for the size of business that we give you? In some cases, we even ask the supplier to buy their way into the business with “prebates”. Then when we have done all of that, we probably come back and talk to you again about price. So, it is a vicious circle going around and around. Where does it get us all?

We started our LCC sourcing program back in 1999 in Eastern Europe and Asia. During that time here in Asia, we built up a spending level of \$1.4 billion this year out of \$7 billion for the group. We see that growing and growing, as time goes by.

However, we have one big weakness in our supply base, we have a high grade of vertical integration.

Right now we have a total supply base of 6500 suppliers globally, which is pretty huge.

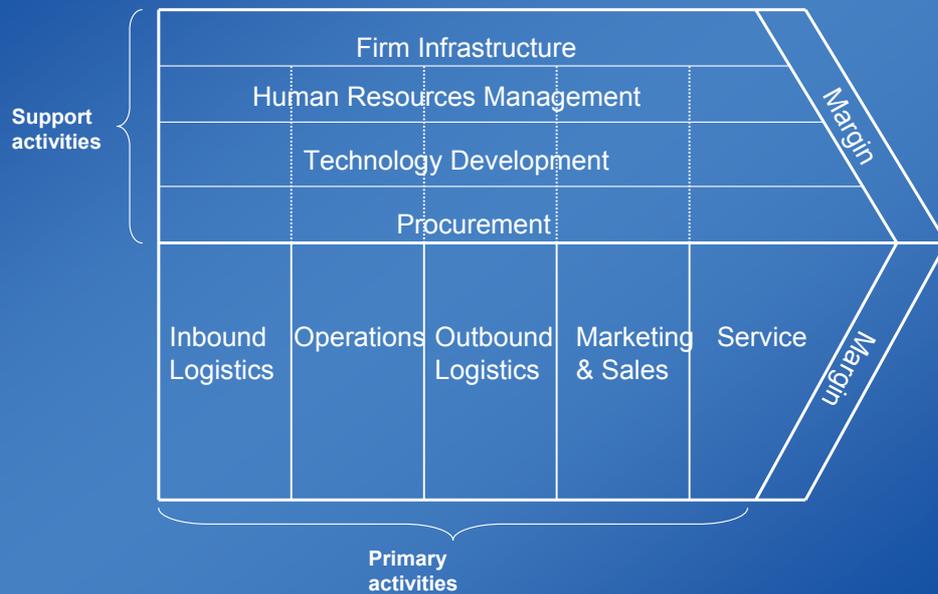
Managing the Value Chain



We launched a campaign earlier this year called Project 21, which was asking our suppliers for 21% price reduction immediately. The intention of that request to our suppliers was to spark discussion and understanding from the supplier base of how they see their business strategy developing over the next 3 years. The 21% is a very simple profit lever for Electrolux. So we have to achieve it one way or another. Part of that process is actually to reduce the number of suppliers. We invited suppliers to make their proposals, to put dollars on the table, to develop a business plan that would allow both parties to grow. We are not just doing it like a greedy schoolboy grabbing all of the sweets.

The approach we are taking here is to try to create a bit more harmony between our suppliers in the value chain and to achieve a “comfortable marriage of our retail customers” and a better understanding of the cost structure and the management of the business.

Value Chain



Source: adapted from Competitive Advantage: Creating and Sustaining Superior Performance by Michael E Porter. ©1985 by Michel E Porter

Typical Porter's model here for anyone of you who has taken an MBA. But we will not go into all of the details of this to understand the cost structure.

World Class Cost Model

Stampings

Now, I would like to take you briefly through what we call our world class cost model. To avoid your good questions to myself I will do it on metal stampings.

Here you can see the content of my presentation:

- Objectives
- Assumptions
- Cost Structure & Cost Drivers
- Model Output
- Boundaries of the Model
- Assumptions
- Insight
- Opportunity Identification
- Future Pricing

The Cost Model has four Key Objectives

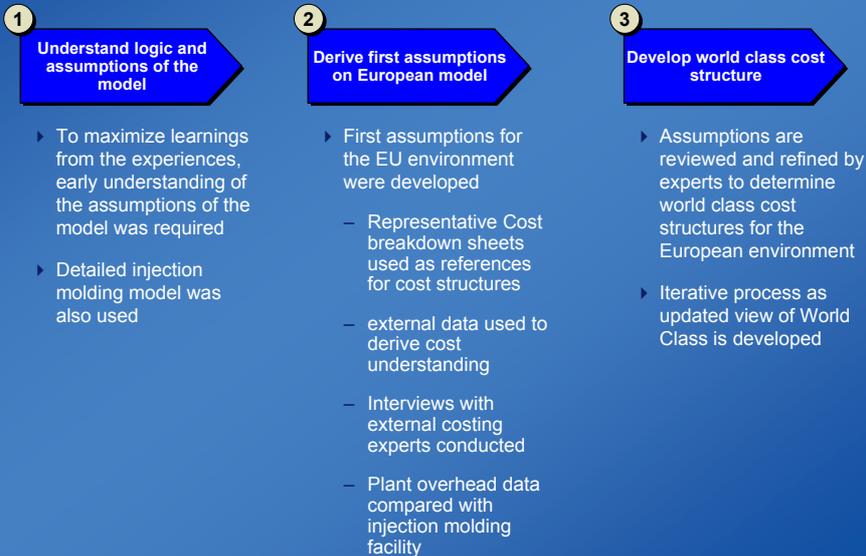
1. Defines target World Class costs for an 'ideal plant / network'
 - > Allowing different scenarios to be tested e.g. plant size and machine mix
2. Feeds targeted commercial negotiations and sets future pricing
3. Models benefits of key levers to quickly drive scenario prioritization
 - > Scale and utilization
 - > Location
 - > Transport
 - > 'World class capabilities'
4. Establish a reference machine rate for current baseline, including for internal plants

The 4 key objectives are

- Defining target world class cost. We ask our suppliers: You have your factory today. It is scaled for a certain level of production. Is that ideal for the cost structure? Would you see the plant being larger or smaller or more flexible, more vertically integrated or not? Let's understand the cost drivers.
- Feeding commercial negotiations and setting a model for future pricing.
- Modeling benefits of key levers.
- Establishing a reference machine rate.

So we are going to create a world class cost model. Our factories, which have installed press shops, have an opportunity to meet the world class cost. If a third party vendor is able to meet those target costs, then we will go through a process of outsourcing those activities. So it is a challenge internally as well as for the supplier base outside.

Using Assumptions from the EU



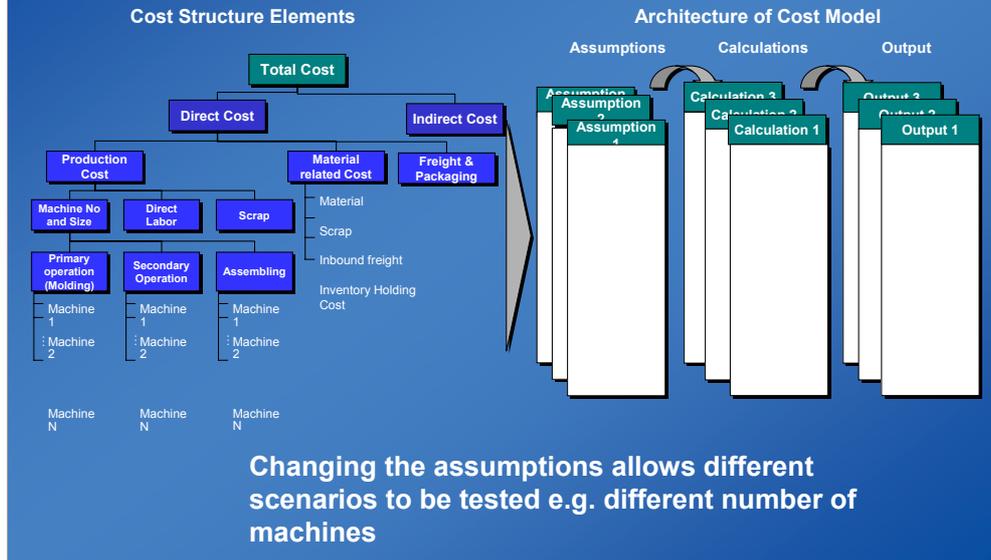
Here are some assumptions listed. We have driven for the model we developed in Europe. We have actually done this from a very detailed study that was done on injection moldings.

Maximize the learning and then derive our first assumption on the European model for supplying metal stampings to our factories.

Representative costs, benchmarking with external data, a lot of interviews with costing consultants inside and outside, and a great detail of understanding of plant overhead data.

Then we develop the world class cost structure. To do that we are doing it bottom up by looking at the cost implication in a very clear structure. We start from the bottom here.

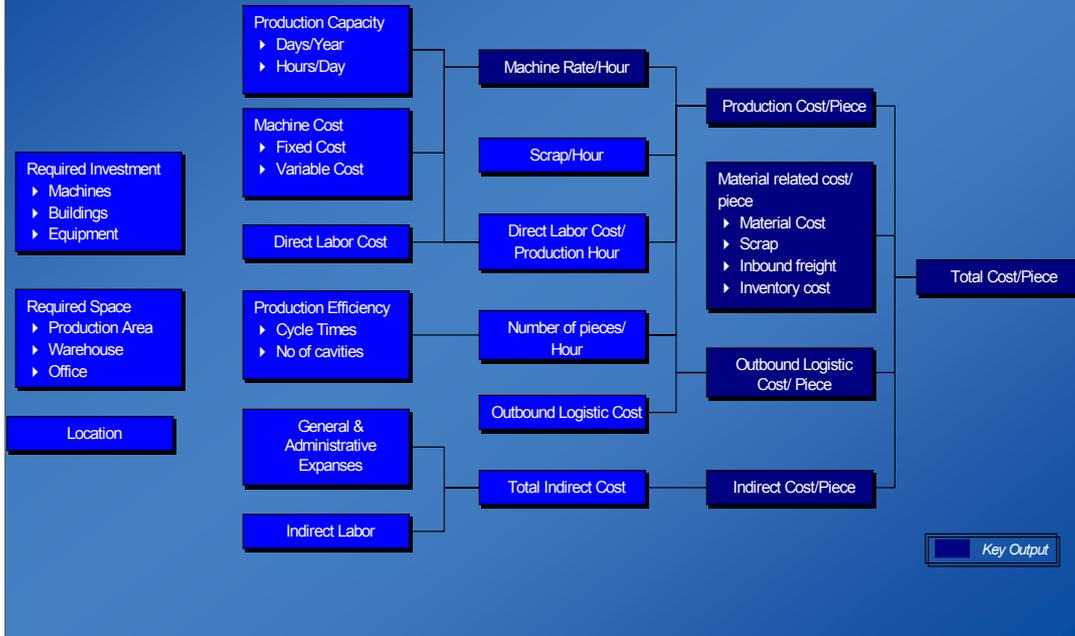
'bottom-up' Cost Implications in a clear Structure...



We are looking at all the machines, their operating and scrap rates, any secondary operations, assembly that may be done. We are looking at the scale of the factory and the direct labor cost, giving us the production cost. Then material related costs, freight and packaging and an understanding of the indirect cost in the business.

That gives us the framework, that creates a number of assumptions, which drive calculations and a number of outputs.

Relationships of Cost Drivers



We have a model looking at the cost driver relationship. We start, on the left hand side, looking at required investments, machines, buildings and equipment, required space and locations. Looking at production capacity, machine cost, labor, production efficiency. That drives us into machine rates per hour, scrap per hour, direct labor cost per production hour. Moving on then, to give us the production cost per piece, more details on material related costs and how the overhead structure builds up, what is the outbound logistic cost to our manufacturing location and indirect cost per piece, running along the bottom, which will give us the total cost per piece that is being produced.

Key Model Outputs

1

Calculation of total plant cost structure (Pure & Mixed Facility)

- ▶ 'Standard' model machine types
 - <400t
 - 400-630t (Prog/Trans)
 - 630-800t (Prog/Trans)
 - >800t (Prog/Trans)
- ▶ 'Complex' model machine types
 - 800t trans
 - 1000t trans
 - 1200t trans
 - 1600t trans
- ▶ Direct cost
 - Variable Machine Rate
 - Direct Labor
 - Material related cost
- ▶ Indirect cost
 - Fixed Machine Rate
 - Indirect Labor
 - G&A Expenses
 - Shared cost allocation for mixed facility

2

Calculation of individual price prices

- ▶ Direct cost based on
 - No. of parts per stroke
 - Stroke rates
 - Production cost
 - Material related cost
- ▶ Allocation of indirect cost based on total plant cost
- ▶ Freight cost
- ▶ Profit margin on production and material

On outputs, we are looking for the calculation of the total plant cost structure. A pure facility doing metal stampings or a mixed facility where you are bringing in added activities such as fabrication, painting, assembling etc. This is giving us a calculation of individual piece prices. It is a base line calculation of the individual piece price.

Now, one thing we do understand is the supplier. Of course, you do want to make a margin, a return on investment. We need to discuss that and we need to agree on it.

Boundaries of the Model

	What it does	What it does not do
Capabilities Covered	<ul style="list-style-type: none"> ▶ Assumes contract manufacturing capabilities of a 'hit and ship' plant, with tooling maintenance 	<ul style="list-style-type: none"> ▶ Capabilities of the plant do not include <ul style="list-style-type: none"> – Tooling design – Engineering
Segment/ Technologies Covered	<ul style="list-style-type: none"> ▶ Separate models for <ul style="list-style-type: none"> – Standard parts – Complex parts ▶ Allows a 'shared facility' to be considered at a high level only e.g. stamping is part of a stamping, welding and assembly facility 	<ul style="list-style-type: none"> ▶ Model does not include other basic value added steps e.g. weld nuts and simple assembly
Pricing of Parts	<ul style="list-style-type: none"> ▶ Provides the basis for calculation of individual parts by determining allocation keys, such as <ul style="list-style-type: none"> – Material overhead cost – Indirect cost – SG&A – etc. 	<ul style="list-style-type: none"> ▶ Does not calculate prices in the model ▶ The model could be adapted to calculate prices based on E-lux cost breakdown sheets
Cost Elements Modeled	<ul style="list-style-type: none"> ▶ Model is for conversion, i.e. production cost, only ▶ Material cost is high level only 	<ul style="list-style-type: none"> ▶ Material cost not modeled specifically

The boundaries of the model: What it does do, is to assume contract manufacturing capabilities. We have different models for standard parts and complex parts. We can mix those assumptions together in the calculation sheets. It provides a basis for calculations of individual parts by all the overhead allocation keys. What we are modeling is the cost for conversion. On the right hand side at the bottom, you can see that the material cost is not modeled specifically.

We might regard the cable as something of a commodity, which may be right or it may be wrong.

'World Class' Assumptions for each Part Type

	World Class - Key Factors for Standard Parts -	World Class - Key Factors for Complex Parts -
Scale	<ul style="list-style-type: none"> ▶ 12 – 16 presses ▶ Minimum 2 presses per press range 	<ul style="list-style-type: none"> ▶ 8 – 12 presses ▶ Minimum 2 presses per press range
Plant Operation	<ul style="list-style-type: none"> ▶ 3 * 8 hour shifts per day ▶ 6 days per week ▶ 48 weeks per year 	<ul style="list-style-type: none"> ▶ 3 * 8 hour shifts per day ▶ 6 days per week ▶ 48 weeks per year
Plant Performance	<ul style="list-style-type: none"> ▶ 85% Efficiency⁽¹⁾ <ul style="list-style-type: none"> – 5-10 mins tool change time – 2 mins coil change time ▶ High stroke rates (90% stroke efficiency⁽²⁾) 	<ul style="list-style-type: none"> ▶ 75% Efficiency⁽¹⁾ <ul style="list-style-type: none"> – 35 mins tool change time – 10 mins coil change time ▶ 90% stroke efficiency⁽²⁾
Tooling	<ul style="list-style-type: none"> ▶ In-house tool maintenance shop 	<ul style="list-style-type: none"> ▶ In-house tool maintenance shop
Press Technology	<ul style="list-style-type: none"> ▶ 'Komatsu' type machines ▶ 12 year depreciation 	<ul style="list-style-type: none"> ▶ 'Fagor' type machines ▶ 12 year depreciation

(1) Efficiency – Actual strokes / target strokes based on 22.5 hr/day operation (i.e. excludes breaks)

(2) Stroke efficiency - Actual stroke rate / maximum possible stroke rate

I do not have to go through all of the details here. But we are looking at the scale of the factory, how the plant operates, what are the shift patterns, what are the assumptions on plant efficiency in terms of working hours, tooling, is it in house or external, and what type of press technology is in place, and what is the depreciation policy of the supplier.

Insights for the Key Drivers of Cost

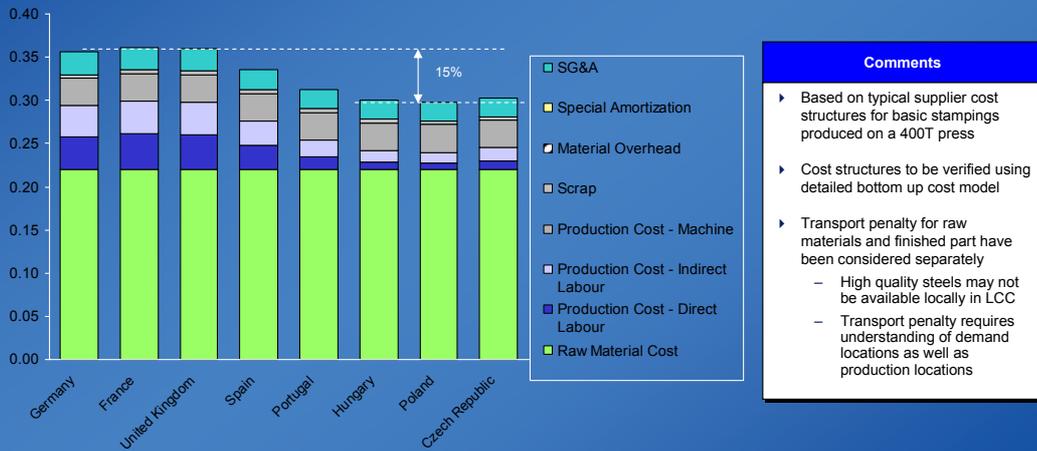
Lever	Insight
▶ Low Cost Country (LCC) Manufacture (focused on Eastern Europe)	▶ Potential saving of 10% for stampings that ship well <ul style="list-style-type: none"> – Based on labor rate benefits – Allowing for incremental steel and outbound logistics costs
▶ Improved Utilisation	▶ Potential of up to 15% <ul style="list-style-type: none"> – Based on 24/7 operation – Relative to typical supplier today
▶ “World Class” Model	▶ Potential of 15-20% <ul style="list-style-type: none"> – Driven by lean organisation & optimized production – However LCC not always justified (logistics penalty offsets limited labor benefit)
▶ Scale	▶ At minimum efficient scale of 12-16 machines, 1 plant could provide the total in scope production
▶ Steel	▶ Logistics costs across Europe can change steel price by 10-15% <ul style="list-style-type: none"> – Steel is 50-60% of unit cost – Availability of specific grades by location of key importance
▶ Logistics	▶ Some stampings do not ship well, implying a regional supply strategy

Here are the insights, this is driven for us. We look at Europe and in particular at Eastern European countries.

The lever is potential saving, at least 10% for stampings for ship well. Improved utilization, potential of up to 15% based on 24/7 operation.

In terms of the “World Class” model, anything up to 20% in total cost efficiency. The scale of the suppliers, we look for, is someone with 12 to 16 machines. In terms of the steel cost, we are looking very carefully not just at the base price of the steel but the logistics to move the base coils and components around Europe. A good understanding of logistics such as models and cost is also necessary.

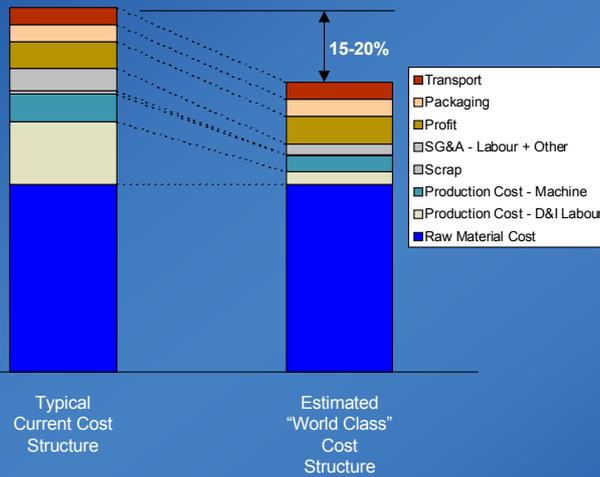
Opportunity Identification



To give you an idea of the opportunity identification, starting on the left hand side here with Germany, France and UK, and looking at all of these elements above material cost (green) simply by working on all of the non-raw material costs we identified round about 15% switching into Hungary, Poland and the Czech Republic.

Opportunity Identification

Benefits of World Class Model for Europe
- <400T Press Range -

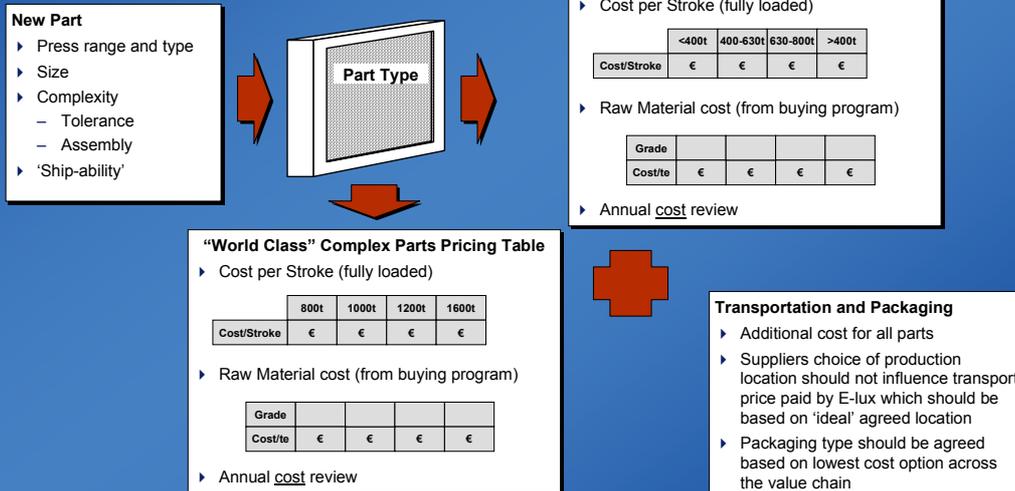


Comments
▶ Savings of 15-20% could be achieved by applying the World Class costs to Europe
▶ World Class processing costs/stroke have been translated to Europe
▶ The two main differences between Europe's current suppliers and the model are <ul style="list-style-type: none"> - Lean organisation - Operation optimized to maximize utilisation

In a little bit more detail, we look at this in terms of the typical cost structure. You can see the area of reduction, in particular, direct labor. Obviously, the production cost of the machine, the maintenance of running drops a little bit. But it is a very clear understanding of the location of manufacturing that we want to have for components.

Future Pricing Mechanism

Stampings WCCM Future Pricing Proposal - Cost per Stroke Example -



In this final slide here, I would like to talk about the future pricing mechanism. Having done all of this for a new component we now understand the cost structure, be it complex parts, standard parts, transport and packaging. We can synthesize that together to have what some people would call the "should cost" or in this example they call it the "World Class" cost model. From that we can determine a broad price, that we should be negotiating. Hopefully we can get away from all of this "price, price, price".

Now we can apply this type of model equally to cables and cordsets as we have done here to stampings. Any of you in the audience who believe your company could rise to the challenge and is prepared to work in this way we are very open to you.

Thank you for your time.

Question: Will it be a long time cooperation for those companies?

Answer by **Mr. Nick Sowden:**

Yes, I think it has to be.