Lean suppliers competitive with China

BY TIM MCLEAN*

IF you have been facing the blowtorch of Chinese competition in recent years, then you will be well aware of China's advantages.

Chinese wages and salaries are a fraction of ours and they also have lower construction and capital costs, lower compliance costs and massive economies of scale through the size of their manufacturing sector.

However, this year the first signs have also emerged of some light at the end of the tunnel for local manufacturers competing with China. If you are a buyer it may also be time to think twice before embarking on your next China sourcing project.

Agility is the key to beat Chinese imports and lean manufacturing the most effective tool to achieve that agility.

Lean enables suppliers to offer faster service, better quality, smaller batch sizes and a greater degree of customisation than traditional manufacturing approaches without increasing unit costs.

Lean can drive down total costs for customers by reducing inventory holding and handling costs, obsolescence and the cost of poor quality.

We are not suggesting that you should exclude the option of low cost off shore suppliers, TXM is in fact actively involved in helping clients source off shore – when it makes sense to do so.

However it is vital that you consider all the costs before making the decision, not just unit cost.

"The extended length of the supply chain means that problems with quality and obsolescence will be amplified. If your product is difficult to make and has frequent model or design changes, then a local supplier is likely to offer better value.

If you select a local supplier, then look for one that has a lean, customer focused mindset and robust internal processes for quality and supply chain management. This type of supplier can provide significant cost savings to your business over the long haul.

Sadly, many local suppliers squander the competitive advantages they have over imports.

While the historic arrangements that they have negotiated with customers for long order lead times, large batch sizes and limited customisation may work well, they are also highly vulnerable to import competitors.

5 Year Total Cost of Ownership			
Supplier Location	**China**	**Australia**	**Australia**
Supply Chain Type	**Typical**	**Typical**	**Lean**
Annual Usage (Units)	100,000	100,000	100,000
Cost per Unit Year 1	$6.00	$10.00	$10.00
Inflation Rate	9%	3%	3%
Currency Movement	5%	0%	0%
Ex Works Cost Over 5 Years	3,966,062	5,309,136	5,309,136
Sea Freight Costs	396,606	-	-
Inventory Holding Cost	249,916	218,184	48,291
Storage Cost	137,429	91,714	24,971
Cost of Poor Quality	654,190	308,219	22,740
Startup Costs	300,000	200,000	200,000
Ongoing Supplier Support Costs	336,606	-	-
Total Cost Over 5 Years	**6,040,810**	**6,127,253**	**5,605,138**

Figure 1 - Total Cost of Ownership for Australian and China Supply. Source TXM

Comparing local and import supply

The exact competitive landscape varies from product to product.

Based on recent experience importing from China, the team from TXM have have calculated the relative costs to source a "typical" product over a period of five years.

For the Chinese and "typical" local suppliers the test-case assumed that products were ordered in monthly lots with a four week production lead time plus, I also allowed a delivery lead time from China of three weeks.

To reflect the problems that can occur when starting up new suppliers, the test-case allowed for two major quality issues to occur in the first year and one quality issue per year in subsequent years for both the local and Chinese suppliers.

The test-case also assumed that a proportion of the stock each year would become obsolescent.

Importantly for the Chinese supplier, the test-case has included the cost of supporting the supplier in China. Often these overhead costs (e.g. the China Procurement Office) are not included in any cost comparison. Interestingly the inventory levels and holding costs are not significantly different between China and the typical local supplier. This is because the monthly order cycle and one month lead time applying in both cases have a bigger impact on inventory than

shipping lead time.

For the "lean" local supplier, the TXM team assumed a weekly order cycle and one week order lead time based on the supplier having more flexible production processes. This brings down all the inventory related costs in the supply chain.

In addition, it is reasonable to assume that a "lean" supplier will have better control of internal quality and therefore be less likely to send poor quality parts to the customer and have lower startup costs. Therefore it has been assumed there is one quality issue in the first year one and no major issues in subsequent years. The results of this analysis by TXM are summarised in the table.

In this example, even though the Chinese supplier offers a 40 per cent ex-works unit cost saving at the start of the contract, over the five year period the total cost of sourcing the parts is only 1.4 per cent lower than the "typical" local supplier and the Chinese supplier actually works out more expensive than a "lean" local supplier.

Again, we are not suggesting that life is going to be easy and the threat from China is over, however in many sectors the worst is over. For those suppliers that have survived so far, some "lean thinking" may soon mean that they can claw back some lost ground.

** Tim McLean is principal of TXM, 0404 480 517, info@txm.com.au.*