



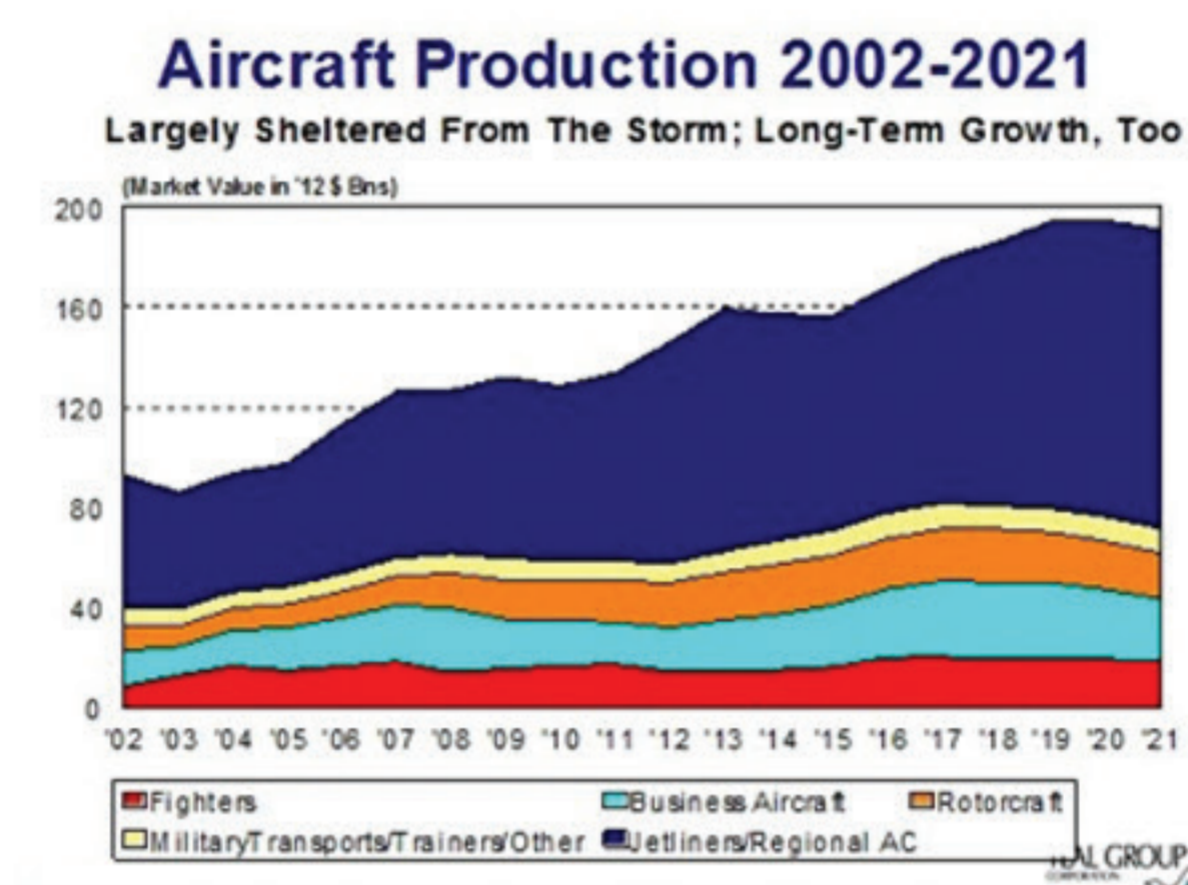
Heat Treating 2016

According to Gord Montgomery, editor of the THE MONTY

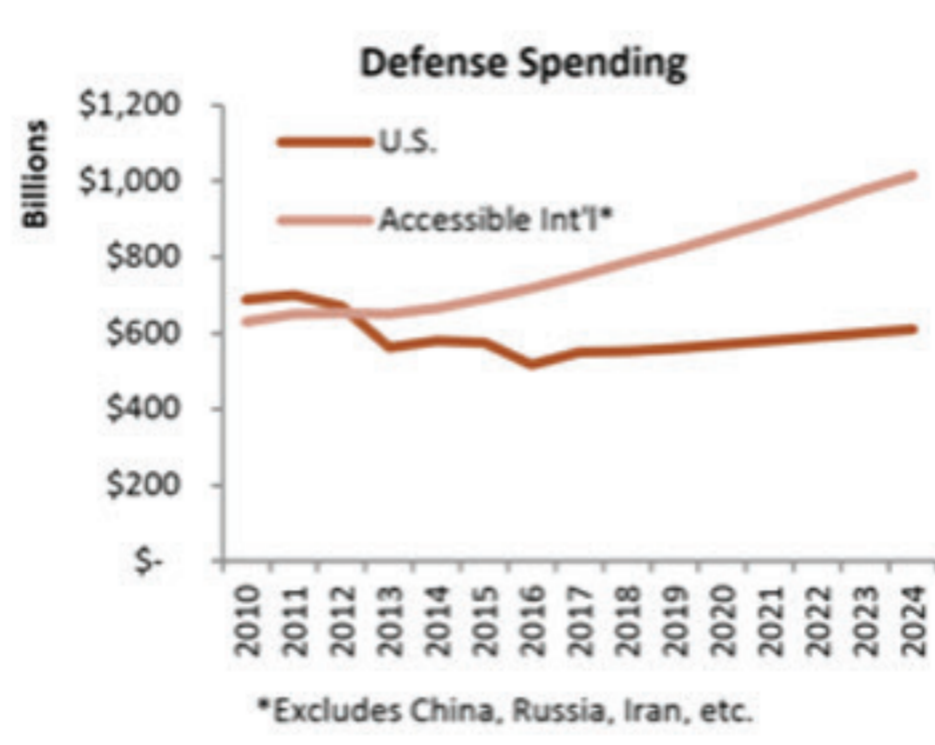
2015 proved to be a year which looked favorably on most captive and commercial heat treaters around the world; most felt sales were up from 2014 or at the very least remained the same. Predictions for the future are always very easy to make and we will fearlessly make a prediction about the health of the industry in 2016. We will start off though by saying that it is difficult to know where you are going when you don't know where you've been. For example, anecdotal evidence tells us that heat treaters did well last year but actual hard and fast numbers are hard to come by. As an example, captive and commercial heat treating is estimated to be roughly \$20 billion USD/year in North America with 10% of this being commercial and 90% captive with worldwide heat treating estimated at \$60-\$80 billion USD/year. The problem is that we have yet to see a breakdown of where these numbers come from or even what is included. As an example does this include steel mills and foundries, or are these number restricted to real heat treating such as carburizing and vacuum heat treating?

Let's try another tack here and backtrack from commercial heat treating whose numbers are easier to pin down. Most areas of the world have a local organization of commercial heat treaters who to varying degrees share information such as individual sales. In North America it is assumed that 10% of the market is commercial and 90% captive-another one of these assumptions which is possible but hard to know for sure (incidentally in Europe the % of the market owned by commercials is larger than 10% and in areas such as Mexico, Indian and China it is lower). So if we start off with sales figures for commercial heat treaters and multiply by 10 (in North America) we should end up with a rough estimate of the total value of heat treating on the continent. Not so fast though-keep in mind that not all commercial heat treaters belong to a local organization and not all share sales figures so we don't know if Peter is stealing from Paul. In other words are the reporting companies seeing increased sales at the expense of the non-reporting members ending up with a zero sum game?

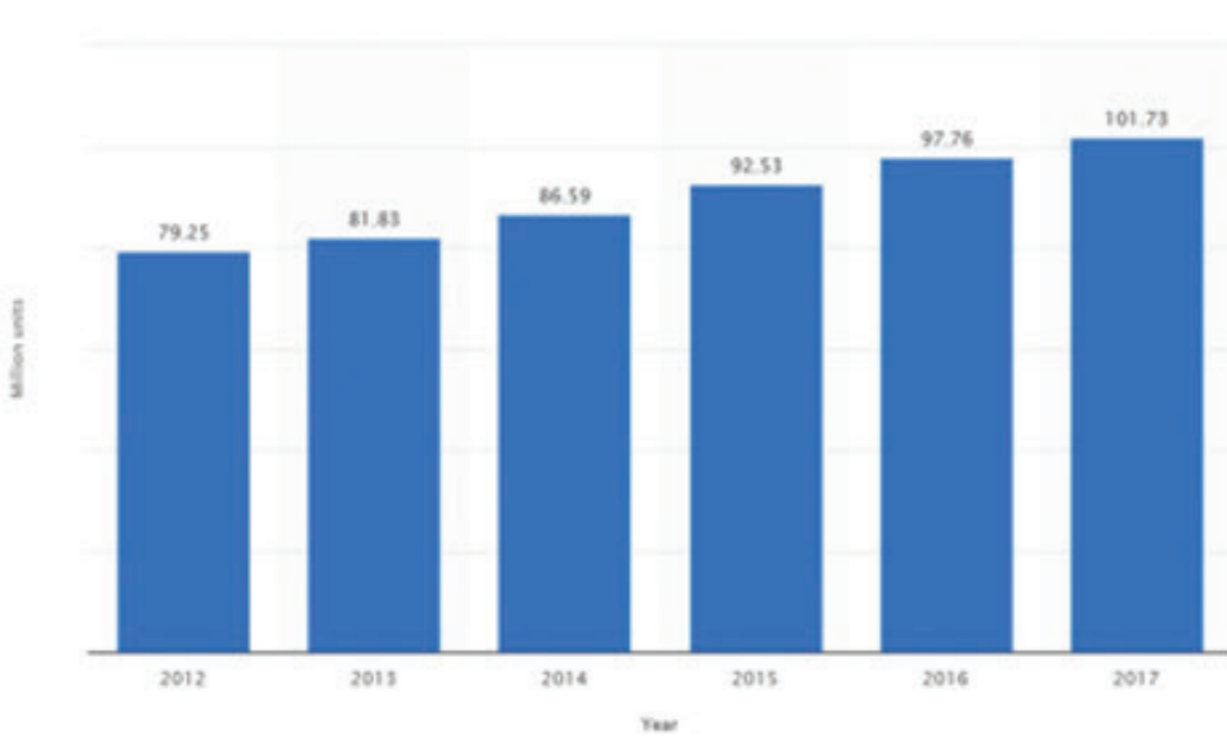
So let's scrap this exercise in futility trying to put a definite number on the value of heat treating and look at it from a completely different standpoint which is that at the end of the day heat treating is part of the manufacturing process and as goes manufacturing so goes captive and commercial heat treating. Worldwide heat treating giant Bodycote (who we believe has the best handle on the size of the heat treating market of any organization in the world) reorganized the company a few years back into business segments defined by the industry served. As an example, the ADE segment consists of aerospace, defence and energy while the AGI segment represents automotive and general industrial.



If we can predict with some certainty how each sector will do in the future we can to some extent make a reasonably accurate estimate about whether our industry will see vibrant growth, stagnation or the desperation of 2009. Out of these five business areas we can see in the graphs below that at least three automotive, aerospace and defense are all on an upward trend, a trend which is expected to continue at least through 2016.



General Industrial covers such a broad spectrum that it is impossible to predict with any certainty where this will go leaving us with energy which as we all know is in the dumpster these days. Therefore if we consider that 3 out of five business areas are expected to grow in 2016 with one maybe and one definitely not we can with some confidence predict that 2016 should prove to be a reasonably good year for our industry, with of course some areas doing better than others.



Of course life has a habit of popping up and changing the best laid plans of man but at this point we look forward to a good 2016.

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