STATE OF MICHIGAN
DEPARTMENT OF LICENSING & REGULATORY AFFAIRS
MICHIGAN ADMINISTRATIVE HEARING SYSTEM
MICHIGAN TAX TRIBUNAL

Diversified Machine, Inc.,
Petitioner,

v

MTT Docket No. 370306

City of Montague,
Respondent.

Tribunal Judge Presiding
Steven H. Lasher

FINAL OPINION AND JUDGMENT

INTRODUCTION

Petitioner, Diversified Machine, Inc., appeals ad valorem property tax assessments levied by Respondent, City of Montague, against Petitioner's ownership interest in Parcel Nos. 61-21-990-201-0379-00, 61-21-982-202-0531-00, 61-21-900-351-0005-00, 61-21-982-204-0414-00, and 61-21-982-205-0414-00 for the 2009, 2010, and 2011 tax years.[1] Steven P. Schneider, attorney, represented Petitioner, and Thomas J. Kenny, attorney, represented Respondent.

A hearing on this matter was held on August 13, August 14, and August 15, 2012. Petitioner's witnesses were J. Michael Clarkson, appraiser, and Michael A. Bolles. Respondent's witnesses were Mark Rodriguez, appraiser, and Frank L. Giglio.

The Tribunal has spent countless hours reviewing the evidence and testimony presented by the parties in this case and must express its disappointment and frustration with the work product of both appraisers. For example, Petitioner's appraiser failed to adequately explain (i) his selection of comparable sales and adjustments to those sales,[2] (ii) his reliance on the reported

[1] The parties stipulated to the values of the subject real estate, parcel nos. 61-21-980-202-0531-00 and 61-21-029-100-0011-00. A Consent Judgment approving the parties' stipulation was issued by the Tribunal on August 3, 2012.
[2] For example, there is no way a reader of Petitioner's appraisal would know how the $35,000 sale price used for the Fanuc Model S-430i 6-Axis Material Handling Robot listed on page 0092 of Tab 5 to Exhibit P-1A was determined based on the sales information contained on page 1142 of Tab 8 showing a sale price of $21,900; further, a reader of the report would not be able to determine that the increase in market value from $35,000 for 2011 to $37,000 for 2010 and $39,000 for 2009 was attributable to the net of an 8% decrease for physical depreciation and a 3% increase

sale price of the Hayes Lemmerz assets without verifying the allocation of assets between locations or verifying the purported arm's-length nature of the sale, and (iii) his failure to identify or recognize approximately $14 million of leased assets and assets omitted from the fixed asset list. Respondent's appraisal was also substantially flawed to the extent that it (i) relied on sales information that was essentially based on interviews rather than actual sales, (ii) concluded that historical costs should be increased by 25% or more based on trending factors that clearly fail to recognize the realities of the Michigan economy and the automobile industry during the tax years at issue, (iii) failed to provide adequate explanations of assumptions and conclusions that would provide the Tribunal a reasonable basis upon which to make a value determination in this matter, and (iv) assumed all leased and omitted property was actually at the subject facility for all of the tax years at issue.

Based on the evidence, testimony, and case file, the Tribunal finds that the parties have provided sufficient information for the Tribunal to make an independent determination of the true cash values of the subject personal property for the tax years at issue using the cost less depreciation approach, with economic obsolescence determined using selected market information. The Tribunal finds the true cash values ("TCV"), state equalized values ("SEV"), and taxable values ("TV") of the subject property for the years under appeal are as follows:

PARCEL NUMBER[3]	YEAR	TCV	SEV	TV
61-21-990-201-0379-00	2009	$10,012,402	$5,006,201	$5,006,201
61-21-982-202-0531-00	2009	$7,174,236	$3,587,118	$3,587,118
61-21-900-351-0005-00	2009	$9,442,734	$4,721,367	$4,721,367
61-21-982-204-0414-00	2009	$1,517,328	$758,664	$758,664
61-21-982-205-0414-00	2009	$1,823,666	$911,833	$911,833
61-21-990-201-0379-00	2010	$10,509,930	$5,254,965	$5,254,965

due to market conditions.

[3] For 2009 and 2010, the subject property consisted of five parcels of personal property, four of which were IFT parcels; for 2011, the subject property consisted of three parcels of personal property, two of which were IFT parcels. IFTs for the two parcels not identified for 2011 expired in 2010.

PARCEL NUMBER[3]	YEAR	TCV	SEV	TV
61-21-982-202-0531-00	2010	$7,618,114	$3,809,057	$3,809,057
61-21-900-351-0005-00	2010	$10,582,336	$5,291,118	$5,291,118
61-21-982-204-0414-00	2010	$1,527,514	$763,757	$763,757
61-21-982-205-0414-00	2010	$1,846,730	$923,365	$923,365
61-21-900-351-0005-00	2011	32,305,092	$16,152,546	$16,152,546
61-21-982-204-0414-00	2011	$1,505,974	$752,987	$752,987
61-21-982-205-0414-00	2011	$1,865,868	$932,934	$932,934

PETITIONER'S CONTENTIONS

Petitioner contends that the evidence presented in this case strongly supports a determination that the true cash value of the subject property, as determined by Respondent, is substantially overstated. Petitioner, which manufactures aluminum castings of suspension parts for the auto industry, contends that the downturn experienced by that industry during the tax years at issue adversely impacted the market for its products and therefore reduced the value of its personal property. Petitioner contends that the economic obsolescence it experienced is not appropriately reflected in the State Tax Commission depreciation tables created in 1999. Petitioner further contends that although the respective appraisers for Petitioner and Respondent applied both the market and cost approaches to value the subject personal property, Respondent's appraiser erred by not adjusting his values for the subject property to appropriately reflect the substantial economic obsolescence suffered at the subject facility. Petitioner further contends that Respondent's appraiser erred by relying on just nine actual sales of comparable equipment, while Petitioner's appraiser identified in excess of one hundred comparable sales. Petitioner contends that Respondent's appraiser further erred by (i) using an 18-year useful life for the subject property rather than a 10-year life, (ii) applying the market approach to a substantial portion of the subject personal property based on a small sample of actual sales, (iii) adding estimated costs for freight and installation to the sales price when applying the market approach to value, (iv) valuing assets not physically present at Petitioner's Montague, Michigan, facility on the applicable assessment dates, and (v) failing to adjust the value of leased equipment at the facility for any economic obsolescence. Finally, Petitioner contends that its appraiser overstated the true cash value of the subject property by understating economic obsolescence and by valuing some assets by both the cost and market approaches, and including both values in its overall conclusion of value.

As determined by Petitioner's appraiser, the TCV, SEV, and TV for the subject property for the tax years at issue should be:[4]

PARCEL NUMBER	YEAR	TCV	SEV	TV
61-21-990-201-0379-00	2009	$3,820,000	$1,910,000	$1,910,000
61-21-982-202-0531-00	2009	$2,460,000	$1,230,000	$1,230,000
61-21-900-351-0005-00	2009	$13,771,900	$6,885,950	$6,885,950
61-21-982-204-0414-00	2009	$746,600	$373,300	$373,300
61-21-982-205-0414-00	2009	$1,700,000	$850,000	$850,000
61-21-990-201-0379-00	2010	$3,000,000	$1,500,000	$1,500,000
61-21-982-202-0531-00	2010	$2,080,000	$1,040,000	$1,040,000
61-21-900-351-0005-00	2010	$14,685,350	$7,342,675	$7,342,675
61-21-982-204-0414-00	2010	$659,550	$329,775	$329,775
61-21-982-205-0414-00	2010	$1,510,000	$755,000	$755,000
61-21-900-351-0005-00	2011	$21,546,230	$10,773,115	$10,773,115
61-21-982-204-0414-00	2011	$552,530	$226,265	$226,265
61-21-982-205-0414-00	2011	$1,320,000	$660,000	$660,000

PETITIONER'S ADMITTED EXHIBITS

P-1 Personal Property Appraisal prepared by J. Michael Clarkson, including Exhibit 8, of personal property located at Montague, Michigan.

P-1A Corrected Exhibits 1 – 7 of Personal Property Appraisal prepared by J. Michael Clarkson.

---

[4] Petitioner's appraisal concluded to total true cash values of $22,650,000, $21,200,000, and $21,510,000 for the 2009, 2010, and 2011 tax years, respectively. At the hearing, however, Petitioner's appraiser identified disposed assets and market data corrections which, when corrected or adjusted, yielded reduced true cash value conclusions as reflected in this schedule. (See Exhibit P-16)

P-2 Photographs of certain machinery and equipment.

P-3 U.S. Department of Commerce, U.S. Automotive Parts Industry Annual Assessment (April 2009).

P-4 U.S. Department of Commerce, U.S. Automotive Parts Industry Annual Assessment (2010).

P-5 U.S. Department of Commerce, U.S. Automotive Parts Industry Annual Assessment (2011).

P-6 Summary of Die Casting Factory and Machine Liquidations by Die Cast Machinery, LLC.

P-7 Announcement of Cerion's purchase of Contech's Casting Division for $13.5 million.

P-8 Summary from the Original Equipment Suppliers Association (OESA) of 2009 auto industry suppliers that went bankrupt.

P-11A Disposed Assets Valued in Petitioner's Appraisal (Revised).

P-13A Summary of acquisition dates and transfer dates of CNC machines alleged to be omitted property by MR Valuation Consulting, LLC (Revised).

P-14 Summary of revisions to Clarkson sales comparison approach with comparable data.

P-15 Excerpts from ASA's *Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets* (2nd Edition).

P-16 Final value conclusions by parcel, including IFT parcels.

P-17 Purchase Order Summary for 4 Makino A71 Machines, 12/10.

P-18 CorpBanca- U.S. Economic Overview MR Valuation Consulting.

P-19 Unisolar Appraisal Report.

P-20 OKK Machine Summary.

PETITIONER'S WITNESSES

J. Michael Clarkson

J. Michael Clarkson, MAI, CFA, is a licensed real estate appraiser in Michigan with substantial experience in appraising industrial machinery and equipment. Mr. Clarkson testified that (i) he performed a "wall-to-wall" inspection of Petitioner's manufacturing facility in

February 2012 to identify personal property located at the plant, (ii) because his appraisal is a retrospective appraisal, market information relating to 2012 was adjusted to reflect the substantial decline in the automobile industry during the 2007 to 2010 period, (iii) he applied the market approach to value personal property, such as machining centers, stand-alone machines, and lab equipment, where credible sales information was available, (iv) he secured market information from internet sites including action.com, machinery trader, eBay, Sinopak and usedgymequipment.com, etc., (v) he adjusted sale prices for differences between the subject machine and the comparable sold machine based on market information, (vi) in applying the market approach he used gross market sales or offers for sale as a basis for comparable values, (vii) freight and installation costs were not added to the sale prices because such costs are usually taken into consideration by the purchaser and included in the offer to purchase, (viii) he applied the cost approach to value personal property where sales information was not available, such as furnaces, casters, and heat treatment equipment, (ix) in applying the cost approach he determined replacement cost new trended to the tax year at issue, and then adjusted that cost by physical depreciation, and economic obsolescence, (x) physical depreciation was determined using a 10-year useful life applied to Marshall Valuation Service depreciation curves, (xi) economic obsolescence of sixty percent was quantified by calculating the ratio of the sale price of certain personal property by Hayes Lemmerz to Petitioner in 2007 to the replacement cost less physical depreciation for those assets, and (xii) he valued certain assets that he later determined had been disposed of prior to the applicable assessment date. (Transcript, Vol. 1, pp. 47 – 234)

Michael A. Bolles

Michael A. Bolles has been Operations Manager of the Diversified Machine, Inc. Montague, Michigan, facility for the past year and a half and is responsible for all production and direct labor. Mr. Bolles testified that (i) he reviewed Petitioner's Proposed Exhibit P-11 and confirmed that although certain assets listed on the Fixed Asset List were not located at the subject facility on one or more of the assessment dates at issue, some of the listed assets may have been, or were, present at the subject facility on one or more of the assessment dates and, as a result, he prepared Petitioner's Exhibit P-11A, (ii) he prepared a portion of Petitioner's Exhibit P-13A, which purports to show acquisition dates and transfer dates for fixed assets erroneously included by Respondent's appraiser as assets omitted from Petitioner's appraisal, (iii) he provided the information included in Petitioner's Exhibit P-20, which identifies the dates that OKK machines were received by Petitioner, and (iv) the three Enshu machines included on Respondent's appraiser's list of omitted property were never located at the subject Montague, Michigan, location. (Transcript, Vol. 2, pp. 5 – 21; Vol. 3, pp. 38 – 66)

RESPONDENT'S CONTENTIONS

Respondent contends that the true cash, assessed, and taxable values it determined for the subject property for the tax years at issue should be substantially increased based on the value conclusions made by its appraiser. Respondent further contends that Petitioner has failed to meet its burden of proof in this matter and has provided incomplete and unusable fixed asset records, which led Petitioner's appraiser to make erroneous conclusions of value. Respondent further contends that although its appraiser was able to make a reasonable value determination based on his review of the fixed asset register, his inspection of the subject facility, his review of selected purchase orders, and his review of various leases, his value conclusions were substantially hindered by the lack of, or incomplete, information furnished by Petitioner. Respondent further contends that Petitioner's determination of approximately sixty percent economic obsolescence is unsupported because it is based on a comparison of the allocated sale price of assets purchased from Hayes Lemmerz to the depreciated book cost of those assets, even though the terms and conditions of the sale of Hayes Lemmerz assets from two of its facilities to Petitioner, and the allocation of sale price to each of the two facilities, could not be verified. Instead, Respondent contends that its determination that an adjustment of 24% to 30% to the cost approach is supported by actual sales information. (Transcript, Vol. 3, pp. 107 - 113)

As determined by Respondent's appraiser, the TCV, SEV, and TV for the subject property for the tax years at issue should be:[5]

PARCEL NUMBER	YEAR	TCV	AV	TV
61-21-990-201-0379-00	2009	$20,647,600	$10,323,800	$10,323,800
61-21-982-202-0531-00	2009	$16,489,800	$8,244,900	$8,244,900
61-21-900-351-0005-00	2009	$9,493,600	$4,746,800	$4,746,800
61-21-982-204-0414-00	2009	$3,050,200	$1,525,100	$1,525,100
61-21-982-205-0414-00	2009	$3,855,800	$1,927,900	$1,927,900
61-21-900-351-0005-00	2010	$48,760,000	$24,380,000	$24,380,000
61-21-982-204-0414-00	2010	$4,977,000	$2,488,500	$2,488,900
61-21-982-205-0414-00	2010	$1,424,000	$712,000	$712,000
61-21-900-351-0005-00	2011	$48,839,000	$24,419,500	$24,419,500
61-21-982-204-0414-00	2011	$4,732,000	$2,366,000	$2,366,000
61-21-982-205-0414-00	2011	$1,331,000	$665,500	$665,500

RESPONDENT'S ADMITTED EXHIBITS

R-1 Assessment Notices for tax years 2009, 2010, and 2011.

R-2A Personal Property Statement for 2009.

R-2B Personal Property Statement for 2010.

R-2C Personal Property Statement for 2011.

R-3 MR Valuation Appraisal Report.

R-4 Purchase Orders.

[5] The value conclusions contained in Respondent's appraisal are both confusing and inconsistent. First, Respondent failed to properly determine true cash values for the five personal property parcels at issue for 2010 and 2011, excluding parcel nos. 61-21-990-201-0379-00 and 61-21-982-202-0531-00, concluding to values only for the remaining three parcels. Second, Respondent's appraiser concluded to total true cash values for the subject parcels of $53,585,000 for 2009, $55,161,000 for 2010, and $54,902,000 for 2011 in his appraisal transmittal letter (page iii) and the same amounts on page 42 of his appraisal. These total true cash values are reflected in the above table. Respondent's appraisal separately concluded to total true cash values of the subject parcels of $53,537,000 for 2009, $55,120,000 for 2010, and $54,853,000 for 2001 at page 41 of his appraisal, and to total true cash values of the subject parcels of $54,300,000 for 2009, $56,000,000 for 2010 and 2011 at pages 55 and 67 of his appraisal.

R-5 Preventative Maintenance Records.

R-6 DMI Fixed Asset List.

R-7 Petitioner's Response to Second Document Request.

R-8 Estimated Useful Life Study – American Society of Appraisers.

R-9 Equipment Lease – Wenzler CNC Dial Machines (Merrill Lynch) – Attachment 2a.

R-10 Equipment Lease – Wenzler CNC Dial Machines (Merrill Lynch) – Attachment 2b.

R-11 Equipment Lease – Wenzler CNC Dial Machines (Merrill Lynch) – Attachment 2c.

R-12 Equipment Lease – Wenzler CNC Dial Machines (Merrill Lynch) – Attachment 2d.

R-13 Equipment Lease – Dell Computers.

R-14 Equipment Lease – Verizon Phone Systems.

R-15 Equipment Lease – Forklifts (Alta Lift Truck Services).

R-16 Equipment Lease – OKK Horizontal Machining Center (Merrill Lynch).

R-17 Equipment Lease – Makino A71 HMC Machining Center (Bank of America).

R-18 MR Valuation Schedule – Summary of Leased Equipment located at Montague facility.

R-19 MR Valuation Schedule – Expanded Data for trended original cost analysis of leased equipment 2009, 2010, 2011.

R-20 Marshall Valuation Services Indices.

RESPONDENT'S WITNESSES

Frank Giglio

Frank Giglio is employed by Diversified Property Solutions, which provides property tax consulting services to clients, including Petitioner. Mr. Giglio testified that he was responsible for Petitioner's response to Respondent's discovery request for documents, which included production of a fixed asset list and a corrected fixed asset list for its Montague, Michigan, facility, as well as a list of leased equipment at the facility. (Transcript, Vol. 2, pp. 225 - 276)

Mark Rodriguez

Mark Rodriguez is the managing member of MR Valuation, is an accredited senior appraiser with the American Society of Appraisers, and focuses on machinery and technical specialties. Mr. Rodriguez testified that (i) his appraisal of the subject property was restricted to the extent that he was not allowed to contact any of Petitioner's vendors regarding equipment at the facility and he was not provided a complete fixed asset list, (ii) while he determined the true cash value of the personal property identified on Petitioner's fixed asset list, he also determined the true cash value of personal property not included on the fixed asset list, which included leased equipment, and machinery and equipment included only on Petitioner's preventative maintenance list[6], or identified by purchase orders, (iii) assets identified as not being included on the fixed asset list were assumed to have been present at Petitioner's Montague facility on all of the assessment dates at issue in this case, (iv) he applied both the reproduction cost approach and the sales comparison approach to determine the true cash value of the subject personal property, (v) in applying the reproduction cost approach, he applied a trend index to the historical cost of an asset identified on the fixed asset list to determine "its reproduction cost today" (Transcript, Vol. 2, p. 53) and then determined physical depreciation based on the "age-life" method with a useful life of 18 years based on the average lives of all assets identified on the fixed asset list, (vi) in applying the cost approach, he determined that the subject personal property did not experience any functional or economic obsolescence, (vii) in applying the sales comparison approach to value, he identified approximately seventy-five sales[7] of machinery and equipment during 2012 comparable to specific assets owned or leased by Petitioner, and adjusted the sales prices for age and condition, as well as applicable freight and installation costs, and then compared those values to cost values for the same assets to determine economic obsolescence of

[6] Mr. Rodriguez testified that although he requested a preventative maintenance list for each of the tax years at issue, he was provided a single list as of 2012. (Transcript, Vol. 2, p. 99)
[7] For purposes of applying the sales comparison approach, Mr. Rodriguez relied on sales listings, quotes for sold pieces of equipment, auction prices, and other relevant market information derived from vendors and publications. (Transcript, Vol. 2, pp. 78 - 80)

approximately twenty-five percent to be applied to substantially all of the assets at issue, (viii) he relied on the sales comparison approach to determine the value of a substantial portion of the subject property, and (ix) the methodology applied by Petitioner's appraiser to calculate economic obsolescence is flawed and unreliable because (a) the purchase price paid by DMI for the Hayes Lemmerz property[8] includes real and intangible property in addition to personal property, and given the economic condition of Hayes Lemmerz at the time of the sale, as well as the state of the automobile industry at that time, intangible property could have a substantial negative value, and (b) not enough information is known or available regarding circumstances of the sale of assets from Hayes Lemmerz to Petitioner. (Transcript, Vol. 2, pp. 34 – 239; Vol. 3, pp. 5 - 37)

FINDINGS OF FACT

1. The subject personal property is owned by Diversified Machine, Inc., an aluminum casting plant located at 5353 Wilcox Avenue, Montague, Michigan.
2. For 2009 and 2010, the subject property consisted of five parcels of personal property, four of which were IFT parcels; for 2011, the subject property consisted of three parcels of personal property, two of which were IFT parcels.
3. The subject property was assessed for the tax years at issue as follows:

PARCEL NUMBER	YEAR	TCV	SEV	TV
61-21-990-201-0379-00	2009	$12,984,600	$6,492,300	$6,492,300
61-21-982-202-0531-00	2009	$10,370,000	$5,185,000	$5,185,000
61-21-900-351-0005-00	2009	$5,970,200	$2,985,100	$2,985,100
61-21-982-204-0414-00	2009	$1,918,200	$959,100	$959,100
61-21-982-205-0414-00	2009	$2,424,800	$1,212,400	$1,212,400
61-21-990-201-0379-00	2010	$12,581,400	$6,290,700	$6,290,700
61-21-982-202-0531-00	2010	$9,412,200	$4,706,100	$4,706,100

[8] Petitioner's appraiser calculated economic obsolescence by dividing the allocated price paid by Petitioner for the Hayes Lemmerz assets by the total trended cost less physical depreciation value of the assets.

PARCEL NUMBER	YEAR	TCV	SEV	TV
61-21-900-351-0005-00	2010	$6,210,000	$3,105,000	$3,105,000
61-21-982-204-0414-00	2010	$1,740,800	$870,400	$870,400
61-21-982-205-0414-00	2010	$2,158,200	$1,079,100	$1,079,100
61-21-900-351-0005-00	2011	$27,673,400	$13,836,700	$13,836,700
61-21-982-204-0414-00	2011	$1,644,800	$822,400	$822,400
61-21-982-205-0414-00	2011	$1,938,400	$969,200	$969,200

4. The highest and best use of the subject property is its present manufacturing use.
5. Petitioner’s appraiser considered both the cost less depreciation and sales comparison approaches to value for the tax years at issue.
6. A substantial portion of the subject property was purchased from Hayes Lemmerz on February 13, 2007, for a reported $8.9 million.[9]
7. For each of the tax years at issue, Respondent’s appraiser determined the true cash value of more than five hundred items of personal property identified on Petitioner’s fixed asset list, plus twenty items of machinery identified on a preventative maintenance list that were not included on the fixed asset list, and certain leased equipment.
8. Respondent’s appraiser did not apply the income approach to value because “[t]his method is rarely applied in the valuation of personal property related assets.” (Respondent’s Appraisal, p. 37)
9. In applying the cost approach to value the subject property, Respondent’s appraiser estimated the replacement/reproduction cost new of the subject property by trending original costs using Marshall Valuation Service trend indices and then applying physical depreciation based on an average 18-year useful life. Ultimately, the cost approach was used to value computer equipment, FF&E, and testing equipment.

[9] DMI paid $24.1 million for the real property, personal property, and intangible property of Hayes Lemmerz located in Montague, Michigan, and Bristol, Indiana. Allocation of the purchase to the two locations was determined by American Capital Strategies Ltd. to be $8.9 million to Montague and $15.2 million to Bristol. Neither party presented evidence regarding any allocation of the purchase price to real property, personal property, or intangible property. Further, neither party presented any evidence regarding the methodology employed by American Capital Strategies to allocate the sales price between the Indiana and Michigan locations.

10. In applying the cost approach, Respondent's appraiser (i) concluded that "original costs reported by DMI in FAR[10] were reasonable," (Respondent's appraisal, p. 22) (ii) included twenty machines included in DMI's Preventative Maintenance Schedule that were not included in the FAR in his valuation of the subject property, (iii) included leased machinery and equipment not originally reported by Petitioner in his valuation of the subject property, (iv) applied the age-life method to determine physical depreciation of the subject property, based on placed in service data included in the FAR and an 18-year life for machinery and equipment, a 13-year life for furniture and fixtures, and a five-year life for computer equipment, and (v) did not observe any functional obsolescence or economic obsolescence associated with the subject personal property.
11. In applying the sales comparison approach to value, Respondent's appraiser "analyzed comparable sales of similar assets in the marketplace," and included the review of sales listings, vendor quotes, and auction listings.
12. Respondent's appraiser adjusted market prices by 20% for freight and installation.
13. In applying the sales comparison approach to value general plant equipment, Respondent's appraiser analyzed sales of 75 machinery and equipment assets for the 2011 tax year, trended values to 2009 and 2010, and then developed a percentage comparison of sales price to cost to determine downward adjustments to cost values for machinery and equipment of 36% for 2009, 30% for 2010, and 26% for 2011.
14. Petitioner's appraiser did not apply the income approach to value because the requisite allocation of business enterprise value between real property, intangible property, non-taxable property, and personal property limits its reliability.
15. Petitioner's appraiser valued the subject property using the market approach where he was able to identify comparable sales information. All of the remaining subject property was appraised using the cost approach.

[10] DMI's Fixed Asset Register.

16. Petitioner's appraiser inspected the subject property on site in February 2012.
17. In applying the market approach to value, Petitioner's appraiser did not use auction sales as comparable market sales, but did use "offers to sell" in addition to recorded sales.
18. In applying the market approach to value, Petitioner's appraiser made adjustments for condition, quality, desirability, inflation, location, and degree of modification, but did not adjust or deduct for selling expenses.
19. In applying the cost approach to value, Petitioner's appraiser calculated replacement cost new based on an item's original cost and year placed in service, adjusted by the Producer Price Index, and then adjusted for (a) physical depreciation based on an age/life analysis using 10 years as the average physical life of the property and (b) economic obsolescence based on the ratio of the 2007 sale of a substantial portion of the subject property to its replacement cost new less physical depreciation.
20. Petitioner's appraiser did not include leased equipment or assets identified as omitted from Petitioner's fixed asset list by Respondent's appraiser in its determination of value.

ISSUES AND CONCLUSIONS OF LAW

The assessment of real and personal property in Michigan is governed by the constitutional standard that such property shall not be assessed in excess of 50% of its true cash value.

> The legislature shall provide for the uniform general ad valorem taxation of real and tangible personal property not exempt by law. The legislature shall provide for the determination of true cash value of such property; the proportion of true cash value at which such property shall be uniformly assessed, which shall not . . . exceed 50% . . . . Const 1963, art 9, sec 3.

The Michigan Legislature has defined "true cash value" to mean:

> . . . the usual selling price at the place where the property to which the term is applied is at the time of assessment, being the price that could be obtained for the property at private sale, and not at auction sale except as otherwise provided in this section, or at forced sale. MCL 211.27(1); MSA 7.27(1).

The Michigan Supreme Court has determined that "true cash value" is synonymous with "fair market value." See *CAF Investment Co v State Tax Commission,* 392 Mich 442, 450; 221 NW2d 588 (1974).

Under MCL 205.737(1); MSA 7.650(37)(1), the Tribunal must find a property's true cash value in determining a lawful property assessment. *Alhi Development Co v Orion Twp,* 110 Mich App 764, 767; 314 NW2d 479 (1981). The Tribunal is not bound to accept either of the parties' theories of valuation. *Teledyne Continental Motors v Muskegon Twp,* 145 Mich App 749, 754; 377 NW2d 908 (1985). The Tribunal may accept one theory and reject the other, it may reject both theories, or it may utilize a combination of both in arriving at its determination. *Meadowlanes Limited Dividend Housing Association v City of Holland,* 437 Mich 473, 485- 486; 473 NW2d 636 (1991).

A proceeding before the Tax Tribunal is original, independent, and de novo. MCL 205.735(1); MSA 7.650(35)(1). The Tribunal's factual findings are to be supported by competent, material, and substantial evidence. *Antisdale v City of Galesburg,* 420 Mich 265, 277; 362 NW2d 632 (1984); *Dow Chemical Co v Department of Treasury,* 185 Mich App 458, 462-463; 452 NW2d 765 (1990). Substantial evidence must be more than a scintilla of evidence, although it may be substantially less than a preponderance of the evidence. *Jones and Laughlin Steel Corp v City of Warren*, 193 Mich App 348, 352-353; 483 NW2d 416 (1992).

"The petitioner has the burden of establishing the true cash value of the property . . . ." MCL 205.737(3). This burden encompasses two separate concepts: (1) the burden of persuasion, which does not shift during the course of the hearing; and (2) the burden of going forward with the evidence, which may shift to the opposing party. *Jones and Laughlin,* pp. 354-355. However, "[t]he assessing agency has the burden of proof in establishing the ratio of the average level of assessment in relation to true cash values in the assessment district and the equalization factor that was uniformly applied in the assessment district for the year in question." MCL 205.735(3).

The three most common approaches to valuation are the capitalization of income approach, the sales comparison or market approach, and the cost-less-depreciation approach. *Meadowlanes*, at 484-485; *Pantlind Hotel Co v State Tax Commission*, 3 Mich App 170; 141 NW2d 699 (1966), aff'd 380 Mich 390 (1968). The market approach is the only appraisal method that directly reflects the balance of supply and demand for property in marketplace trading. *Antisdale*, p. 278. The Tribunal is under a duty to apply its own expertise to the facts of the case to determine the appropriate method of arriving at the true cash value of the property, utilizing an approach that provides the most accurate valuation under the circumstances. *Antisdale*, p. 277.

Because the income approach determines the present worth of future benefits of ownership, it is not typically applied to individual items of machinery and equipment. Further, neither of the parties' appraisers applied the income approach to value the subject personal property. Therefore, the Tribunal finds that application of the income approach in this matter is not appropriate.

The appraisers for Petitioner and Respondent applied both the sales comparison approach and the cost less depreciation approaches to determine the true cash values of the subject property. Where possible, both appraisers identified sales of personal property similar to personal property owned by Petitioner and applied market adjustments to determine the true cash values of such property. Where comparable sales were not available, both appraisers applied the cost less depreciation approach. Thus, while the general process used by the respective appraisers to value the subject property was consistent, the parties' appraisers varied substantially in their application of this process and the assumptions made in ultimately determining the true cash values of the subject property.

Both appraisers relied to some extent on the American Society of Appraisers ("ASA") *Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets*, (Washington, D.C.: 2nd ed, 2005). (Petitioner's Exhibit P-15; Transcript, Vol. 2, p. 50).[11] In its third edition of this publication, the ASA discusses in detail both the cost approach and the sales comparison approach, including appropriate methodologies available to the appraiser in applying each approach, as well as any benefits and/or detriments realized in applying these approaches to value personal property. The Tribunal has carefully reviewed the appraisals submitted into evidence by the parties, the testimony and analysis of the appraisers, and the principles and discussion found in the ASA's publication, and finds that the appropriate method of determining the true cash value of the subject property for the tax years at issue is the cost less depreciation approach, applying physical depreciation and economic obsolescence to trended historical costs, with economic obsolescence determined by comparing the cost and market values of selected assets identified by both appraisers.[12] The Tribunal finds that this methodology eliminates (i) the concerns of both parties that the State Tax Commission methodology fails to reflect current market conditions,[13] (ii) Petitioner's concern that its appraiser valued certain assets using both the cost and market approaches and therefore overstated the value of those

[11] Although both parties relied on the second edition, the third edition of this publication was issued by the American Society of Appraisers in 2011. The Tribunal will rely on the most current edition of this publication in its Final Opinion and Judgment.
[12] See, for example, Petitioner's appraiser's testimony (Transcript, Vol. 1, p. 108) discussing *Valuing Machinery and Equipment* that economic obsolescence is the difference between the "cost indicator of value prior to deducting economic obsolescence to the actual sales price."
[13] Both appraisers contend that because the State Tax Commission tables were established in 1999, they are outdated, and fail to reflect economic obsolescence. (Transcript, Vol. 1, pp. 11, 12; Vol. 3, pp. 30 - 32)

assets, and (iii) Respondent's concern that Petitioner's appraiser substantially overstated economic obsolescence. The Tribunal further finds that such methodology incorporating market information into the calculation of economic obsolescence provides a better indication of the true cash value of the subject personal property given the failure of both appraisers to adequately support their sale price conclusions in making value determinations using the sales comparison approach.

In applying the cost approach to value personal property, the appraiser typically begins with the current replacement cost of the property being appraised and then calculates deductions for the loss in value caused by physical depreciation and functional and economic obsolescence. In this case, both appraisers attempted to determine the true cash values of at least some of the subject personal property by applying the reproduction cost[14] approach. Further, both appraisers determined the appropriate starting point to be the historical cost of the property identified on Petitioner's fixed asset list when first placed in service[15] and then applied a trending method to obtain an estimated reproduction cost new for each asset.[16] Finally, both appraisers (i) calculated physical depreciation, (ii) concluded that there was no functional obsolescence associated with the subject property, and (iii) further concluded, directly or indirectly, that economic obsolescence was present and should be calculated in their ultimate value conclusions. The Tribunal will review, analyze, and calculate each of these components in detail to ultimately reach its final determination of the true cash values of the subject property for the tax years at

[14] Defined as the current cost of reproducing a new replica of the property being appraised using the same, or closely similar, materials, as of a specific date. American Society of Appraisers, *Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets* (Washington, D.C.: 3rd ed, 2011), pp. 39, 555.

[15] Respondent's appraiser Rodriguez verified historical costs by comparing costs of selected assets on Petitioner's fixed asset list to costs for those assets found on purchase orders and capital expenditure requests. Petitioner's appraiser relied on the fixed asset list provided by Petitioner.

[16] Respondent's appraiser used trend indices from Marshall Valuation Service, but did not apply trend indices to computer equipment because of the rate of computer technology advances. Petitioner's appraiser used the Producer Price Index presented as Section 6 to Exhibit P-1A.

issue.

1. Historical costs new.

Petitioner reported total historical costs by year of acquisition on its Personal Property Statements for the subject parcels of approximately $71 million for 2009, $72 million for 2010, and $75.5 million for 2011. (Exhibit A) Petitioner's appraiser used these historical costs as the basis for his appraisal. (Petitioner's Appraisal, p. 16; Exhibit P-1A, Sections 2, 3, and 4) Although Petitioner's appraiser did not reconcile his representation of Petitioner's fixed asset list with the historical costs reported by Petitioner on its Personal Property Statements, the Tribunal has calculated the total "reported costs" reflected on Exhibit P-1A and determined them to be consistent with the reported historical costs. Respondent's appraiser identified historical costs of $90.3 million for 2009, $91.3 million for 2010, and $94.8 million for 2011. (Respondent's Appraisal, p. 55) The difference is attributable to Respondent's appraiser's determination that Petitioner's fixed asset list did not include $12.85 million of leased equipment and 20 machines identified on Petitioner's Preventative Maintenance Schedule (Exhibit R-5) that were not included on its Fixed Asset List ("omitted assets"). Respondent's appraiser testified that in determining the property omitted by Petitioner in reporting its personal property, he (i) toured the subject facility in 2012, (ii) relied on the 2012 fixed asset list, 2012 preventative maintenance list, and equipment leases provided in 2012, and (iii) concluded that all property identified as omitted was actually located at the subject location for all three tax years at issue. (Transcript, Vol. 3, pp. 93 – 125) Based on the evidence and testimony presented by Petitioner (specifically, Exhibits P-11A, P-13A, and P-20, and the testimony of Mr. Bolles), the Tribunal takes strong exception to Respondent's assumption that all of the omitted and leased assets were present at the subject facility on each of the respective assessment dates. Similarly, the Tribunal finds that

Petitioner's appraiser committed substantive error by failing to recognize and value any of the leased equipment and omitted property identified by Respondent's appraiser. Clearly, the inclusion of all leased and omitted equipment by Respondent's appraiser for all tax years and the failure by Petitioner's appraiser to include any was made without any rational basis in what the Tribunal finds to be, at best, a failure to act in a reasonable and appropriate manner, and, at worst, a deliberate attempt to either understate or overstate the value of the subject property. Therefore, the Tribunal has carefully reviewed the evidence presented by both Respondent and Petitioner and finds that certain leased equipment and personal property owned by Petitioner should have been included in determining the historical cost of the property to be assessed. Further, the Tribunal accepts the testimony of Mr. Bolles (Transcript, Vol. 1, pp. 123 – 137; Vol. 2, pp. 7 – 12) and Petitioner's evidence (Exhibit P-11A) identifying assets included on the fixed asset list that were disposed of on or before one or more of the assessment dates. Based on its analysis of leased equipment and omitted and disposed of property, the Tribunal finds that the historical cost of Petitioner's personal property at the subject location was approximately $81.2 million in 2009, $83.4 million in 2010, and $88.9 million in 2011 (Exhibit B).

2. <u>Trending indices</u>.

"Trending is a method of estimating a property's reproduction cost new (not replacement cost new) in which an index or trend factor is applied to the property's historical cost to convert the known cost into an indication of current cost." (*Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets*, p. 50). Trending indices must be used carefully, however, as (i) indices generally do not reflect technological advances, (ii) trend factors should not be applied to costs resulting from prior allocations of a purchase price, and (iii) the user should know at least the basics of how the index was developed. (*Id.* at 51)

As is discussed in greater detail in Exhibit C, Respondent's appraiser used Marshall Valuation Services trend indices for metalworking to trend "the asset original costs to estimate the Reproduction Costs New and/or Replacement Costs New for the assets, as of the various appraisal dates." [17] (Respondent's Appraisal, p. 25) Petitioner's appraiser utilized the Producer Price Index for automobile, light truck, and utility vehicle manufacturing to similarly trend the historical cost of the subject personal property.

Although neither appraiser adequately defended their choice of a trending index in the respective appraisals, or through testimony, the Tribunal finds that the Producer Price Index used by Petitioner's appraiser is the most reasonable, given the limitations expressed by Marshall Valuation Services (Marshall Valuation Services indices represent the equipment costs of an entire industry on a national basis) and the adverse economic conditions experienced in the automobile industry and in Michigan. Further, the Tribunal simply does not accept Respondent's unsupported conclusion, that in spite of the adverse economic conditions experienced in Michigan during the tax years at issue, an approximate 25% increase in historical costs is actually reflective of current costs. (Respondent's appraisal, p. 55)

3. <u>Physical Depreciation</u>.

Physical depreciation "is the loss in value or usefulness of an asset due to the using up or expiration of its useful life caused by wear and tear, deterioration, exposure to various elements, physical stresses, and similar factors." (*Id.* at 57)

Respondent's appraiser applied the age-life method to calculate physical depreciation, based on the historical age, service life, and remaining life of each asset.[18] Respondent's

[17] Respondent's appraiser provides no schedules or other analysis that shows how he determined trended reproduction cost new based on his historical costs for assets identified on the fixed asset list and the property he concluded was omitted from that list.
[18] In applying this method, "age" is synonymous with "effective age."

appraiser utilized the "Estimated Normal Use Life Study" issued by the American Society of Appraisers – Machinery & Technical Specialties Committee (2010), which establishes a service life of 18 years for machinery and equipment, a 13-year life for furniture and fixtures, and a 5-year life for computer equipment. (Respondent's appraisal, pp. 26 – 28; Exhibit R-19)[19]

Petitioner's appraiser also determined physical depreciation using the age-life method. Petitioner's appraiser relied upon Marshall Valuation Service guidelines that establish a life of 9.5 to 14.5 years for the "Motor Vehicle Parts and Manufacturing" class of property. Petitioner's appraiser ultimately chose 10 years as "the average physical life of the subject property" given the "relatively short production life of the automotive platforms (7 – 9 years) in which a majority of the manufacturing equipment at DMI was custom built." (Petitioner's appraisal, pp. 16, 17; Exhibit P-1A, Section 6)

The Tribunal finds that Respondent's application of the straight-line depreciation method using the American Society of Appraisers service life of 18 years is appropriate for the subject machinery and equipment, a service life of 13 years is appropriate for furniture and fixtures, and a service life of five years is appropriate for computer equipment. As the Marshall Valuation Service states as a preface to using their depreciation table, the tables are general and should be used

> as a check against . . . other methods of determination of the total depreciation of equipment. These tables were based on actual cases of sales and mortality to which empirical mathematical curves have been matched. They are averages and as such must be used with care using effective age and modifying for above – or below – normal wear and tear and obsolescence.

The Tribunal finds that Petitioner's appraiser has failed to provide sufficient support for his use of a methodology that may include obsolescence in addition to physical depreciation. The Tribunal further finds that adopting the service lives developed by the American Society of Appraisers to determine the physical depreciation of the subjects is consistent with the Tribunal's determination that the trending indices developed by that organization are more appropriate than

[19] Respondent's appraiser provided no schedules or other analysis that shows how he calculated physical depreciation and then determined reproduction cost new (trended) less physical depreciation.

those developed by Marshall Valuation Service. A summary of the Tribunal's determination of physical depreciation factors to be applied to its determination of Replacement Cost New ("RCN") on Exhibits F-1, F-2, and F-3 is attached as Exhibit D.

4. <u>Economic Obsolescence</u>.

Economic obsolescence is "the loss in value or usefulness of a property caused by factors external to the property," such as increased cost of raw materials, labor, or utilities (without an offsetting increase in product price), reduced demand for the product, increased competition, environmental or other regulations, inflation or high interest rates, or similar factors. (*Id.* at 76)

Respondent's appraiser contends that he did not directly apply an economic obsolescence factor to his calculated reproduction cost new (trended) less physical depreciation values because "[s]ince we are determining true cash value of the personal property assets and not business value, we did NOT determine any form of economic obsolescence with respect to the personal property assets at DMI." (Respondent's appraisal, p. 30) In applying the sales comparison approach, however, Respondent's appraiser essentially did apply an economic obsolescence factor by developing a market value to cost value ratio for selected assets and then applying that ratio to the calculated reproduction cost new (trended) less physical depreciation values to determine a value for those assets.

Specifically, Respondent's appraiser communicated with "major equipment vendors and suppliers that provide comparable equipment to the Assets at DMI" (Respondent's appraisal, p. 33), as well as a combination of internet, vendor, and auction pricing sources to obtain sales listings, quotes for sold equipment, and auction prices. Based on those conversations and resources, Respondent's appraiser contends that he determined a sale price in 2012 for approximately 75 items of sold equipment equivalent to assets identified on Petitioner's fixed asset list. He trended those values to the tax years at issue using Marshall Valuation Service's indices, adjusted those for age and condition, added freight and installation costs. He then compared those market values to the values for those assets determined using the cost approach to conclude that the value of these sampled assets using the market approach was 36% lower than the cost approach value for 2009, 30% lower for 2010, and 26% lower for 2011. Respondent's appraiser then applied these developed percentages to the cost values determined for machinery and equipment, idle machinery and equipment, and leased machinery and equipment to determine the true cash value of those assets.

As discussed above, Petitioner's appraiser primarily determined the true cash values of the subject assets using the sales comparison approach where comparable sales information was available. Where such information was unavailable, Petitioner's appraiser applied the cost approach to those assets, using historical costs, trending indices, and calculating physical depreciation. Petitioner's appraiser then calculated economic obsolescence based on "the recent, arm's length sale of a portion of the assets in 2007." (Petitioner's Appraisal, p. 17) Specifically, Petitioner's appraiser calculated economic obsolescence to be the percentage determined by comparing the sale price of Hayes Lemmerz International, Inc. assets located in Montague, Michigan, to Petitioner to the aggregate reproduction cost new less physical depreciation of those assets.[20] The Tribunal finds that the methodology applied by Petitioner's appraiser to determine economic obsolescence is simply without merit and lacks sufficient credibility. Although Petitioner's appraiser contends that the sale of the Hayes Lemmerz assets was an arm's-length transaction, Petitioner's appraiser has failed to provide any information with respect to the circumstances of the sale.[21] Further, no evidence was presented with respect to how the allocation of assets sold between Montague and Bristol was determined. Finally, the parties spent considerable time discussing and disagreeing as to the extent to which real property and intangible property should have been considered in concluding that the $8.9 purchase price allocated to the Montague facility was all personal property. The Tribunal finds that too many

[20] Petitioner's appraisal relies on the sale on February 14, 2007, of the capital stock of Hayes Lemmerz International – Bristol, Inc. and Hayes Lemmerz International – Montague, Inc. to Diversified Machine, Inc. for $24.1 million. Petitioner's appraisal further relies on an allocation of the total purchase price prepared by American Capital Strategies Ltd. ($8.9 million to Montague and $15.2 million to Bristol).

[21] Hayes Lemmerz filed for bankruptcy shortly after the subject sale of property.

unanswered questions exist with respect to the methodology applied by Petitioner's appraiser to determine economic obsolescence.

The Tribunal finds that the subject property has experienced economic obsolescence during the tax years at issue. The Tribunal further finds it appropriate to calculate economic obsolescence essentially relying on the methodology employed by Respondent's appraiser.[22] The Tribunal, however, also finds it appropriate to rely, if the evidence allows, on reliable comparable sales identified by both appraisers, adjusted for differences between the comparable sales and the subject property.

Although Respondent's appraiser contends that he identified 75 comparable sales, during cross-examination of Respondent's appraiser it became apparent that not all of the 75 sales identified and used by the appraiser to develop his relationship between market and cost were actually sales.[23] The Tribunal finds that Respondent's appraiser erred in concluding that pricing based on interviews, dealer opinions of value, and age/life analyses constituted actual sales. The Tribunal agrees with Petitioner that of the approximate 75 "sales" identified by Respondent's appraiser, only nine of those transactions were actual sales of equipment comparable to property located at Petitioner's Montague, Michigan, facility. Further, the Tribunal finds that Petitioner's appraiser's addition of installation and freight costs to actual sale prices was not supported by the evidence or testimony. In *Lionel Trains, Inc v Chesterfield Twp*, 224 Mich App 350, 354-355; 568 NW2d 685 (1997), the Michigan Court of Appeals concluded that "installation, freight, and sales tax are appropriately included in true cash value unless there is evidence that such costs are not part of the market." Consistent with the Court of Appeals decision in *Spartech Polycom, In. v City of St. Clair*, unpublished opinion per curium of the Court of Appeals, issued March 8, 2011 (Docket No. 295334), the Tribunal finds adequate evidence from Mr. Clarkson's testimony that freight and installation costs were not included in the market prices of the goods at issue and

[22] Petitioner's appraiser also recognizes this methodology as valid. (Transcript, Vol. 1, p. 108)
[23] Petitioner contends that Respondent's ultimate determination of the value of the subject machinery and equipment was based on nine actual sales. (Transcript, Vol. 3, pp. 196 – 231)

should therefore be excluded from the market values of the subject property. The Tribunal has recalculated Respondent's appraiser's determination of economic obsolescence based on actual sales information with no increase in sale price for installation and freight costs compared to the calculated reproduction cost new less physical depreciation of those same assets, concluding that economic obsolescence of 40% for 2009, 37% for 2010, and 29% for 2011 is reasonable *based solely on the sales information provided by Respondent's appraiser*. (Exhibit E)

Petitioner's appraiser used the market approach to value the subject property where he could identify actual sales or "offers to sell,"[24] but did not rely on auction sales. Petitioner's appraiser defended his reliance on offers to sell because that price would represent the upper level of price to be paid for a particular piece of property. Although the Tribunal finds no rational basis for the methodology used by Petitioner's appraiser to determine economic obsolescence, the Tribunal does find that an analysis of the sales identified by Petitioner's appraiser compared to the reproduction cost less physical depreciation of those assets would provide a reasonable basis for determining economic obsolescence, if Petitioner's appraiser had provided the Tribunal with sufficient information to do so. After devoting a considerable amount of time reviewing Petitioner's appraisal (specifically, Exhibits P-1, Tab 8, and P-1A, Tabs 4 and 5), the Tribunal finds that the information provided by Petitioner's appraiser is inconsistent and does not allow the Tribunal to perform a sales price to historical cost less physical depreciation comparison sufficient to determine reliable economic obsolescence factors for the tax years at issue. Although Petitioner's appraiser has provided the Tribunal a clear path from Tab 8 (market information) to Tab 5 (the summary of Petitioner's application of the sales comparison approach to specific assets), he has failed to provide sufficient information necessary for the Tribunal to calculate the RCN less depreciation value for each asset.[25]

---

[24] Pursuant to USPAP Standards Rule 7-5, the appraiser must analyze all "agreements of sale, validated offers or third-party offers to sell, options, and listings of the subject property current as of the effective date of the appraisal . . . ."

[25] The Tribunal attempted to use cost information included in Tabs 2, 3, and 4 to Exhibit P-1A to make such comparisons, but Petitioner's appraiser failed to properly reference sales information from Tab 8 to Tabs 2, 3, and 4. For example, at p. 0047 of Tab 4, the sale of an SH-800 Mori Seiki machine is referenced to Exh 3 (sic) #1028. The

Given the failure of Petitioner's appraiser to provide a clear path from each of the equipment sales identified in Tab 8 to Exhibit P-1A to the historical cost of each asset being valued, the Tribunal then attempted to compare market information identified by both appraisers for a single item of equipment in an attempt to determine an appropriate sale price with which to compare to its depreciated trended historical cost (Exhibit E). Acknowledging the difficulty in accurately measuring economic obsolescence, the Tribunal, after careful consideration of the evidence and testimony in this case, finds that economic obsolescence factors of 47% for 2009, 41% for 2010, and 33% for 2011, are appropriate given the information and analysis compiled by the Tribunal in Exhibit E. The economic obsolescence factors determined by the Tribunal have been reflected in determining the true cash values of the subject property calculated in Exhibits F-1, F-2, and F-3.

The Tribunal finds, based upon the Findings of Fact and the Conclusions of Law set forth herein, that Petitioner has failed to prove by a preponderance of the evidence that the true cash value of the subject property should be reduced from $31.2 - $33.7 million to $21.9 - $23.4 million. The Tribunal also finds no evidence presented by Respondent to support its position that the true cash values of the subject property should be increased from $31.2 - $33.7 million to $53.5 - $55.1 million. The subject property's true cash values (TCV), state equalized values (SEV), and taxable values (TV) are as stated in the Introduction section above.

JUDGMENT

IT IS ORDERED that the property's assessed and taxable values for the tax years at issue are MODIFIED as set forth in the Introduction section of this Final Opinion and Judgment.

IT IS FURTHER ORDERED that the officer charged with maintaining the assessment rolls for the tax years at issue shall correct or cause the assessment rolls to be corrected to reflect the property's true cash and taxable values as finally shown in this Final Opinion and Judgment

---

market sale identified as #1028 at Tab 8 is for a punching bag.

within 90 days of the entry of the Final Opinion and Judgment, subject to the processes of equalization. See MCL 205.755. To the extent that the final level of assessment for a given year has not yet been determined and published, the assessment rolls shall be corrected once the final level is published or becomes known.

IT IS FURTHER ORDERED that the officer charged with collecting or refunding the affected taxes shall collect taxes and any applicable interest or issue a refund as required by this Order within 28 days of the entry of this Order. If a refund is warranted, it shall include a proportionate share of any property tax administration fees paid and of penalty and interest paid on delinquent taxes. The refund shall also separately indicate the amount of the taxes, fees, penalties, and interest being refunded. A sum determined by the Tribunal to have been unlawfully paid shall bear interest from the date of payment to the date of judgment and the judgment shall bear interest to the date of its payment. A sum determined by the Tribunal to have been underpaid shall not bear interest for any time period prior to 28 days after the issuance of the Tribunal’s order. Pursuant to 1995 PA 232, interest shall accrue (i) after December 31, 2008, at the rate of 3.31% for calendar year 2009, (ii) after December 31, 2009, at the rate of 1.23% for calendar year 2010, (iii) after December 31, 2010, at the rate of 1.12% for calendar year 2011, (iv) after December 31, 2011, and prior to July 1, 2012, at the rate of 1.09% for calendar year 2012, and (v) after June 30, 2012 and prior to January 1, 2013, at the rate of 4.25%.

This Order resolves all pending claims in this matter and closes this case.

MICHIGAN TAX TRIBUNAL

By: Steven H. Lasher

Entered: 10/31/12

EXHIBIT A
PERSONAL PROPERTY REPORTED BY PETITIONER

	Year of Acquisition	2009 Original Cost[26]	2010 Original Cost[27]	2011 Original Cost[28]
Parcel No. 21-900-351-0005-00				
Furniture & Fixtures	2004	21,254	21,254	21,254
	2002	20,700	20,700	20,700
	1999	17,870	17,870	17,870
	1997	9,300	9,300	9,300
	1995	15,500	15,500	15,500
	1994	5,780	5,780	5,780
	Prior	20,360	20,360	20,360
		110,764	110,764	110,764
Machinery & Equipment	2010			1,522,448
	2009		977,348	977,349
	2008	1,685,328	1,685,328	1,685,328
	2007	286,719	286,719	286,719
	2006	27,704	27,704	27,704
	2005	31,120	31,120	31,120
	2004	1,088,320	1,088,320	19,853,763
	2003	1,717,709	1,717,709	8,839,305
	2002			19,926,636
	2001	1,858,350	1,858,350	1,858,350
	2000	679,700	679,700	679,700
	1999	230,200	230,200	230,200
	1998	940	940	940
	1997	4,620	4,620	4,620
	1996	7,900	7,900	7,900
	1995	157,056	157,056	
	1994	57,700	57,700	
	Prior	336,112	336,112	550,868
		8,169,478	9,146,826	56,482,950
Office, Electronic Equipment	2008	157,794	157,794	157,794
	2007	6,680	6,680	6,680
	2006	19,094	19,094	19,094
	2004	106,470	106,470	106,470
	2003	1,055,266	1,055,266	1,055,266
	2001	46,650	46,650	45,650
	2000	2,150	2,150	2,150
	1999	5,300	5,300	5,300
	1997	95,276	95,276	95,276
	1994	6,090	6,090	6,090
	Prior	9,460	9,460	9,460
		1,509,230	1,509,230	1,509,230
Computer Equipment	2010			16,315
	2005	17,776	17,776	17,776
	2004	57,501	57,501	65,777
	2003	213,000	213,000	213,000
	2002	4,950	4,950	4,950

[26] Exhibit R-2A
[27] Exhibit R-2B
[28] Exhibit R-2C

	Prior	9,270	9,270	9,270
		302,497	302,497	327,088

	Year of Acquisition	2009 Original Cost[29]	2010 Original Cost[30]	2011 Original Cost[31]
Tooling	2008	3,217	3,217	3,217
	2007	243,949	243,949	243,949
	2005	53,202	53,202	53,202
	Prior	105,000	105,000	105,000
		405,368	405,368	405,369
Idle Equipment – Furniture & Fixtures	2004	59,999	59,999	120,477
	2003			3,591,039
	2002			256,700
	2000	2,662,250	2,662,250	2,662,250
	1999	910,880	910,880	910,880
		3,633,129	3,633,129	7,541,346
Construction in Progress				1,993,597
Total Personal Property for Parcel		14,130,466	15,107,814	68,370,344
Parcel No. 21-982-202-0531-00				
Machinery & Equipment	2004	18,765,442	18,765,442	IFT Expired
	2003	453,300	453,300	
		19,218,742	19,218,742	
Computer Equipment	2004	8,276	8,276	
Idle Equipment – Machinery & Equipment	2004	60,478	60,478	
Total Personal Property for Parcel		19,287,496	19,287,496	
Parcel No. 21-982-204-0414-00				
Machinery & Equipment	2005	1,519,827	1,519,826	1,519,826
	2004	1,114,787	1,114,787	1,114,787
		2,634,614	2,634,614	2,634,614
Office Equipment	2006	129,794	129,794	129,794
	2004	756,854	756,854	756,854
		886,648	886,648	886,648
Tooling	2004	53,800	53,800	53,800
Total Personal Property for Parcel		3,575,062	3,575,062	3,575,062
Parcel No. 21-982-205-0414-00				
Machinery & Equipment	2007	1,143,027	1,143,027	1,143,027
	2006	1,954,884	1,954,884	1,954,884
		3,097,911	3,097,911	3,097,911
Office Equipment	2006	447,748	447,748	447,748
Total Personal Property for Parcel		3,545,659	3,545,659	3,545,659
Parcel No. 21-990-201-0379-00				

[29] Exhibit R-2A
[30] Exhibit R-2B
[31] Exhibit R-2C

Machinery & Equipment	2003	6,668,296	6,668,296	IFT Expired
	2002	19,926,636	19,926,636	
		26,594,932	26,594,932	
Idle Equipment	2003	3,591,039	3,591,039	
	2002	256,700	256,700	
		3,847,739	3,847,739	
Total Personal Property for Parcel		30,442,671	30,442,671	
Total Personal Property (All Parcels)		70,981,354	71,905,103	75,491,065

EXHIBIT B
LEASED EQUIPMENT/OMITTED PROPERTY/DISPOSED OF ASSETS

A. LEASED EQUIPMENT

Respondent identified $12,700,000 of leased machinery and equipment and $132,000 of leased computer equipment that it contends was not reported by Petitioner on its Personal Property Statements. (See Respondent's Appraisal, p. 29; Exhibits R-18 and R-19) Petitioner contends that Respondent has improperly included "leased equipment" for Parcel 21-900-351-005-00 that was never at Petitioner's Montague facility or was not at the facility on one or more of the subject assessment dates. (Exhibit P-20)

Asset Description	Date placed in service per Respondent	Original Cost per Respondent	Actual dates placed in service (if any) per Petitioner	Original Cost of equipment actually in service as of assessment dates
Computer Equipment				
Dell Computer Products (42)	8/31/2007	27,000	8/31/2007	27,000 (2009, 2010, 2011)
Dell Computer Products (24)	2/14/2008	27,000	2/14/2008	27,000 (2009, 2010, 2011)
Dell Computer Products (54)	8/25/2008	27,000	8/25/2008	27,000 (2009, 2010, 2011)
Dell Computer Products (27)	9/15/2008	31,500	9/15/2008	31,500 (2009, 2010, 2011)
Dell Computer Products	1/25/2011	19,096	1/25/2011	0[32]
		131,596		112,500 (2009, 2010, 2011)
Machinery & Equipment				
Wenzler Multi Spindle Pallet Center	10/16/2006	1,989,886	10/16/2006	1,989,886 (2009, 2010, 2011)
Wenzler Multi Spindle Pallet Center	12/1/2005	4,353,323	12/1/2005	4,353,323 (2009, 2010, 2011)
Wenzler Multi Spindle Pallet Center	12/20/2005	622,720	12/20/2005	622,720 (2009, 2010, 2011)
10 OKK and 3 ENSHU[33]	2/1/2008	5,343,778	2009 – 5 OKK[34] 2010 – 1 OKK 2012 – 4 OKK	2009 – 2,320,000 2010 – 2,754,000 2011 - 4,640,000
2008 Makino A71	7/1/2008	408,700	N/A	
		12,718,407		
Total Leased Property placed in service				2009 – 9,398,429 2010 - 9,832,429 2011 - 11,718,429

[32] Because these assets were placed in service during 2011, they are not assessed until the 2012 tax year.
[33] Per Exhibit R-16, Petitioner leased 3 ENSHU units with a total cost of $703,778; 6 OKK HM600 units with a total cost of $2,604,000 ($434,000 each); 4 OKK HM800 units with a total cost of $2,036,000 ($509,000 each).
[34] For 2009, 2 OKK HM800 (total cost of $1,018,000) and 3 OKK HM600 (total cost of $1,302,000); for 2010, 1 OKK HM600 added (cost of $434,000); for 2011, 2 OKK HM 600 (cost of $868,000) and 2 OKK HM800 (cost of $1,018,000) added.

B. OMITTED PROPERTY

Respondent identified twenty (20) items of equipment from Petitioner's Preventative Maintenance Schedule (Exhibit R-5) that were not included on Petitioner's Fixed Asset List. Respondent determined a true cash value for these "omitted" assets. (Respondent's appraisal, pp. 24, 66, 67) Petitioner contends that for Parcel 21-900-351-0005-00, Respondent improperly included certain of these assets that were never located at Petitioner's Montague facility or were not at the facility on one or more of the subject assessment dates. (Exhibit P-13A)

Asset Description	Date placed in service	Original Cost[35]	Actual dates placed in service (if any) per Petitioner	Original Cost of equipment actually in service as of assessment dates
SH-400 Mori Seiki (2)	2000		Acquired 2011; reported on 2012 personal property statement	2009 – 0 2010 – 0 2011 – 0
SV-500 Mori Seiki (2)	2000		Acquired 2011; reported on 2012 personal property statement	2009 – 0 2010 – 0 2011 – 0
A55 Makino (2)	2002	$89,900 each		2009 - $179,800 2010 - $179,800 2011 - $179,800
A66 Makino (5)	2002	$146,700 each		2009 - $733,500 2010 - $733,500 2011 - $733,500
A71 Makino (5)	2004	$237,000 each	One (1) machine acquired in 2008; one (1) machine acquired in 2009; Three (3) machines acquired in 2010	2009 - $237,000 2010 - $474,000 2011 - $1,185,000
A88 Makino (2)	2004	$478,800 each	One (1) machine never in Montague; one (1) machine at facility in 2010, transferred in 2011	2009 – 0 2010 – $478,800 2011 – 0
Kitamura HX 400 (2)	2002	$91,650 each		2009 - $183,300 2010 - $183,300 2011 - $183,300
Total Omitted Property (Machinery and				2009 - $1,333,600

[35]Respondent's appraiser failed to provide original cost information for each omitted asset valued; Respondent's appraiser further failed to provide information detailing his calculation of replacement cost new (RCN) and replacement cost new less physical depreciation (RCNLPD) based on original costs for each asset. Respondent's appraiser did, however, determine the true cash values for each omitted asset valued based on a market approach that concluded that market values (i) equaled 64% of values determined using the cost approach for 2009, (ii) equaled 70% of values determined using the cost approach for 2010, and (iii) 74% of values determined using the cost approach for 2011 (Respondent's appraisal, p. 36). Therefore, the Tribunal was able to calculate the RCNLPD of the omitted personal property actually in service at the subject's Montague facility for each of the tax years at issue by dividing the true cash values for those assets determined by Respondent's appraiser using the market approach by the respective percentages established by Respondent's appraiser. To determine the original cost of each omitted asset, the Tribunal then applied the percentage reductions calculated by Respondent's appraiser from RCN to RCNLPD for machinery & equipment for each tax year (e.g., for 2009, $57.1 million divided by $85.5 million), and the percentage increases calculated by Respondent's appraiser from Original Cost to RCN for machinery & equipment for each tax year (e.g., for 2009, $85.5 million divided by $67.0 million) (Respondent's appraisal, p. 55). Therefore, the original cost of an A55 Makino machine was determined by dividing Respondent's 2009 TCV of $76,600 by the respective percentages.

Equipment) to be added to Fixed Asset List				2010 - $2,049,400 2011 - $2,281,600

C. DISPOSED OF ASSETS

After completion of his appraisal, Petitioner's appraiser determined that certain assets included in his determination of the true cash values of the subject property had been disposed of by Petitioner. (Exhibit P-11A) (Transcript, Vol 1, pp. 123 – 137; Vol 2, pp. 7 – 12)

Asset Description[36]	Year Placed in Service	Year Disposed Of	Original Cost[37]
Gantry Unload System-Finish Cell #6	2008	2010	47,529
Gantry Unload System-Finish Cell #7	2008	2010	47,529
Ricoh Copier Replacement	2004	2007	51,162
15k Pre-Heat Stations Mech Safety Improvements	2005	2006	82,732
Ford A/C Bracket	1995	1999	105,000
U231 X-Ray Unit Modification	2004	2006	140,722
U222-ADR	2002	2006	94,600

[36] All assets are included in Parcel No. 21-900-351-005-00 except for the 15k Pre-heat Stations and U231 X-Ray Unit Modification included in Parcel No. 21-982-204-0414-00.
[37] Exhibit P-1A, Sections 2 and 4

EXHIBIT C
TRENDING INDICES

Tax Year	Year Placed in Service	Petitioner PPI Trending[38]	Respondent MVS Trending[39]
2009	2008	1.0	1.0
	2007	1.0137	1.0386
	2006	1.0161	1.0962
	2005	.9837	1.1443
	2004	.9736	1.2546
	2003	.9837	1.2743
	2002	.9852	1.2953
	2001	.9658	1.2977
	2000	.9582	1.3064
	1999	.9658	1.3245
	1998	.9715	1.3242
	1997	.9582	1.3369
	1996	.9466	1.3541
	1995	.9554	1.3777
	1994	.9630	1.4309
	1993 and Prior	.9977	1.4947
2010	2009	1.0000	1.0
	2008	1.0286	1.0377
	2007	1.0427	1.0777
	2006	1.0451	1.1375
	2005	1.0118	1.1874
	2004	1.0015	1.3018
	2003	1.0118	1.3222
	2002	1.0133	1.3441
	2001	.9935	1.2977
	2000	.9856	1.3556
	1999	.9935	1.3743
	1998	.9993	1.3741
	1997	.9856	1.3873
	1996	.9736	1.4051
	1995	.9827	1.4296
	1994	.9906	1.4848
	1993 and Prior	1.0263	1.5510
2011	2010	1.0000	1.0
	2009	1.0007	.9808
	2008	1.0293	1.0177
	2007	1.0435	1.0570
	2006	1.0459	1.1156
	2005	1.0126	1.1645

[38] Petitioner's appraiser used the Producer Price Index for "automobile, light truck and utility vehicle mfg." (Petitioner's appraisal, p. 16) Petitioner's appraiser determined RCN by multiplying an annual index factor (Exhibit P-1A, section 6) representing inflation over time by the item's original cost. An annual index factor was determined by calculating the ratio of the index value from the year an asset was placed in service to the current year (e.g., 2008 index for the 2009 tax year). For example, for the 2009 tax year, the trending index value for an asset placed in service in 2004 is calculated by dividing 132.9 (the index for 2008) by 136.5 (the index for 2004), yielding a trend index of .9736. (Transcript, Vol 1, pp. 91 – 93)

[39] Respondent's appraiser used trend indices from Marshall Valuation service for "Metalworking," trending the original cost for each asset to obtain an estimated reproduction cost new. (Respondent's appraisal, p. 21) (Exhibits R-19 and R-20) (Transcript, Vol 2, pp. 55, 56, 152) For example, for the 2009 tax year, the trending index value for an asset placed in service in 2004 is calculated by dividing 1593.2 (the index for 2008) by 1269.9 (the index for 2004), yielding a trend index of 1.2546

Tax Year	Year Placed in Service	Petitioner PPI Trending[38]	Respondent MVS Trending[39]
	2004	1.0022	1.2768
	2003	1.0126	1.2968
	2002	1.0141	1.3182
	2001	.9942	1.3207
	2000	.9863	1.3296
	1999	.9942	1.3479
	1998	1.0000	1.3477
	1997	.9863	1.3606
	1996	.9744	1.3780
	1995	.9835	1.4021
	1994	.9913	1.4563
	1993 and Prior	1.0270	1.5212

EXHIBIT D
PHYSICAL DEPRECIATION

Both appraisers for Petitioner and Respondent applied an age/life method to calculate physical depreciation for the subject personal property. In applying this method, "age" is synonymous with "effective age."

	10 Year Average Life % Good	18 Year Average Life % Good (M&E)	13 Year Average Life % Good (F&F)	5 Year Average Life % Good (Computer Equip)
2009 Tax Year				
2009	100	100	100	100
2008	92	94	92	80
2007	84	89	85	60
2006	76	83	77	40
2005	67	78	69	20
2004	58	72	61	
2003	49	67	54	
2002	39	61	46	
2001	30	56	38	
2000	24	50	31	
1999	21	44	23	
1998	20	39	15	
1997	20	33	8	
1996	20	28		
1995	20	22		
1994	20	17		
1993	20	11		
1992	20	6		
2010 Tax Year				
2010	100	100	100	100
2009	92	94	92	80
2008	84	89	85	60
2007	76	83	77	40
2006	67	78	69	20
2005	58	72	61	
2004	49	67	54	
2003	39	61	46	
2002	30	56	38	
2001	24	50	31	
2000	21	44	23	
1999	20	39	15	
1998	20	33	8	
1997	20	28		
1996	20	22		
1995	20	17		
1994	20	11		
1993	20	6		
2011 Tax Year				
2011	100	100	100	100
2010	92	94	92	80
2009	84	89	85	60
2008	76	83	77	40
2007	67	78	69	20
2006	58	72	61	
2005	49	67	54	

	10 Year Average Life % Good	18 Year Average Life % Good (M&E)	13 Year Average Life % Good (F&F)	5 Year Average Life % Good (Computer Equip)
2004	39	61	46	
2003	30	56	38	
2002	24	50	31	
2001	21	44	23	
2000	20	30	15	
1999	20	33	8	
1998	20	28		
1997	20	22		
1996	20	17		
1995	20	11		
1994	20	6		

EXHIBIT E

ECONOMIC OBSOLESENCE

A. Respondent's Sales Information[40]

Description	2009 Cost[41]	2009 Sales Price[42]	2010 Cost	2010 Sales Price	2011 Cost	2011 Sales Price
Makino A71	230,074	114,000	220,374	114,000	198,124	114,000
Makino A71	230,074	114,000	220,374	114,000	198,124	114,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Mori Seiki	444,332	270,000	419,150	270,000	369,979	270,000
Makino A51	97,545	65,000	92,0167	65,000	81,222	65,000
Makino A51	97,545	65,000	92,0167	65,000	81,222	65,000
Sollair Compressor	43,033	16,950	41,129	16,950	37,057	16,950
Sollair Compressor	43,033	16,950	41,129	16,950	37,057	16,950
Sollair Compressor	43,033	16,950	41,129	16,950	37,057	16,950
Trim Saw	115,217	85,000	112,523	85,000	103,461	85,000
Trim Saw	115,217	85,000	112,523	85,000	103,461	85,000
	4,119,095	2,468,850	3,907,535	2,468,850	3,466,818	2,468,850
Economic Obsolescence		40%		37%		29%

B. Comparison of Sale Prices

The following compares sale prices (exclusive of freight and installation costs) of individual items of equipment identified by the respective appraisers.

Description	Number of Items	Petitioner's Market Information	Respondent's Market Information
Makino Model A-66	9	$109,000	$127,400
Mori Seiki Model SH8000	7	$206,500	$270,000
Kingsbury 5-Axis Twin Spindle	12	$183,000	$315,000
OKK Model HM80S	10	$240,000	$250,000

C. Assuming that 38 items of equipment identified in B. above are a representative sample, the Tribunal finds that the sale prices, as adjusted, identified by Respondent's appraiser exceed the sale prices for the same items of equipment determined by Petitioner's appraiser by 33%. Adjusting the economic obsolescence calculations in A. above by 33% would increase economic obsolescence for 2009 to 53%, for 2010 to 49 %, and for 2011 to 36%.

[40] Exhibit R-3, pp. 79, 88
[41] Exhibit R-3, p. 69
[42] Applying Petitioner's trending tables, a factor of 1.0 was applicable for each of the tax years at issue, resulting in no adjustment of the 2011 sale prices to 2009 and 2010.

EXHIBIT F-1

2009 TRUE CASH VALUE

	Year of Acquisition	2009 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN[43]	RCN less Physical Depreciation[44] (Exh D)	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)[45]
arcel No. 21-900-351-005-00									
urniture & Fixtures	2004	21,254				21,254	20,693	12,623	
	2002	20,700				20,700	20,394	9,381	
	1999	17,870				17,870	17,259	3,969	
	1997	9,300				9,300	8,911	712	
	1995	15,500				15,500	14,809	1,184	
	1994	5,780				5,780	5,566	445	
	Prior	20,360				20,360	20,313	1,625	
		110,764				110,764	107,945	28,314	28,314
lachinery & Equipment									
	2008	1,685,328		2,320,000		4,005,328	4,005,328	3,765,008	
	2007	286,719				286,719	290,647	258,675	
	2006	27,704		1,989,886		2,017,590	2,050,073	1,701,560	
	2005	31,120		4,976,043		5,007,163	4,925,526	3,841,910	
	2004	1,088,320	237,000		(51,162)	1,274,158	1,240,520	893,174	
	2003	1,717,709				1,717,709	1,689,710	1,132,105	
	2002		1,096,600		(94,600)	1,002,000	987,170	602,173	
	2001	1,858,350				1,858,350	1,794,794	1,005,084	
	2000	679,700				679,900	651,480	325,644	
	1999	230,200				230,200	222,327	97,823	
	1998	940				940	913	356	
	1997	4,620				4,620	4,427	1460	
	1996	7,900				7,900	7,478	2,093	
	1995	157,056			(105,000)	52,056	49,734	10,941	
	1994	57,700				57,700	55,565	9,446	
	Prior	336,112				336,112	335,389	36,892	
		8,169,478	1,333,600	9,285,929	(250,762)	18,538,245	18,311,489	13,684,344	7,252,702

	Year of Acquisition	2009 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
ffice, Electronic quipment	2008	157,794				157,794	157,794	145,170	
	2007	6,680				6,680	6,771	5,755	
	2006	19,094				19,094	19,401	14,938	
	2004	106,470				106,470	103,659	63,231	
	2003	1,055,266				1,055,266	1,038,065	560,555	
	2001	46,650				46,650	45,054	17,120	
	2000	2,150				2,150	2,060	638	

[43] Total historical cost multiplied by applicable index (Exhibit C)
[44] RCN multiplied by applicable percent good (Exhibit D)
[45] Economic obsolescence of 47% applied to machinery and equipment only

	1999	5,300				5,300	5,119	1,177	
	1997	95,276				95,276	91,293	7,303	
	1994	6,090				6,090	5,865	469	
	Prior	9,460				9,460	9,438	755	
		1,509,230				1,509,230	1,484,519	817,111	817,111
omputer Equipment									
	2008			27,000		27,000	27,000	21,600	
	2007			85,500		85,500	85,500	51,300	
	2005	17,776				17,776	17,776	7,100	
	2004	57,501				57,501	57,501	11,500	
	2003	213,000				213,000	213,000	42,600	
	2002	4,950				4,950	4,950	990	
	Prior	9,270				9,270	9,270	1,854	
		302,497		112,500		414,997	414,997	136,944	136,944
ooling	2008	3,217				3,217	3,217	3,023	
	2007	243,949				243,949	247.291	220,089	
	2005	53,202				53,202	52,334	40,820	
	Prior	105,000				105,000	102,228	73,604	
		405,368				405,368	405,070	337,536	178,894

	Year of Acquisition	2009 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Idle Equipment – Furniture & Fixtures	2004	59,999				59,999	58,415	35,633	
	2000	2,662,250				2,662,250	2,550,968	790,800	
	1999	910,880				910,880	879728	202,337	
		3,633,129				3,633,129	3,489,111	1,028,770	1,028,770
Total Personal Property for Parcel		14,130,466	1,333,600	9,389,429	(250,762)	24,611,733	24,213,071	16,033,019	9,442,735
Parcel No. 21-982-202-0531-00									
Machinery & Equipment	2004	18,765,442				18,765,442	18,270,034	13,154,424	
	2003	453,300				453,300	445,911	298,760	
		19,218,742				19,218,742	18,715,945	13,453,184	7,130,187
Computer Equipment	2004	8,276				8,276	8,276	1,655	1,655
Idle Equipment – Machinery & Equipment	2004	60,478				60,478	58,881	42,394	42,394
Total Personal Property for Parcel		19,287,496				19,287,496	18,783,102	13,497,233	7,174,236
Parcel No. 21-982-204-0414-00									
Machinery & Equipment	2005	1,519,827			(82,732)	1,437,095	1,413,670	1,102,662	
	2004	1,114,787			(140,722)	974,065	948,349	682,811	
		2,634,614			(223,454	2,411,160	2,362,019	1,785,473	946,300
Office Equipment	2006	129,794				129,794	131,883	101,550	
	2004	756,854				756,854	736,873	449,492	

		886,648				886,648	868,756	551,042	551,042
Tooling	2004	53,800				53,800	52,379	37,712	19,987
Total Personal Property for Parcel		3,575,062			(223,454)	3,351,608	3,283,154	2,374,227	1,517,329
Parcel No. 21-982-205-0414-00									
Machinery & Equipment	2007	1,143,027				1,143,027	1,158,686	1,031,230	
	2006	1,954,884				1,954,884	1,986,358	1,648,677	
		3,097,921				3,097,921	3,145,044	2,779,907	1,473,350
Office Equipment	2006	447,748				447,748	454,956	350,316	350,316
Total Personal Property for Parcel		3,545,659				3,545,659	3,600,000	3,030,223	1,823,666
Parcel No. 21-990-201-0379-00									
Machinery & Equipment	2003	6,668,296				6,668,296	6,559,602	4,394,933	
	2002	19,926,636				19,926,636	19,631,721	11,975,349	
		26,594,932				26,594,932	26,191,323	16,370,282	8,676,249
Idle Equipment	2003	3,591,039				3,591,039	3,532,505	2,366,778	
	2002	256,700				256,700	252,900	154,269	
		3,847,739				3,847,739	3,785,405	2,521,047	1,336,154
Total Personal Property for Parcel		30,442,671				30,442,691	29,976,728	18,891,329	10,012,403
Total Personal Property (All Parcels)		70,981,354	1,333,600	9,398,429	(474,216)	81,239,167	79,856,055	53,826,031	29,970,369

EXHIBIT F-2

2010 TRUE CASH VALUE

	Year of Acquisition	2010 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN[46]	RCN less Physical Depreciation[47]	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)[48]
Parcel No. 21-900-351-0005-00									
Furniture & Fixtures	2004	21,254				21,254	21,285	11,493	
	2002	20,700				20,700	20,975	7,970	
	1999	17,870				17,870	17,753	2,662	
	1997	9,300				9,300	9,166	733	
	1995	15,500				15,500	15,231	1,218	
	1994	5,780				5,780	5,725	458	
	Prior	20,360				20,360	20,895	1,671	
		110,764				110,764	111,030	26,205	26,205
Machinery & Equipment									
	2009	977,348				977,348	977,348	918,707	
	2008	1,685,328		2,754,000		4,439,328	4,566,292	4,063,999	
	2007	286,719				286,719	298,961	248,137	
	2006	27,704		1,989,886		2,017,590	2,108,583	1,644,694	
	2005	31,120		4,976,043		5,007,163	5,066,247	3,647,697	
	2004	1,088,320	952,800		(51,162)	1,989,958	1,992,582	1,335,029	
	2003	1,717,709				1,717,709	1,737,977	1,060,165	
	2002		1,096,600		(94,600)	1,002,000	1,015,326	568,582	
	2001	1,858,350				1,858,350	1,846,270	923,125	
	2000	679,700				679,900	670,109	294,847	
	1999	230,200				230,200	228,703	89,194	
	1998	940				940	939	309	
	1997	4,620				4,620	4,553	1,274	
	1996	7,900				7,900	7,691	1,692	
	1995	157,056			(105,000)	52,056	51,155	8,696	
	1994	57,700				57,700	57,157	6,287	
	Prior	336,112				336,112	344,951	20,697	
		9,146,826	2,049,400	9,719,929	(250,762)	20,665,393	20,974,844	14,833,131	8,751,547
	Year of Acquisition	2010 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Office, Electronic Equipment									
	2008	157,794				157,794	162,306	137,961	
	2007	6,680				6,680	6,965	5,363	
	2006	19,094				19,094	19,955	13,768	
	2004	106,470				106,470	106,629	57,579	
	2003	1,055,266				1,055,266	1,067,718	491,150	

[46] Total historical cost multiplied by applicable trend index (Exhibit C)
[47] RCN multiplied by applicable percent good (Exhibit D)
[48] Economic obsolescence of 41% applied to machinery and equipment only

	2001	46,650				46,650	46,346	14,367	
	2000	2,150				2,150	2,119	487	
	1999	5,300				5,300	5,265	789	
	1997	95,276				95,276	93,904	7,512	
	1994	6,090				6,090	6,032	482	
	Prior	9,460				9,460	9,708	776	
		1,509,230				1,509,230	1,526,947	730,234	730,234
Computer Equipment									
	2008			27,000		27,000	27,000	16,200	
	2007			85,500		85,500	85,500	34,200	
	2005	17,776				17,776	17,776	3,555	
	2004	57,501				57,501	57,501	11,500	
	2003	213,000				213,000	213,000	42,600	
	2002	4,950				4,950	4,950	990	
	Prior	9,270				9,270	9,270	1,854	
		302,497		112,500		414,997	414,997	110,899	110,899
Tooling									
	2008	3,217				3,217	3,309	2,945	
	2007	243,949				243,949	254,365	211,122	
	2005	53,202				53,202	53,829	38,756	
	Prior	105,000				105,000	107,761	72,199	
		405,368				405,368	419,264	325,022	191,762

	Year of Acquisition	2010 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Idle Equipment – Furniture & Fixtures									
	2004	59,999				59,999	60,088	32,447	
	2000	2,662,250				2,662,250	2,623,913	603,499	
	1999	910,880				910,880	904,959	135,743	
		3,633,129				3,633,129	3,588,960	771,689	771,689
Total Personal Property for Parcel		15,107,814	2,049,400	9,832,429	(250,762)	26,738,881	27,036,042	16,797,180	10,582,336
Parcel No. 21-982-202-0531-00									
Machinery & Equipment									
	2004	18,765,442				18,765,442	18,793,590	12,591,705	
	2003	453,300				453,300	458,648	279,775	
		19,218,742				19,218,742	19,252,238	12,871,480	7,594,173
Computer Equipment	2004	8,276				8,276	8,276	1,655	1,655
Idle Equipment – Machinery & Equipment	2004	60,478				60,478	60,568	40,580	23,942
Total Personal Property for Parcel		19,287,496				19,287,496	19,321,082	12,913,715	7,618,115
Parcel No. 21-982-204-0414-00									
Machinery & Equipment	2005	1,519,827			(82,732)	1,437,095	1,454,052	1,046,917	

	2004	1,114,787			(140,722)	974,065	875,526	653,602	
		2,634,614			(223,454)	2,411,160	2,329,578	1,700,519	1,003,306
Office Equipment	2006	129,794				129,794	135,647	93,596	
	2004	756,854				756,854	757,989	409,314	
		886,648				886,648	893,636	502,910	502,910
Tooling	2004	53,800				53,800	53,880	36,099	21,298
Total Personal Property for Parcel		3,575,062			(223,454)	3,351,608	3,377,094	2,239,528	1,527,514

	Year of Acquisition	2010 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Parcel No. 21-982-205-0414-00									
Machinery & Equipment	2007	1,143,027				1,143,027	1,191,834	989,222	
	2006	1,954,884				1,954,884	2,043,049	1,593,578	
		3,097,911				3,097,911	3,234,883	2,582,800	1,523,852
Office Equipment	2006	447,748				447,748	467,941	322,879	322,879
Total Personal Property for Parcel		3,545,659				3,545,659	3,702,824	2,905,679	1,846,731
Parcel No. 21-990-201-0379-00									
Machinery & Equipment	2003	6,668,296				6,668,296	6,793,659	4,144,131	
	2002	19,926,636				19,926,636	20,191,660	11,307,329	
		26,594,932				26,594,932	26,985,319	15,451,460	9,116,361
Idle Equipment	2003	3,591,039				3,591,039	3,633,413	2,216,381	1,307,664
	2002	256,700				256,700	260,114	145,603	85,905
Total Personal Property for Parcel		30,442,671				30,442,691	30,618,732	17,813,444	10,509,930
Total Personal Property (All Parcels)		71,958,702	2,049,400	9,832,429	(474,216)	83,366,335	84,055,774	52,669,546	32,084,626

EXHIBIT F-3

2011 TRUE CASH VALUE

	Year of Acquisition	2011 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN[49]	RCN less Physical Depreciation[50]	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)[51]
Parcel No. 21-900-351-0005-00									
Furniture & Fixtures									
	2004	21,254				21,254	21,300	9,798	
	2002	20,700				20,700	20,991	6,507	
	1999	17,870				17,870	17,766	1,421	
	1997	9,300				9,300	9,172	733	
	1995	15,500				15,500	15,244	1,219	
	1994	5,780				5,780	5,729	458	
	Prior	20,360				20,360	20,900	1,672	
		110,764				110,764	111,111	21,808	21,808
Machinery & Equipment									
	2010	1,522,448				1,522,448	1,522,448	1,431,101	
	2009	977,348				977,348	978,032	870,448	
	2008	1,685,328		4,640,000	(95,058)	6,230,270	6,412,816	5,322,637	
	2007	286,719				286,719	299,191	233,368	
	2006	27,704		1,989,886		2,017,590	2,110,197	1,519,341	
	2005	31,120		4,976,043		5,007,163	5,070,253	3,397,069	
	2004	19,853,763	1,185,000		(51,162)	20,987,601	21,033,773	12,830,601	
	2003	8,839,305				8,839,305	8,950,984	5,012,551	
	2002	19,926,636	1,096,600		(94,600)	20,928,636	21,223,729	10,611,864	
	2001	1,858,350				1,858,350	1,847,571	812,931	
	2000	679,700				679,700	670,388	201,116	
	1999	230,200				230,200	228,864	75,525	
	1998	940				940	940	263	
	1997	4,620				4,620	4,556	1,002	
	1996	7,900				7,900	7,697	1,308	
	1995	157,056			(105,000)	52,056	51,197	5,631	
	1994	57,700				57,700	57,198	3,431	
	Prior	336,112				336,112	345,187	20,711	
		56,482,950	2,281,600	11,605,929	(345,820)	70,024,658	70,815,021	42,350,898	28,375,101

	Year of Acquisition	2011 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Office, Electronic Equipment									
	2008	157,794				157,794	162,417	125,061	
	2007	6,680				6,680	6,970	4,809	
	2006	19,094				19,094	19,970	12,181	
	2004	106,470				106,470	106,704	49,083	

[49] Total historical cost multiplied by applicable trend index (Exhibit C)
[50] RCN multiplied by applicable percent good (Exhibit D)
[51] Economic obsolescence of 33% applied to machinery and equipment only

	2003	1,055,266				1,055,266	1,068,562	406,053	
	2001	46,650				46,650	46,379	10,667	
	2000	2,150				2,150	2,120	318	
	1999	5,300				5,300	5,269	421	
	1997	95,276				95,276	93,970	7,517	
	1994	6,090				6,090	6,037	482	
	Prior	9,460				9,460	9,715	777	
		1,509,230				1,509,230	1,528,113	617,369	617,369
Computer Equipment									
	2010	16,315				16,315	16,315	16,315	
	2008			27,000		27,000	27,000	10,800	
	2007			85,500		85,500	85,500	17,100	
	2005	17,776				17,776	17,776	3,555	
	2004	65,777				65,777	65,777	13,155	
	2003	213,000				213,000	213,000	42,600	
	2002	4,950				4,950	4,950	990	
	Prior	9,270				9,270	9,270	1,854	
		327,088		112,500		439,588	439,588	106,369	106,369
Tooling									
	2008	3,217				3,217	3,311	2,748	
	2007	243,949				243,949	254,560	198,556	
	2005	53,202				53,202	53,872	36,099	
	Prior	105,000				105,000	107,835	65,779	
		405,368				405,368	419,578	303,182	203,131

	Year of Acquisition	2011 Original Cost (Exh A)	Omitted Property (Exh B)	Leased Property (Exh B)	Disposed of Assets (Exh B)	Total Historical Cost	RCN	RCN less Physical Depreciation	RCN less Physical Depreciation less Economic Obsolescence (Exhibit E)
Idle Equipment – Furniture & Fixtures									
	2004	120,477				120,477	120,742	55,541	
	2003	3,591,039				3,591,039	3,636,286	1,381,778	
	2002	256,700				256,700	260,319	80,884	
	2000	2,662,250				2,662,250	2,625,777	393,866	
	1999	910,880				910,880	905,596	72,447	
		7,541,346				7,541,346	7,548,720	1,984,516	1,984,516
Construction in Progress		1,993,597				1,993,597	1,993,597	1,993,597	996,798[52]
Total Personal Property for Parcel		68,370,344	2,281,600	11,718,429	(345,820)	82,024,553	82,855,728	47,377,739	32,305,092
Parcel No. 21-982-204-0414-00									
Machinery & Equipment	2005	1,519,827			(82,732)	1,437,095	1,455,202	974,985	653,239
	2004	1,114,787			(140,722)	974,065	976,207	595,486	398,975
Office Equipment	2006	129,794				129,794	135,751	82,808	82,808
	2004	756,854				756,854	758,519	348,918	348,918

[52] Construction in progress reported as 50% of cost.

Tooling	2004	53,800				53,800	53,918	32,889	22,035
Total Personal Property for Parcel		3,575,062			(223,454)	3,351,608	3,379,597	2,035,085	1,505,975
Parcel No. 21-982-205-0414-00									
Machinery & Equipment	2007	1,143,027				1,143,027	1,192,748	930,343	623,329
	2006	1,954,884				1,954,884	2,044,613	1,472,121	986,321
Office Equipment	2006	447,748				447,748	468,299	285,662	285,662
Total Personal Property for Parcel		3,545,659				3,545,659	3,705,660	2,688,126	1,865,869
Total Personal Property		75,491,065	2,281,600	11,718,429	(569,274)	88,921,820	89,921,182	52,100,951	35,676,936