GF DATA®

MANUFACTURING DRILLDOWN

The most reliable data on private M&A transactions in the $10-250 million value range.

SEPT 2020

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The GF Data Manufacturing Drilldown is one of four industry reports that is interspersed with our regular offerings. The annual rotation comprises: Manufacturing, Distribution, Health Care Services and Business Services.

GF Data provides data on private equity-sponsored M&A transactions with enterprise values of $10 to 250 million. We collect transaction information from private equity groups and other deal sponsors on a blind and confidential basis. Private equity contributors and other subscribers receive our quarterly M&A and leverage reports, as well as our semi-annual supplement on key deal terms.

Our on-line searchable data base, with valuation comps organized by NAICS code, is often heavily used by some but not all professionals in a given firm. These drilldown reports enable that detail to reach more of our users, and not just those charged with searching on-line.

CHART 1

VALUATION DRILLDOWN (ALL MANUFACTURING)

2015-2019—TEV/EBITDA

			Buyouts Only						
TEV	ALL	Buyouts Only	Platforms	Add-Ons	Indiv/ Family Seller	PEG/ Corp Seller	Above Average	Post-Closing Mgt.	ALL THREE*
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: ALL THREE in the rightmost column denotes buyouts featuring above-average financial characteristics, a post-closing management solution and a private equity/corporate seller.

To recap GF Data's "belt and suspenders" approach to industry classification, each deal is placed in a major business category (e.g., Manufacturing) and then tagged with a six-digit NAICS industry code (e.g. 322211—Corrugated and Solid Fiber Box Manufacturing). Most of the charts herein, including the valuation drilldown, focus on deals in the Manufacturing major business category. We then provide industry detail in selected NAICS groupings. Please note that the latter will not be perfect subsets of the former.

- Chart 1 disaggregates how valuation is driven by a variety of factors. The subset is Manufacturing deals completed in 2015-2019. Of 520 completed transactions, 480 were buyouts.
- This includes several factors—above-average financial performance, institutional ownership prior to sale, and provision of a management solution post-transaction—that each individually boost valuations. Our definition of "above-average" financial performance is provided on page four.
- For the life of the sample, we see consistent rewards for business size. Average valuations ascend from 6.0x in the $10-25 million TEV range to 8.5x in the 100-250 million TEV range. Where all three favorable pricing factors are present, the pick-up in each valuation bracket is about one turn.
- Charts 4-9 provide valuation detail drawn from our continuously available on-line searchable data base. They cover six of the more populous four-digit NAICS groupings within Manufacturing—Converted Paper (3222); Architectural & Structural Metals Fabrication (3323); Industrial Machinery (3332); Semiconductor & Other Electronic Components (3344); Household & Institutional Furniture (3371); and Medical Equipment & Supplies (3391).

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For information on subscribing, or on contributing data as a private equity participant, contact us at info@gfdata.com.

CHART 2

TOTAL ENTERPRISE VALUE/EBITDA (ALL MANUFACTURING)

TEV	2003 -2014	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Please note that N for 2003-2014 encompasses twelve years of activity.

CHART 3

TOTAL ENTERPRISE VALUE/EBITDA (MFG BUYOUTS ONLY)

TEV	2003 -2014	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Please note that N for 2003-2014 encompasses twelve years of activity.

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CHART 4

CONVERTED PAPER PRODUCT (NAICS CODE: 3222)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3222 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

CHART 5

ARCHITECTURAL & STRUCTURAL METALS (NAICS CODE: 3323)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3323 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

CHART 6

INDUSTRIAL MACHINERY (NAICS CODE: 3332)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3332 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

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CHART 7

SEMICONDUCTOR & OTHER ELECTRONIC COMPONENTS (NAICS CODE: 3344)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3344 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

CHART 8

HOUSEHOLD & INSTITUTIONAL FURNITURE & KITCHEN CABINET (NAICS CODE: 3371)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3371 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

CHART 9

MEDICAL EQUIPMENT & SUPPLIES (NAICS CODE: 3391)

2003–2019

TEV	TEV ($)	Revenue ($)	Rev Growth (%)	EBITDA Margin (%)	TEV/ Revenue	TEV/ EBITDA	N	Std Dev
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: NAICS 3391 encompasses deals identified by acquirers as being in manufacturing, as well as other industry categories. Revenue and margin data for the trailing twelve month (TTM) period prior to closing.

SOURCE: GF DATA®

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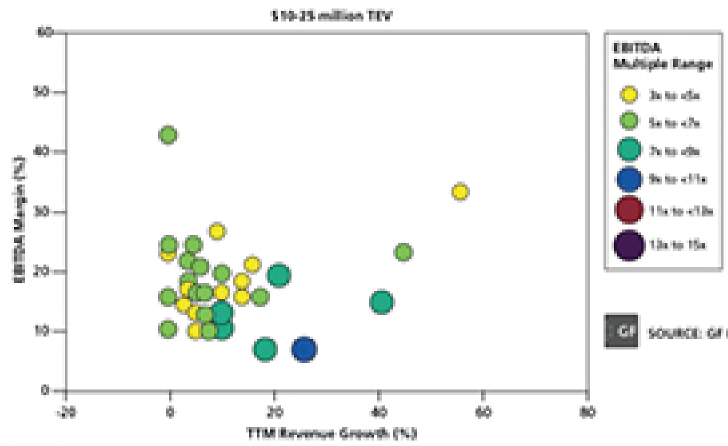
CHART 10

EBITDA MARGIN, REVENUE GROWTH, AND TEV/EBITDA

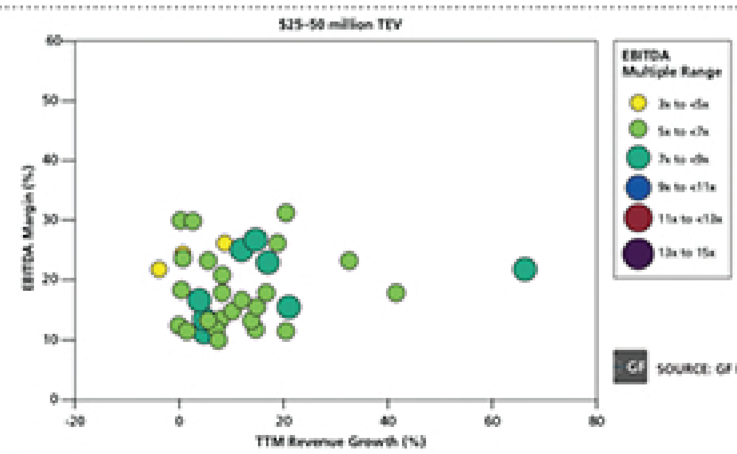
(MANUFACTURING BUSINESS CATEGORY)

2019



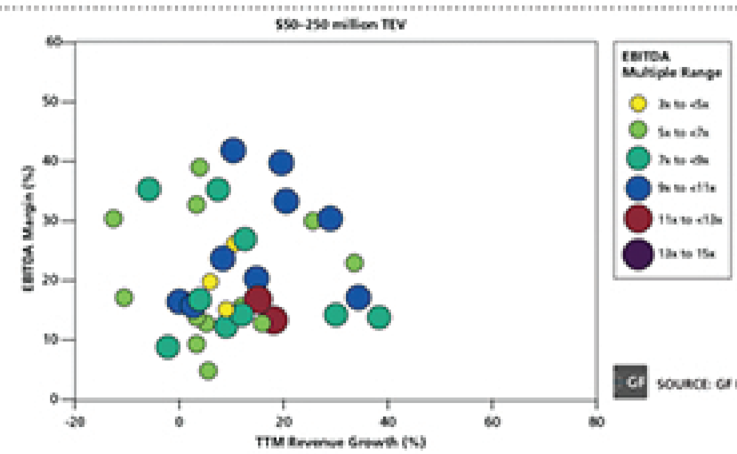
SOURCE: GF DATA®

CHART 11



SOURCE: GF DATA®

CHART 12



SOURCE: GF DATA®

- The heat maps set forth in Charts 10-12 show the extent to which larger manufacturing deals commanded fuller valuations in 2019 and the extent to which above-par EBITDA margins and revenue growth drive premium pricing more predictably within that cohort.
- GF Data defines better financial performers as businesses with TTM EBITDA margins and revenue both above 10 percent or one above 12 percent and the other metric at least 8 percent. Outliers on the high side are excluded.
- Charts 13 and 14 show average equity contribution for manufacturing deals versus the total GF Data universe. Following the format adopted in our Leverage Report, we now focus on equity share in platform transactions only, avoiding the "noise" created by add-ons financed on the strength of the acquiring entity rather than the acquired. It is striking to see that for each of the past five years, the average equity contribution required of buyers in manufacturing was two or three percentage points below the average for the entire data set.
- Charts 15 and 16 set forth the debt data for the sector versus the GF Data universe in total. Debt utilization is about in line. This provides some perspective on the chronically lower equity share. Total debt in manufacturing averaged 3.9x in 2019, compared to 4.0x generally. Manufacturing valuations, though were 6.7x, a half turn off of the 7.2x average for the universe.
- Charts 17 and 18, drawn from our key deal terms report, provide general indemnification caps against breaches in reps and warranties. As noted at length in our recent Key Deal Terms Report, we saw no signs of abatement in 2019 in non-economic deal terms overall. The average general indemnification cap continued to improve, from the sellers' perspective, declining from 11.5%. For manufacturing sellers, though, the average cap slid upward, from 11.8% in 2019 to 12.2% last year.

GF Data will be providing industry drilldowns interspersed with our more comprehensive reports on this schedule:

- March: Manufacturing
- June: Distribution
- September: Health Care Services
- January 2021: Business Services

Subscribers will receive information on how these reports can be integrated into their GF Data packages as subscriptions come up for renewal.

For more information, please contact Bob Wegbreit at bw@gfdata.com.

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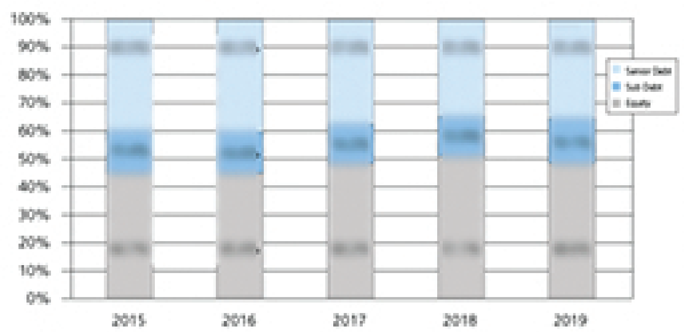
CHART 13

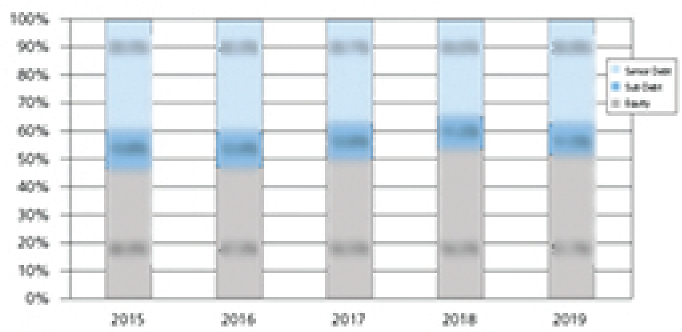
EQUITY AND DEBT CONTRIBUTION, PLATFORMS ONLY
(MANUFACTURING)



SOURCE: GF DATA®

CHART 14

EQUITY AND DEBT CONTRIBUTION, PLATFORMS ONLY
(ALL DEALS)



SOURCE: GF DATA®

CHART 15

TOTAL DEBT/EBITDA (MANUFACTURING)

TEV	2003 –2014	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Note: Deals with no debt are eliminated from leverage data, as are significant outliers. Please note that N for 2003-2014 encompasses twelve years of activity.

SOURCE: GF DATA®

CHART 16

TOTAL DEBT/EBITDA (ALL DEALS)

TEV	2003 –2014	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
100-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Note: Deals with no debt are eliminated from leverage data, as are significant outliers. Please note that N for 2003-2014 encompasses twelve years of activity.

SOURCE: GF DATA®

CHART 17

INDEMNIFICATION CAP (MANUFACTURING)

% OF TOTAL ENTERPRISE VALUE

TEV	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

SOURCE: GF DATA®

CHART 18

INDEMNIFICATION CAP (ALL DEALS)

% OF TOTAL ENTERPRISE VALUE

TEV	2015	2016	2017	2018	2019	Total	N =
10-25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25-50	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
50-250	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
N =	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

SOURCE: GF DATA®

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On-point valuation comps organized by NAICS industry code are available on line at www.gfdata.com.

We provide detailed valuation data organized by major business category and/or NAICS code. You can organize your search by TEV or by year. GF Data reports at the finest level of industry detail at which there are at least three data points.

These are the three- and four-digit NAICS groupings covered within Manufacturing:

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212	Mining (Except Oil and Gas)
213	Support Activities for Mining
2131**	Stone Mining and Quarrying
236	Building Construction
2361**	Residential Construction
237	Heavy and Civil Engineering Construction
2371**	Utility System Construction
2373**	Hway, Street & Bridge Construction
238	Speciality Trade Contracting
2381**	Foundation Structure and Bldg. Exterior
2382**	Building Equipment
2383**	Building Finishing
311	Food Manufacturing
3111**	Animal Food Manufacturing
3114**	Fruit and Veg. Preserving/Specialty Foods
3115**	Dairy Products
3116**	Animal Processing & Slaughtering
3118**	Bakeries and Tortilla Mfring
3119**	Other Food Mfring
312	Beverage and Tobacco Mfring
3121**	Beverage Mfring
313	Textile Mills
314	Textile Product Mills
315	Apparel Manufacturing
316	Leather and Allied Product Mfring
321	Wood Product Manufacturing
322	Paper Manufacturing
323	Printing and Related Support Activities
325	Chemical Manufacturing
3251**	Basic Chemicals
3252**	Resin, Synth. Rubber, and Artificial Synth. Products
3253**	Pesticide, Fertilizer & Other Ag. Products
3254**	Pharmaceutical and Medicine
3255**	Paint, Coating, and Adhesive Manufacturing
3256**	Soap, Cleaning and Toilet Prep. Products
326	Plastics and Rubber Products Mfring
3261**	Plastics Products
3262*	Rubber Products
327	Nonmetallic Mineral Product Manufacturing
3271**	Clay Products & Refractory
3272**	Glass and Glass Products
3273**	Cement & Concrete Products
331	Primary Metal Mfring
3311**	Iron & Steel Mills and Ferroalloy Mfring
3312**	Iron and Steel Pipe and Tube from Purchased Steel
3313**	Alumina and Aluminum Production and Processing
3314**	Nonferrous Metal (except Alum.) Prod./Processing
3315**	Foundries
332	Fabricated Metal Product Mfring
3321**	Forging and Stamping
3323**	Architect. & Structural Metals
3324**	Boiler, Tank, and Shipping Containers
3325**	Hardware
3327**	Machine Shops/Turned Product/Screw, Nut & Bolt
3328**	Coating, Engraving, Heat Treating Products
333	Machinery Manufacturing
3331**	Agriculture, Constr., and Mining Machinery
3332**	Industrial Machinery
3333**	Comm. & Service Industry Machinery
3334**	HVAC and Commercial Refrigeration Equip.
3335**	Metalworking Machinery
3336**	Engine, Power & Turbine Transmission Equip.
3339**	Other General Purpose Machinery
334	Computer & Electronic Prod. Mfring
3341**	Computers and Peripheral Equipment
3342**	Communications Equipment
3343**	Audio & Video Equipment
3344**	Semiconductor and Other Electronic Components
3345**	Navig., Meas., Electromed., and Control Instruments
3346**	Magnetic and Optical Media
335	Elec. Equip., Appl. and Component Mfring
3351**	Electrical Lighting Equipment
3352**	Household Appliance Mfring
3353**	Electrical Equipment
336	Transportation Equip. Mfring
3361**	Motor Vehicle Mfring
3362**	Heavy Duty Truck Manufacturing
3363**	Motor Vehicle Parts
3364**	Aerospace Products and Parts
3366**	Ship and Boat Building
337	Furniture and Related Products
3371**	Household and Institutional Furniture
3372**	Office Furniture (including Fixtures)
3379**	Mattress Manufacturing
339	Miscellaneous Mfring
3391**	Medical Equip. & Supplies

DISCLAIMER AND TERMS OF USE

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