

No attempt has been made to rank the information contained in this report in order of importance, since BPA Worldwide believes this is a judgment which must be made by the user of the report.

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**SME MEDIA** is a leading source for news and in-depth technical information about advanced manufacturing in North America. While our roots are in traditional metalworking and shop operations, we distinguish ourselves by remaining on the cutting edge and keeping our eyes on what's next, covering everything from metalworking to 3D printing.

### BRAND REPORT PURPOSE

The Brand Report provides a deeper understanding and identification of all audited touch points with customers that have interest in the brand. It is designed to present analysis of all communication channels, including a brand's unique users within each channel of, but not across, multiple media platforms. This non-integrated report contains data for each separate media channel as indicated in the Executive Summary. No attempt has been made to identify or eliminate duplication that may exist across media channels.

## CHANNELS

### MANUFACTURING ENGINEERING MAGAZINE



6 issues in the period  
90,392 average circulation

### MANUFACTURING ENGINEERING E-NEWSLETTER



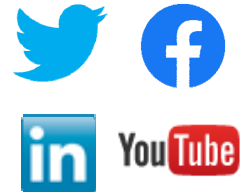
25 issued in the period  
30,459 average per occurrence

### SME/MANUFACTURING ENGINEERING WEBSITE



66,074 average users

### MANUFACTURING ENGINEERING SOCIAL MEDIA



22,304 Twitter followers  
7,607 Facebook likes  
1,022 LinkedIn group members  
1,980 YouTube Subscribers  
2,079 YouTube Views

## EXECUTIVE SUMMARY

Below are the average contacts per occurrence, including frequency per period reported.

	Non-Paid	Paid	Average
<b>MANUFACTURING ENGINEERING MAGAZINE</b> (6 issues in the period)	90,392	-	90,392
a. Print	78,028	-	78,028
b. Digital	12,364	-	12,364
1. Requested	12,364	-	12,364
2. Non-Requested	-	-	-
<b>MANUFACTURING ENGINEERING E-NEWSLETTER</b>			
Advanced Manufacturing Now (25 issued in the period)	30,459	-	30,459
<b>SME/MANUFACTURING ENGINEERING WEBSITE</b> (Monthly Users with 148,788 average Pageviews)	66,074	-	66,074
<b>MANUFACTURING ENGINEERING SOCIAL MEDIA</b>			
a. Twitter followers	*22,304	-	*22,304
b. Facebook likes	*7,607	-	*7,607
c. LinkedIn group members	*1,022	-	*1,022
d. You Tube subscribers	*1,980	-	*1,980
e. You Tube views	*2,079	-	*2,079

\*Social Media claims are cumulative figures, not averages.

**FIELD SERVED**

**MANUFACTURING ENGINEERING** serves manufacturing industries with primary focus on metalworking industries. Industries include primary metal, fabricated metal products, machinery (except electrical), electric & electronic equipment, transportation equipment, instruments & related equipment, and misc. manufacturing industries. Wholesale trade, professional, scientific & technical services, and other manufacturing industries as described in Paragraph 3a also served.

**DEFINITION OF RECIPIENT QUALIFICATION**

Qualified recipients are corporate executives, owners and managers, manufacturing production management and department, manufacturing engineering management and department, quality assurance & control management and department, product design/R&D management, engineers and department, factory automation management and department, and purchasing professionals. Also qualified are sales/marketing professionals and others allied to the field.

**AVERAGE NON-QUALIFIED CIRCULATION**

Non-Qualified Not Included Elsewhere	Copies
Other Paid Circulation	126
Advertiser and Agency	2,183
Allocated for Trade Shows and Conventions	600
All Other	5,606
<b>TOTAL</b>	<b>8,515</b>

**1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR THE PERIOD**

Qualified Circulation	Total Qualified		Qualified Non-Paid		Qualified Paid	
	Copies	Percent	Copies	Percent	Copies	Percent
Individual	90,283	99.9	90,283	99.9	-	-
Sponsored Individually Addressed	-	-	-	-	-	-
Membership Benefit	109	0.1	109	0.1	-	-
Multi-Copy Same Addressee	-	-	-	-	-	-
Single Copy Sales	-	-	-	-	-	-
<b>TOTAL QUALIFIED CIRCULATION</b>	<b>90,392</b>	<b>100.0</b>	<b>90,392</b>	<b>100.0</b>	<b>-</b>	<b>-</b>

**2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD**

2019 Issue	Print	Digital	Total Qualified
July	78,009	12,638	90,647
August	78,007	12,632	90,639
September	78,021	12,485	90,506
October	78,033	12,068	90,101
November	77,998	12,045	90,043
December	78,098	12,319	90,417

**3a. BUSINESS/OCCUPATIONAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 2019**

This issue is 0.5% or 419 copies below the average of the other 5 issues reported in Paragraph 2.

North American Industry Classification System – Business & Industry Codes – were introduced in 1997, and last updated in 2017. The NAICS system has evolved from the Standard Industrial Classification (SIC) numerical coding system last updated in 1987.

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing				Quality Assurance Control (P, Q)	Product Design Research and Development (H,I,J)	Marketing/Sales (M)	Other Qualified Personnel (N)
					Production		Engineering					
					Management (C, R)	Department (D, S)	Management (E)	Department (F, G)				
331	PRIMARY METAL MANUFACTURING											
3311	Iron and Steel Mills and Ferroalloy Manufacturing	264	0.3	93	37	21	42	21	10	23	17	-
3312	Steel Product Manufacturing from Purchased Steel	222	0.2	62	33	27	32	17	10	13	28	-
3313	Alumina and Aluminum Production and Processing	465	0.5	135	57	42	86	53	15	45	31	1
3314	Nonferrous Metal (except Aluminum) Production and Processing	229	0.3	83	26	15	39	26	7	18	14	1
3315	Foundries	383	0.4	97	40	28	82	73	14	30	18	1
	<b>Sub-Total NAICS 331</b>	<b>1,563</b>	<b>1.7</b>	<b>470</b>	<b>193</b>	<b>133</b>	<b>281</b>	<b>190</b>	<b>56</b>	<b>129</b>	<b>108</b>	<b>3</b>
332	FABRICATED METAL PRODUCT MANUFACTURING											
33211	Forging and Stamping	1,471	1.6	487	187	140	266	148	68	102	68	5
33221	Cutlery and Handtool Manufacturing	369	0.4	136	52	30	46	32	9	34	30	-
33231	Plate Work and Fabricated Structural Product Manufacturing	2,821	3.1	1,343	388	195	445	158	67	112	106	7
33232	Ornamental and Architectural Metal Products Manufacturing	2,919	3.3	1,462	379	183	452	167	64	117	92	3
33241	Power Boiler and Heat Exchanger Manufacturing	66	0.1	28	9	3	13	5	1	5	2	-
33242	Metal Tank (Heavy Gauge) Manufacturing	210	0.2	87	28	12	38	18	9	14	4	-
33243	Metal Can, Box and Other Metal Container (Light Gauge) Manufacturing	107	0.1	30	15	8	27	10	5	12	-	-
33251	Hardware Manufacturing	288	0.3	85	38	23	44	33	11	41	13	-
33261	Spring and Wire Product Manufacturing	408	0.5	160	52	28	68	32	20	30	17	1
33271	Machine Shops	12,741	14.2	9,471	899	615	817	393	213	131	164	38
33272	Turned Product and Screw, Nut and Bolt Manufacturing	549	0.6	200	89	56	69	54	36	30	15	-
33281	Coating, Engraving, Heat Treating and Allied Activities	675	0.8	293	80	36	95	34	28	36	72	1
33291	Metal Valve Manufacturing	969	1.1	280	137	87	144	126	43	107	45	-
332991	Ball and Roller Bearing Manufacturing	191	0.2	33	17	16	35	52	13	14	11	-
332992	Small Arms Ammunition Manufacturing	18	-	5	1	-	4	5	2	1	-	-
332993	Ammunition (except Small Arms) Manufacturing	13	-	1	-	1	4	2	1	4	-	-
332994	Small Arms Manufacturing (pt)	176	0.2	40	20	20	15	48	11	21	1	-
332996	Fabricated Pipe and Pipe Fitting Manufacturing	373	0.4	136	50	33	72	26	15	16	24	1
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing (pt)	1,176	1.3	465	136	78	202	87	27	111	69	1
	<b>Sub-Total NAICS 332</b>	<b>25,540</b>	<b>28.4</b>	<b>14,742</b>	<b>2,577</b>	<b>1,564</b>	<b>2,856</b>	<b>1,430</b>	<b>643</b>	<b>938</b>	<b>733</b>	<b>57</b>
333	MACHINERY MANUFACTURING											
333111	Farm Machinery and Equipment Manufacturing (pt)	1,774	2.0	846	182	82	247	270	25	99	21	2
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	381	0.4	144	48	22	69	57	6	31	3	1
333120	Construction Machinery Manufacturing	1,854	2.0	832	176	71	308	285	33	123	21	5
333131	Mining Machinery and Equipment Manufacturing	348	0.4	133	34	15	62	75	3	21	4	1
333132	Oil and Gas Field Machinery and Equipment Manufacturing	1,057	1.2	314	147	50	182	203	47	100	13	1
333241	Food Product Machinery Manufacturing	200	0.2	67	33	17	45	16	1	20	1	-
333242	Semiconductor Machinery Manufacturing	27	-	13	3	1	2	4	-	3	1	-
333243	Sawmill, Woodworking and Paper Machinery Manufacturing	141	0.1	64	19	9	17	8	3	13	8	-
333244	Printing Machinery and Equipment Manufacturing	81	0.1	27	8	1	17	5	3	16	4	-
333249	Other Industrial Machinery Manufacturing	585	0.6	167	80	53	96	58	16	71	41	3
333314	Optical Instrument and Lens Manufacturing	141	0.2	29	17	21	17	23	2	19	13	-
333316	Photographic and Photocopying Equipment Manufacturing	52	-	11	6	3	16	4	-	9	3	-
333318	Other Commercial and Service Industry Machinery Manufacturing (pt)	496	0.6	152	59	46	86	55	11	58	27	2
333413	Industrial and Commercial Fan and Blower Manufacturing	262	0.3	59	35	16	55	29	3	32	32	1
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing (pt)	415	0.5	129	37	53	85	43	11	44	13	-
333415	Air-Conditioning and Warm Air Heating Equipment	473	0.5	114	52	28	135	63	7	55	19	-
333511	Industrial Mold Manufacturing	137	0.2	75	10	7	20	8	1	8	8	-
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	1,049	1.2	480	136	63	198	56	19	52	42	3
333515	Cutting Tool and Machine Tool Accessory Manufacturing	663	0.7	209	54	40	92	82	19	65	102	-

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing				Quality Assurance Control (P, Q)	Product Design Research and Development (H, I, J)	Marketing/Sales (M)	Other Qualified Personnel (N)
					Production		Engineering					
					Management (C, R)	Department (D, S)	Management (E)	Department (F, G)				
333517	Machine Tool Manufacturing	1,177	1.3	378	120	93	139	115	31	116	181	4
333519	Rolling Mill and other Metalworking Machinery Manufacturing	249	0.3	79	21	15	37	22	12	36	24	3
333611	Turbine and Turbine Generator Set Unit Manufacturing	475	0.5	115	34	42	73	108	19	71	9	4
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	102	0.1	37	18	11	8	14	4	4	6	-
333613	Mechanical Power Transmission Equipment Manufacturing	171	0.2	44	20	18	24	37	7	12	8	1
333618	Other Engine Equipment Manufacturing (pt)	232	0.3	76	21	16	41	42	8	21	6	1
333912	Air and Gas Compressor Manufacturing	284	0.3	73	26	32	48	46	5	34	18	2
333914	Measuring, Dispensing, and other Pumping Equipment Manufacturing	630	0.7	191	74	47	105	90	29	71	23	-
333921	Elevator and Moving Stairway Manufacturing	37	-	14	5	-	6	2	2	6	2	-
333922	Conveyor and Conveying Equipment Manufacturing (pt)	283	0.3	103	43	11	55	23	2	22	24	-
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing (pt)	64	0.1	18	4	9	16	6	1	7	3	-
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	226	0.3	89	22	13	44	25	3	22	7	1
333991	Power-Driven Handtool Manufacturing	106	0.1	22	9	7	27	12	-	19	10	-
333992	Welding and Soldering Equipment Manufacturing	246	0.3	87	20	19	33	23	8	26	29	1
333993	Packaging Machinery Manufacturing	158	0.2	39	25	16	31	18	3	21	5	-
333994	Industrial Process Furnace and Oven Manufacturing	178	0.2	62	22	7	39	15	3	14	16	-
333995	Fluid Power Cylinder and Actuator Manufacturing	82	0.1	31	11	4	12	8	4	5	6	1
333996	Fluid Power Pump and Motor Manufacturing	96	0.1	25	6	10	15	23	5	11	1	-
333997	Scale and Balance (except Laboratory) Manufacturing	22	-	9	3	3	1	1	2	3	-	-
333999	All Other Miscellaneous General Purpose Machinery Manufacturing (pt)	2,622	2.9	1,249	287	223	373	171	60	135	116	8
	<b>Sub-Total NAICS 333</b>	<b>17,576</b>	<b>19.5</b>	<b>6,606</b>	<b>1,927</b>	<b>1,194</b>	<b>2,876</b>	<b>2,145</b>	<b>418</b>	<b>1,495</b>	<b>870</b>	<b>45</b>
334	COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING											
3341	Computer and Peripheral Equipment Manufacturing	196	0.2	55	14	10	26	20	13	39	17	2
3342	Communications Equipment Manufacturing	256	0.3	74	24	20	40	27	8	58	4	1
3343	Audio and Video Equipment Manufacturing	51	0.1	16	3	5	8	4	2	13	-	-
3344	Semiconductor and Other Electronic Component Manufacturing	911	1.0	201	87	62	171	140	45	137	66	2
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	1,079	1.2	377	50	47	106	280	85	123	10	1
334511	Search, Detection, Navigation, Guidance, Aeronautical and Nautical System and Instrument Manufacturing	1,172	1.3	173	93	79	186	302	56	263	17	3
334512	Automatic Environmental Control Manufacturing for Residential, Commercial and Appliance Use	330	0.4	119	21	29	59	50	12	27	13	-
334513	Instruments and Related Products Manufacturing for Measuring, Displaying and Controlling Industrial Process Variables	393	0.4	82	57	53	56	55	11	57	19	3
334514	Totalizing Fluid Meter and Counting Device Manufacturing	92	0.1	21	12	10	16	14	2	13	2	2
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	144	0.2	28	10	10	26	29	3	28	10	-
334516	Analytical Laboratory Instrument Manufacturing	180	0.2	43	15	17	30	24	6	34	10	1
334517	Irradiation Apparatus Manufacturing	227	0.3	85	15	11	21	47	16	28	4	-
334519	Other Measuring and Controlling Device Manufacturing	765	0.8	181	70	73	119	111	42	125	43	1
3346	Manufacturing and Reproducing Magnetic and Optical Media	14	-	2	-	1	1	2	1	5	2	-
	<b>Sub-Total NAICS 334</b>	<b>5,810</b>	<b>6.5</b>	<b>1,457</b>	<b>471</b>	<b>427</b>	<b>865</b>	<b>1,105</b>	<b>302</b>	<b>950</b>	<b>217</b>	<b>16</b>
335	ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING											
33511	Electric Lamp Bulb and Part Manufacturing	37	0.1	11	2	3	8	4	2	7	-	-
33512	Lighting Fixture Manufacturing	430	0.5	155	43	32	89	44	12	49	6	-
33521	Small Electrical Appliance Manufacturing	71	0.1	21	7	5	21	5	1	8	3	-
33522	Major Appliance Manufacturing	76	0.1	10	11	4	19	14	6	10	-	2
33531	Electrical Equipment Manufacturing	1,631	1.8	498	157	96	308	196	55	202	116	3
33591	Battery Manufacturing	34	-	6	4	2	5	4	2	10	1	-
33592	Communication and Energy Wire and Cable Manufacturing	193	0.2	52	19	13	35	27	11	25	11	-
33593	Wiring Device Manufacturing	202	0.2	32	33	39	40	18	3	24	12	1
33599	All Other Electrical Equipment and Component Manufacturing	373	0.4	110	46	25	51	37	14	49	39	2
	<b>Sub-Total NAICS 335</b>	<b>3,047</b>	<b>3.4</b>	<b>895</b>	<b>322</b>	<b>219</b>	<b>576</b>	<b>349</b>	<b>106</b>	<b>384</b>	<b>188</b>	<b>8</b>

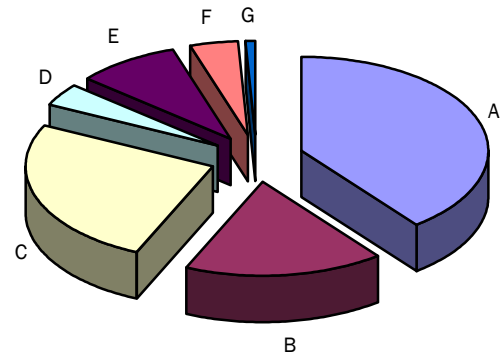
NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing		Quality Assurance Control (P, Q)	Product Design Research and Development (H,I,J)	Marketing/Sales (M)	Other Qualified Personnel (N)		
					Production						Engineering	
					Management (C, R)	Department (D, S)					Management (E)	Department (F, G)
336	TRANSPORTATION EQUIPMENT MANUFACTURING											
336111	Automobile Manufacturing	729	0.8	289	53	28	121	143	13	77	4	1
336112	Light Truck and Utility Vehicle Manufacturing	50	0.1	24	8	-	5	6	-	5	2	-
336120	Heavy Duty Truck Manufacturing	317	0.4	118	41	9	48	75	6	17	3	-
336211	Motor Vehicle Body Manufacturing (pt)	885	1.0	359	70	34	109	139	12	149	12	1
336212	Truck Trailer Manufacturing	438	0.5	231	51	11	59	62	9	13	1	1
336213	Motor Home Manufacturing	70	0.1	34	8	3	11	8	-	5	1	-
336214	Travel Trailer and Camper Manufacturing (pt)	181	0.2	138	13	1	16	5	1	5	2	-
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	326	0.4	90	33	16	49	75	13	41	8	1
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing (pt)	274	0.3	98	22	5	41	67	7	28	6	-
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	134	0.1	43	16	2	16	42	3	10	2	-
336340	Motor Vehicle Brake System Manufacturing	153	0.2	38	25	8	17	52	3	8	2	-
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	258	0.3	99	22	8	39	67	4	19	-	-
336360	Motor Vehicle Seating and Interior Trim Manufacturing	39	-	5	6	2	7	7	2	7	3	-
336370	Motor Vehicle Metal Stamping	369	0.4	85	47	24	66	80	14	41	11	1
336390	All Other Motor Vehicle Parts Manufacturing (pt)	3,632	4.0	1,297	353	152	586	769	83	333	54	5
336411	Aircraft Manufacturing	1,668	1.9	455	106	79	202	441	104	272	4	5
336412	Aircraft Engine and Engine Parts Manufacturing (pt)	1,613	1.8	391	116	88	230	448	155	170	14	1
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	4,543	5.0	1,479	419	183	514	1,083	419	388	55	3
336414	Guided Missile and Space Vehicle Manufacturing	298	0.3	32	26	17	43	102	19	54	-	5
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	211	0.2	41	14	7	34	73	13	27	2	-
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	332	0.4	75	31	25	36	114	21	24	6	-
336510	Railroad Rolling Stock Manufacturing	118	0.1	42	14	7	27	6	6	15	1	-
336611	Ship Building & Repairing	279	0.3	83	48	28	56	35	8	18	1	2
336612	Boat Building	276	0.3	160	25	9	43	14	3	20	2	-
336991	Motorcycle, Bicycle, and Parts Manufacturing (pt)	230	0.3	103	22	9	32	31	6	25	1	1
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing (pt)	293	0.3	90	26	9	44	62	20	41	1	-
336999	All Other Transportation Equipment Manufacturing	201	0.2	83	15	15	44	13	8	21	1	1
	<b>Sub-Total NAICS 336</b>	<b>17,917</b>	<b>19.9</b>	<b>5,982</b>	<b>1,630</b>	<b>779</b>	<b>2,495</b>	<b>4,019</b>	<b>952</b>	<b>1,833</b>	<b>199</b>	<b>28</b>
337	FURNITURE AND RELATED PRODUCT MANUFACTURING											
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	273	0.3	88	25	23	57	23	4	46	6	1
3372	Office Furniture (including Fixtures) Manufacturing	182	0.2	49	25	15	43	18	5	24	3	-
3379	Other Furniture Related Product Manufacturing	20	-	10	-	-	2	1	-	7	-	-
	<b>Sub-Total NAICS 337</b>	<b>475</b>	<b>0.5</b>	<b>147</b>	<b>50</b>	<b>38</b>	<b>102</b>	<b>42</b>	<b>9</b>	<b>77</b>	<b>9</b>	<b>1</b>
339	MISCELLANEOUS MANUFACTURING											
339112	Surgical and Medical Instrument Manufacturing	4,681	5.2	1,364	363	183	514	1,046	443	704	59	5
339113	Surgical Appliance and Supplies Manufacturing	1,663	1.8	739	111	48	161	287	107	187	20	3
339114	Dental Equipment and Supplies Manufacturing	502	0.6	209	42	22	47	91	32	54	4	1
339115	Ophthalmic Goods Manufacturing	345	0.4	156	25	21	29	60	20	30	4	-
339116	Dental Laboratories	234	0.3	173	17	11	23	1	3	5	1	-
3399	Other Miscellaneous Manufacturing	1,293	1.4	463	141	96	183	131	43	167	68	1
	<b>Sub-Total NAICS 339</b>	<b>8,718</b>	<b>9.7</b>	<b>3,104</b>	<b>699</b>	<b>381</b>	<b>957</b>	<b>1,616</b>	<b>648</b>	<b>1,147</b>	<b>156</b>	<b>10</b>
	<b>Sub-Total Metalworking Manufacturing</b>	<b>80,646</b>	<b>89.6</b>	<b>33,403</b>	<b>7,869</b>	<b>4,735</b>	<b>11,008</b>	<b>10,896</b>	<b>3,134</b>	<b>6,953</b>	<b>2,480</b>	<b>168</b>
325	Chemical Manufacturing	424	0.4	98	44	35	42	42	23	79	60	1
326	Plastics and Rubber Products Manufacturing	794	0.9	183	85	85	134	106	49	96	52	4
327	Nonmetallic Mineral Product Manufacturing	246	0.3	45	26	25	30	38	6	45	30	1
	Other Mfg NAICS: 311-316,321-324	528	0.6	160	55	34	88	52	20	64	50	5
	<b>Sub-Total Non-Metalworking Manufacturing</b>	<b>1,992</b>	<b>2.2</b>	<b>486</b>	<b>210</b>	<b>179</b>	<b>294</b>	<b>238</b>	<b>98</b>	<b>284</b>	<b>192</b>	<b>11</b>
	<b>Sub-Total Manufacturing Industries</b>	<b>82,638</b>	<b>91.8</b>	<b>33,889</b>	<b>8,079</b>	<b>4,914</b>	<b>11,302</b>	<b>11,134</b>	<b>3,232</b>	<b>7,237</b>	<b>2,672</b>	<b>179</b>

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing		Quality Assurance Control (P, Q)	Product Design Research and Development (H, I, J)	Marketing/Sales (M)	Other Qualified Personnel (N)		
					Management (C, R)	Department (D, S)					Management (E)	Department (F, G)
111-115	Agriculture	2	-	-	-	1	-	-	-	-	1	
211-213	Mining	7	-	1	2	-	-	1	-	-	3	
221	Utilities	6	-	-	1	-	-	1	-	-	3	
236-238	Construction	40	-	11	4	2	5	3	-	5	4	
423-425	Wholesale Trade Durable Goods	4,195	4.7	1,572	292	247	438	257	89	332	943	25
441-454	Retail Trade	44	-	10	1	1	5	3	1	2	12	9
481-493	Transportation And Warehousing	10	-	1	-	2	3	2	1	-	1	-
511-562	Services	2,418	2.7	778	162	156	219	203	50	444	312	94
611	Educational Services	426	0.5	17	4	7	6	12	2	30	1	347
621-624	Health Care	19	-	3	1	-	1	2	1	1	-	10
711-713	Arts, Entertainment Recreation	5	-	3	-	1	-	-	-	-	1	-
721-722	Accommodations And Food	4	-	2	-	-	-	-	-	1	1	-
811-814	Other Services	80	0.1	27	8	1	5	2	-	3	8	26
921-928	Public Administration	149	0.2	11	12	36	15	18	11	34	-	12
<b>Sub Total Non-Manufacturing</b>		<b>7,405</b>	<b>8.2</b>	<b>2,436</b>	<b>487</b>	<b>454</b>	<b>697</b>	<b>504</b>	<b>155</b>	<b>852</b>	<b>1,286</b>	<b>534</b>
<b>TOTAL QUALIFIED CIRCULATION</b>		<b>90,043</b>	<b>100.0</b>	<b>36,325</b>	<b>8,566</b>	<b>5,368</b>	<b>11,999</b>	<b>11,638</b>	<b>3,387</b>	<b>8,089</b>	<b>3,958</b>	<b>713</b>

- (B) CORPORATE EXECUTIVE titles include Chairman, General Manager, Owner, Partner, President, Vice President.  
 (C) MANUFACTURING PRODUCTION MANAGEMENT titles include Factory Manager, Machine Shop Manager, Manufacturing Manager, Manufacturing Production Manager, Plant Manager, Production Manager, Shop Manager, Tool Room Manager and Works Manager. Includes corporate titles in production department.  
 (D) MANUFACTURING PRODUCTION DEPARTMENT titles include Foreman, Department Supervisor, Manufacturing Supervisor, Master Mechanic, Plant Supervisor, Production Supervisor.  
 (E) MANUFACTURING ENGINEERING MANAGEMENT titles include Chief Tool Engineer, Chief of Manufacturing Development, Director of Manufacturing Engineering, Chief Methods Engineer, Manager of Process Engineering, Director of Production Engineering, Manager of Tool Design and Head of Tool Engineering. Includes corporate titles in engineering department.  
 (F) MANUFACTURING ENGINEERING (ENGINEERS) includes most engineering titles where the individual does not manage the department.  
 (G) MANUFACTURING (OTHER MANUFACTURING PERSONNEL) titles include Diemaker, Expediter, Leadman, Chief Machinist and Chief Toolmaker.  
 (P) QUALITY ASSURANCE/CONTROL MANAGEMENT titles include Quality Assurance Manager, Quality Control Director, Chief of Quality Engineering.  
 (Q) QUALITY ASSURANCE/CONTROL ENGINEERING titles include Quality Assurance Engineer, Quality Control Foreman, Quality Supervisor.  
 (H) PRODUCT DESIGN, RESEARCH AND DEVELOPMENT MANAGEMENT titles include Director of Design Engineering, Chief Draftsman, Manager of Product Engineering and Director of Research.  
 (I) PRODUCT DESIGN, RESEARCH AND DEVELOPMENT ENGINEERING titles include Design Project Engineer, Development Engineer, Research & Design Engineer.  
 (J) PRODUCT DESIGN, RESEARCH AND DEVELOPMENT (OTHER DESIGN PERSONNEL) titles include Draftsman.  
 (R) FACTORY AUTOMATION MANAGEMENT titles include Factory Automation Manager, Chief Factory Automation Engineer, Manager of Systems Design, Chief Systems Engineer.  
 (S) FACTORY AUTOMATION ENGINEERING titles include Factory Automation Engineer, Automation Foreman, Systems Designer, Systems Engineer.  
 (L) PURCHASING titles include Buyer, Procurement Chief, and Purchasing Manager.  
 (M) MARKETING/SALES  
 (N) OTHER QUALIFIED PERSONNEL

### 3a. Breakout of Qualified Circulation by Functions (Please Refer to Paragraph 3a for Complete Descriptions)

Functions	Total Qualified	Percent of Total
A. Company Management, Corporate Executives and Purchasing	36,325	40.3
B. Manufacturing Production: Management & Department	13,934	15.5
C. Manufacturing Engineering: Management & Department	23,637	26.2
D. Quality Assurance/Control	3,387	3.8
E. Product Design Research and Development	8,089	9.0
F. Marketing/Sales	3,958	4.4
G. Other Qualified Personnel	713	0.8



**TOTAL QUALIFIED 90,043 100.0**

### 3b. QUALIFICATION SOURCE BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 2019

Qualification Source	Qualified Within					Total Qualified	Percent
	1 Year	2 Years	3 Years	Print	Digital		
I. Direct Request:	<b>33,677</b>	<b>24,163</b>	-	<b>45,813</b>	<b>12,027</b>	<b>57,840</b>	<b>64.2</b>
II. Request from recipient's company:	<b>23</b>	<b>20</b>	-	<b>43</b>	-	<b>43</b>	<b>0.1</b>
III. Membership Benefit:	<b>60</b>	<b>44</b>	-	<b>86</b>	<b>18</b>	<b>104</b>	<b>0.1</b>
IV. *Communication from recipient or recipient's company (other than request):	<b>9,307</b>	-	-	<b>9,307</b>	-	<b>9,307</b>	<b>10.3</b>
V. TOTAL - Sources other than above (listed alphabetically):	<b>22,749</b>	-	-	<b>22,749</b>	-	<b>22,749</b>	<b>25.3</b>
Association rosters and directories	-	-	-	-	-	-	-
*Business directories	7,610	-	-	7,610	-	7,610	8.5
Manufacturer's, distributor's, and wholesaler's lists	-	-	-	-	-	-	-
*Other sources	15,139	-	-	15,139	-	15,139	16.8
VI. Single Copy Sales:	-	-	-	-	-	-	-
<b>TOTAL QUALIFIED CIRCULATION</b>	<b>65,816</b>	<b>24,227</b>	-	<b>77,998</b>	<b>12,045</b>	<b>90,043</b>	<b>100.0</b>
<b>PERCENT</b>	<b>73.1</b>	<b>26.9</b>	-	<b>86.6</b>	<b>13.4</b>	<b>100.0</b>	

\*See Additional Data

**GEOGRAPHICAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 2019\***

State	Total Qualified	Percent	State	Total Qualified	Percent
Maine	395		Kentucky	962	
New Hampshire	1,077		Tennessee	1,413	
Vermont	350		Alabama	1,096	
Massachusetts	3,976		Mississippi	336	
Rhode Island	494		<b>EAST SO. CENTRAL</b>	<b>3,807</b>	<b>4.2</b>
Connecticut	3,738		Arkansas	429	
<b>NEW ENGLAND</b>	<b>10,030</b>	<b>11.1</b>	Louisiana	624	
New York	3,326		Oklahoma	958	
New Jersey	1,507		Texas	6,065	
Pennsylvania	3,664		<b>WEST SO. CENTRAL</b>	<b>8,076</b>	<b>9.0</b>
<b>MIDDLE ATLANTIC</b>	<b>8,497</b>	<b>9.4</b>	Montana	173	
Ohio	5,020		Idaho	314	
Indiana	2,825		Wyoming	69	
Illinois	5,315		Colorado	705	
Michigan	5,806		New Mexico	230	
Wisconsin	3,526		Arizona	1,161	
<b>EAST NO. CENTRAL</b>	<b>22,492</b>	<b>25.0</b>	Utah	720	
Minnesota	2,692		Nevada	273	
Iowa	1,265		<b>MOUNTAIN</b>	<b>3,645</b>	<b>4.1</b>
Missouri	1,515		Alaska	50	
North Dakota	234		Washington	1,686	
South Dakota	330		Oregon	985	
Nebraska	542		California	12,621	
Kansas	1,090		Hawaii	36	
<b>WEST NO. CENTRAL</b>	<b>7,668</b>	<b>8.5</b>	<b>PACIFIC</b>	<b>15,378</b>	<b>17.1</b>
Delaware	147		<b>UNITED STATES</b>	<b>89,781</b>	<b>99.7</b>
Maryland	693		U.S. Territories	35	
Washington, DC	21		Canada	213	
Virginia	1,076		Mexico	1	
West Virginia	201		Other International	13	
North Carolina	2,180		APO/FPO	-	
South Carolina	1,436				
Georgia	1,931				
Florida	2,503				
<b>SOUTH ATLANTIC</b>	<b>10,188</b>	<b>11.3</b>			
			<b>TOTAL QUALIFIED CIRCULATION</b>	<b>90,043</b>	<b>100.0</b>

\*See Additional Data

**E-NEWSLETTER CHANNEL**

2019	Advanced Manufacturing Now
<b>JULY</b>	
July 3	30,769
July 10	30,595
July 17	30,680
July 24	29,929
July 31	30,114
<b>AUGUST</b>	
August 7	29,919
August 14	30,053
August 21	30,373
August 28	30,413
<b>SEPTEMBER</b>	
September 4	30,678
September 11	30,340
September 18	30,551
September 25	31,146
<b>OCTOBER</b>	
October 2	30,445
October 9	30,024
October 16	30,320
October 23	30,356
October 30	30,257
<b>NOVEMBER</b>	
November 6	30,837
November 13	30,802
November 20	30,719
November 27	30,723
<b>DECEMBER</b>	
December 4	30,573
December 11	30,438
December 18	30,429
<b>AVERAGE:</b>	<b>30,459</b>

Advanced Manufacturing Now (25 issued in the period)



# WEBSITE CHANNEL

## WWW.SME.ORG

2019	Pageviews	Sessions	Users	Average Session Duration
July	108,998	47,757	40,140	1:48
August	120,322	58,113	50,273	1:29
September	138,016	67,878	58,776	1:27
October	178,743	94,636	79,852	1:21
November	184,974	106,867	88,775	1:10
December	161,676	94,519	78,629	1:07
<b>AVERAGE:</b>	<b>148,788</b>	<b>78,295</b>	<b>66,074</b>	<b>1:23</b>

July – December 2019 data was provided by Google Analytics. All website activity is audited by BPA Worldwide.

### WEBSITE GLOSSARY

**Pageviews:** A Pageview is recorded each time a page implanted with the JavaScript code (tag) is displayed in a browser window. This will occur whether the page is served directly from the web server, from a proxy, or from the browser's cache.

**Sessions:** A single continuous set of activity attributable to a cookie browser resulting in one or more pulled text and/or graphics downloads from a site. A period of 30 minutes of inactivity will terminate the session.

**Users:** An identified and unduplicated Cookie Browser that accesses Internet content or advertising during a measurement period.

**Average Session Duration:** The time visitors remain on a site per session.

# SOCIAL MEDIA CHANNEL

## Manufacturing Engineering Social Media



Twitter followers



Facebook likes



LinkedIn group members



You Tube Subscribers



You Tube Views (Note 1)

2019	<a href="http://twitter.com/SMEMediaNews">http://twitter.com/SMEMediaNews</a>	<a href="https://www.facebook.com/SMEMediaNews">https://www.facebook.com/SMEMediaNews</a>	<a href="http://www.linkedin.com/groups/4237717">http://www.linkedin.com/groups/4237717</a>	<a href="http://www.youtube.com/c/SMEMedia">http://www.youtube.com/c/SMEMedia</a>	<a href="http://www.youtube.com/mfgengmedia">http://www.youtube.com/mfgengmedia</a>
Beginning Balance	21,932	7,662	1,035	1,907	1,888
July	22,005	7,655	1,039	1,921	1,842
August	22,053	7,653	1,039	1,929	2,022
September	22,097	7,677	1,039	1,930	2,125
October	22,198	7,665	1,036	1,950	2,681
November	22,239	7,655	1,032	1,970	2,443
December	22,304	7,607	1,022	1,980	2,079

Note 1: You Tube View data is a monthly view figure not an aggregate figure.

# ADDITIONAL DATA

### MAGAZINE: METHOD OF DISTRIBUTION:

All qualified circulation conforms to the field served and definition of recipient qualification, as reported. Print copies are distributed via postal services or other carriers. Recipients of the digital version are notified via email when the Version is available.

### STATEMENT OF CONTENT PLATFORM:

Editorial Replica – If a print edition exists, editorial and design are unchanged from the original print edition. Each issue's content and design are identical to the original edition. Apart from minor updates, the content cannot change once the issue is made available.

### PARAGRAPH 3b:

Communication from recipient or recipient's company (other than request) includes 1 source of circulation for a quantity of 9,307 copies or 10.3%, including SME show registrants. Business directories include 1 source of circulation for a quantity of 7,610 copies or 8.5%, including InfoUSA. Other sources include 2 sources of circulation for quantities of 4,661 copies or 5.2% to 10,478 copies or 11.6%, including OMNI.

### GEOGRAPHIC DISTRIBUTION:

Geographic data for E-Newsletter, Website and Social Media are not reported at the media owner's option.

### PUBLISHER'S AFFIDAVIT

We hereby make oath and say that all data set forth in this statement are true.

Dave O'Neil, Vice President

Mary Venianakis, Circulation/Audience Manager

(At least one of the above signatures must be that of an officer of the publishing company or its authorized representative.)

#### IMPORTANT NOTE:

This unaudited brand report has been checked against the previous audit report. It will be included in the annual audit made by BPA Worldwide.

Date signed

January 29, 2020

State

Michigan

County

Oakland

Received by BPA Worldwide

January 29, 2020

Type

BD

ID Number

M018B0D9

### About BPA Worldwide

A not-for-profit organization since 1931 and headquartered in Shelton, Connecticut, USA, BPA has a global membership, spanning more than 20 countries. The organization conducts 2,500+ audits for media brands in print, online/digital and live events. In addition, the BPA-iCompli division verifies compliance to defined industry standards, provides technology assurance, and certifies organization's sustainability practices and reporting. BPA is supported by 4,000+ advertiser and agency members. The latest innovation to move the industry forward is the BPA Media Exchange, a brand-safe and audited cooperative marketplace which offers automated solutions for the buying and selling of digital advertising.