

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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MODERN MACHINE SHOP is a business-to-business media brand that produces a monthly print magazine, digital media, research and live events for the machining and metalworking market. With an emphasis on applications stories and case histories, Modern Machine Shop provides insight into real world applications of metalworking technology. Helping the subscriber to discover, not only what the technology can do, but how it can change their business, how it can help them serve their customers better and how they can be more profitable as a business enterprise. The parent company Gardner Business Media was established with the launch of Modern Machine Shop magazine in June of 1928. To this day, the Modern Machine Shop brand is recognized around the world as a resource for metalworking product and process technology.

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

MODERN MACHINE SHOP MAGAZINE



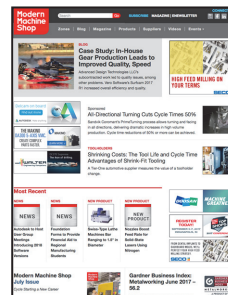
6 issues in the period
96,328 average circulation

MODERN MACHINE SHOP E-NEWSLETTERS



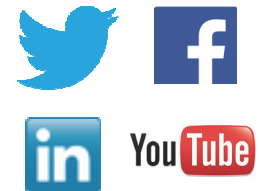
2 E-Newsletters in the period
38 total issued in the period
59,547 average per occurrence
59,502 average per occurrence

MODERN MACHINE SHOP WEBSITE



124,473 average users

MODERN MACHINE SHOP SOCIAL MEDIA



9,851 Twitter followers
9,859 Facebook likes
1,959 LinkedIn group members
288,328 YouTube views

EXECUTIVE SUMMARY

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

	Non-Paid	Paid	Average
MODERN MACHINE SHOP MAGAZINE (6 issues in the period)	96,328	-	96,328
MODERN MACHINE SHOP E-NEWSLETTERS			
a. MMS Extra (12 issued in the period)	59,547	-	59,547
b. The Shop - Blog (26 issued in the period)	59,502	-	59,502
MODERN MACHINE SHOP WEBSITE (Monthly Users with 240,059 average Pageviews)	124,473	-	124,473
MODERN MACHINE SHOP SOCIAL MEDIA			
a. Twitter followers	*9,851	-	*9,851
b. Facebook likes	*9,859	-	*9,859
c. LinkedIn group members	*1,959	-	*1,959
d. YouTube views	*288,328	-	*288,328

*Social Media claims are cumulative figures, not averages.

FIELD SERVED

MODERN MACHINE SHOP serves the metalworking industry. Included are plants performing metalworking operations and whose products fall in manufacturing industries. Also served are other manufacturing, wholesale trade, and professional, scientific, technical, and educational services.

DEFINITION OF RECIPIENT QUALIFICATION

Qualified recipients include corporate executives as well as company management, manufacturing production and manufacturing engineering management and departments, quality assurance and quality control management and department, product design management and department, research & development management and department, factory automation management and department, purchasing and other titled and non-titled personnel and company copies.

PURPOSE

Included herein is a supplementary analysis of recipients who responded to the question "Which of the following markets do you manufacture for?"

AVERAGE NON-QUALIFIED CIRCULATION

Non-Qualified Not Included Elsewhere	Copies
Other Paid Circulation	76
Advertiser and Agency	4,636
Allocated for Trade Shows and Conventions	200
All Other	767
TOTAL	5,679

1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR PERIOD

Qualified Circulation	Total Qualified		Qualified Non-Paid		Qualified Paid	
	Copies	Percent	Copies	Percent	Copies	Percent
Individual	96,328	100.0	96,328	100.0	-	-
Sponsored Individually	-	-	-	-	-	-
Addressed	-	-	-	-	-	-
Membership Benefit	-	-	-	-	-	-
Multi-Copy Same Addressee	-	-	-	-	-	-
Single Copy Sales	-	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	96,328	100.0	96,328	100.0	-	-

2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD

2018 Issue	Total Qualified
January	95,942
February	96,200
March	96,305
April	95,983
May	96,390
June	97,151

3a. BUSINESS/OCCUPATIONAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 2018

This issue is 0.1% or 74 copies above the average of the other 5 issues reported in Paragraph 2.

NAICS	Business and Industry	Total Qualified	Percent of Total	Manufacturing							Other NEC (A,U)
				Production		Engineering			Sales & Marketing (X,Z)		
				Company Management, Corporate Executives and Purchasing (B,L)	Manu- facturing Production Management or Department (C,D,G,R,S)	Manu- facturing Engineering Management or Department (E,F,T,V)	Quality Assurance Control (P,Q)	Product Design Research and Development (H,I,J)		Educational Or Government (N)	
325	CHEMICAL MANUFACTURING	493	0.5	165	91	135	11	57	3	26	5
326	PLASTICS AND RUBBER PRODUCTS MANUFACTURING										
326 (Excl. 326199)	Plastics and Rubber Products Manufacturing	663	0.7	182	187	211	15	53	-	13	2
326199	All Other Plastics Product Manufacturing	1,710	1.8	582	469	475	23	108	4	29	20
	Subtotal NAICS 326	2,373	2.5	764	656	686	38	161	4	42	22
327	NONMETALLIC MINERAL PRODUCT MANUFACTURING	295	0.3	82	80	87	2	25	1	14	4
331	PRIMARY METAL MANUFACTURING										
3311	Iron and Steel Mills and Ferroalloy Manufacturing	356	0.4	161	112	55	7	11	-	8	2
3312	Steel Product Manufacturing from Purchased Steel	199	0.2	58	59	51	10	11	-	8	2
3313	Alumina and Aluminum Production and Processing	161	0.2	44	51	48	6	6	-	3	3
3314	Nonferrous Metal (except Aluminum) Production and Processing	181	0.2	50	48	54	4	18	-	7	-
3315	Foundries	735	0.7	180	238	238	19	39	2	17	2
	Sub-Total NAICS 331	1,632	1.7	493	508	446	46	85	2	43	9
332	FABRICATED METAL PRODUCT MANUFACTURING										
33211	Forging and Stamping	1,152	1.2	466	331	256	34	39	1	12	13
33221	Cutlery and Handtool Manufacturing	434	0.5	181	122	82	5	25	-	17	2
33231	Plate Work and Fabricated Structural Product Manufacturing	821	0.9	385	254	128	11	22	-	14	7
33232	Ornamental and Architectural Metal Products Manufacturing	779	0.8	349	238	142	12	22	-	10	6
33241	Power Boiler and Heat Exchanger Manufacturing (pt)	50	0.1	10	17	15	-	6	1	1	-
33242	Metal Tank (Heavy Gauge) Manufacturing	39	-	18	10	8	-	3	-	-	-
33243	Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing	44	-	16	16	8	1	2	-	-	1
33251	Hardware Manufacturing (pt)	276	0.3	103	87	59	6	10	1	7	3
33261	Spring and Wire Product Manufacturing	315	0.3	146	73	64	6	21	-	5	-
33271	Machine Shops	20,633	21.4	13,079	4,306	2,015	463	297	28	308	137
33272	Turned Product and Screw, Nut and Bolt Manufacturing	2,455	2.6	1,155	664	439	98	41	2	44	12
33281	Coating, Engraving, Heat Treating, and Allied Activities	692	0.7	309	195	123	18	15	-	29	3
33291	Metal Valve Manufacturing	939	1.0	177	403	258	26	51	1	16	7
332991	Ball and Roller Bearing Manufacturing	250	0.3	45	56	121	7	13	-	7	1
332992	Small Arms Ammunition Manufacturing	43	-	12	11	14	2	3	1	-	-
332993	Ammunition (except Small Arms) Manufacturing	39	-	12	8	13	-	4	1	1	-
332994	Small Arms Ordnance, and Ordnance Accessories Manufacturing	311	0.3	115	77	82	4	24	-	2	7
332996	Fabricated Pipe and Pipe Fitting Manufacturing	237	0.2	83	76	55	8	6	-	7	2
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing (pt)	2,151	2.2	1,346	379	257	27	68	1	59	14
	Sub-Total NAICS 332	31,660	32.8	18,007	7,323	4,139	728	672	37	539	215
333	MACHINERY MANUFACTURING										
333111	Farm Machinery and Equipment Manufacturing (pt)	552	0.6	206	140	144	11	41	-	7	3
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	104	0.1	39	22	31	1	10	-	-	1
33312	Construction Machinery Manufacturing	454	0.5	125	124	149	13	33	1	7	2
333131	Mining Machinery and Equipment Manufacturing	170	0.2	59	63	37	2	6	-	3	-
333132	Oil and Gas Field Machinery and Equipment Manufacturing	491	0.5	193	171	91	6	20	-	9	1
333241	Food Product Machinery Manufacturing	305	0.3	136	78	73	1	13	1	2	1
333242	Semiconductor Machinery Manufacturing	44	-	13	8	17	2	2	-	1	1
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	285	0.3	147	61	49	2	15	-	11	-
333244	Printing Machinery and Equipment Manufacturing	99	0.1	40	34	12	-	7	1	2	3
333249	All Other Industrial Machinery Manufacturing	1,301	1.4	681	256	235	15	57	1	46	10
333314	Optical Instrument and Lens Manufacturing	198	0.2	49	51	66	9	16	-	6	1
333316	Photographic and Photocopying Equipment Manufacturing	76	0.1	22	20	27	-	6	-	-	1
333318	Other Commercial and Service Industry Machinery Manufacturing (pt)	562	0.6	295	100	115	4	32	1	13	2

NAICS	Business And Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B,L)	Manufacturing						Sales & Marketing (X,Z)	Other NEU (A,U)
					Production		Engineering					
					Manu- facturing Production Management or Department (C,D,G,R,S)	Manu- facturing Engineering Management or Department (E,F,T,V)	Quality Assurance Control (P,Q)	Product Design Research and Development (H,I,J)	Educational Or Government (N)			
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	212	0.2	82	53	54	3	9	-	10	1	
333414	Heating Equipment except Warm Air Furnaces - Manufacturing (pt)	112	0.1	43	27	29	1	8	-	2	2	
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	327	0.3	145	65	80	6	22	-	8	1	
333511	Industrial Mold Manufacturing	2,688	2.8	1,315	763	363	34	111	1	79	22	
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	1,918	2.0	1,018	511	239	19	58	-	58	15	
333515	Cutting Tool and Machine Tool Accessory Manufacturing	1,745	1.8	766	347	284	25	73	7	222	21	
333517	Machine Tool Manufacturing	2,142	2.2	977	417	431	22	68	2	214	11	
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	402	0.4	172	95	86	6	19	-	21	3	
333611	Turbine and Turbine Generator Set Unit Manufacturing	212	0.2	47	49	95	3	15	-	3	-	
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	290	0.3	98	95	68	11	10	-	7	1	
333613	Mechanical Power Transmission Equipment Manufacturing	283	0.3	74	94	84	12	12	-	5	2	
333618	Other Engine Equipment Manufacturing (pt)	388	0.4	168	74	98	15	28	-	4	1	
333912	Air and Gas Compressor Manufacturing	182	0.2	49	56	46	11	12	3	4	1	
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	359	0.4	79	135	108	8	21	-	8	-	
333921	Elevator and Moving Stairway Manufacturing	28	-	15	4	6	-	3	-	-	-	
333922	Conveyor and Conveying Equipment Manufacturing (pt)	274	0.3	88	91	60	2	18	-	13	2	
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing (pt)	100	0.1	27	23	39	1	7	-	3	-	
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	165	0.2	39	43	68	2	11	1	-	1	
333991	Power-Driven Handtool Manufacturing	143	0.2	53	22	46	3	12	-	6	1	
333992	Welding and Soldering Equipment Manufacturing	105	0.1	34	35	25	3	5	2	1	-	
333993	Packaging Machinery Manufacturing	178	0.2	40	77	41	3	13	-	4	-	
333994	Industrial Process Furnace and Oven Manufacturing	128	0.1	43	33	36	-	12	-	4	-	
333995	Fluid Power Cylinder and Actuator Manufacturing	245	0.3	76	84	64	11	4	1	3	2	
333996	Fluid Power Pump and Motor Manufacturing	177	0.2	41	48	68	8	8	-	3	1	
333997	Scale and Balance (except Laboratory) Manufacturing	27	-	6	4	11	-	4	-	2	-	
333999	All Other Miscellaneous General Purpose Machinery Manufacturing (pt)	1,193	1.2	651	248	184	10	54	-	39	7	
	Sub-Total NAICS 333	18,664	19.4	8,151	4,621	3,759	285	875	22	830	121	
334	COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING											
3341	Computer and Peripheral Equipment Manufacturing	147	0.2	49	22	53	1	14	1	4	3	
3342	Communications Equipment Manufacturing	323	0.3	74	90	120	12	23	-	2	2	
3343	Audio and Video Equipment Manufacturing	37	-	7	9	17	-	4	-	-	-	
3344	Semiconductor and Other Electronic Component Manufacturing	1,001	1.0	242	253	342	26	110	1	17	10	
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2,755	2.9	1,237	520	672	55	190	3	62	16	
3346	Manufacturing and Reproducing Magnetic and Optical Media	42	0.1	17	6	9	-	7	-	3	-	
	Sub-Total NAICS 334	4,305	4.5	1,626	900	1,213	94	348	5	88	31	
335	ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING											
33511	Electric Lamp Bulb and Part Manufacturing	15	-	2	5	7	1	-	-	-	-	
33512	Lighting Fixture Manufacturing	143	0.2	52	32	42	2	13	-	2	-	
33521	Small Electrical Appliance Manufacturing	40	-	6	13	15	2	3	-	-	1	
33522	Major Household Appliance Manufacturing	55	0.1	8	17	21	2	6	-	-	1	
33531	Electrical Equipment Manufacturing	865	0.9	192	205	341	20	79	2	17	9	
33591	Battery Manufacturing	56	0.1	8	11	26	1	9	-	-	1	
33592	Communication and Energy Wire and Cable Manufacturing	37	-	5	9	14	2	6	-	1	-	
33593	Wiring Device Manufacturing	236	0.2	41	88	77	4	22	-	4	-	
33599	All Other Electrical Equipment and Component Manufacturing	359	0.4	113	87	104	-	31	1	23	-	
	Sub-Total NAICS 335	1,806	1.9	427	467	647	34	169	3	47	12	
336	TRANSPORTATION EQUIPMENT MANUFACTURING											
336111	Automobile Manufacturing	897	0.9	□□□□	109	192	28	46	2	5	6	
336112	Light Truck and Utility Vehicle Manufacturing	55	0.1	33	11	3	1	3	-	3	1	
336120	Heavy Duty Truck Manufacturing	177	0.2	109	24	31	2	8	1	2	-	
336211	Motor Vehicle Body Manufacturing (pt)	1,397	1.4	970	221	133	20	42	1	8	2	
336212	Truck Trailer Manufacturing	1,256	1.3	931	198	86	10	15	-	15	1	
336213	Motor Home Manufacturing	127	0.1	86	16	18	3	3	-	1	-	
336214	Travel Trailer and Camper Manufacturing (pt)	430	0.4	343	48	22	3	9	-	3	2	
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	626	0.6	354	101	120	16	23	1	8	3	
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	1,071	1.1	725	144	127	21	44	-	6	4	
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	69	0.1	36	8	20	3	1	-	-	1	
336340	Motor Vehicle Brake System Manufacturing	93	0.1	51	18	15	2	6	-	1	-	
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	347	0.4	179	55	76	16	11	1	5	4	

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B,L)	Manufacturing		Engineering		Educational Or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
					Production		Engineering				
					Manu- facturing Production Management Department (C,D,G,R,S)	Manu- facturing Engineering Management Department (E,F,T,V)	Quality Assurance Control (P,Q)	Product Design Research and Development (H,I,J)			
336360	Motor Vehicle Seating and Interior Trim Manufacturing	189	0.2	94	38	40	6	11	-	-	-
336370	Motor Vehicle Metal Stamping	627	0.7	323	147	107	21	24	-	2	3
336390	Other Motor Vehicle Parts Manufacturing	4,721	4.9	2,106	805	1,320	151	243	12	48	36
336411	Aircraft Manufacturing	1,240	1.3	548	169	398	35	78	3	4	5
336412	Aircraft Engine and Engine Parts Manufacturing (pt)	854	0.9	314	147	311	28	41	3	8	2
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	3,467	3.6	1,500	765	844	149	134	4	52	19
336414	Guided Missile and Space Vehicle Manufacturing	177	0.2	61	37	57	5	14	1	-	2
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	131	0.1	40	26	50	6	7	-	-	2
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	135	0.1	49	30	43	-	9	1	-	3
3365	Railroad Rolling Stock Manufacturing	201	0.2	92	35	52	3	15	-	4	-
3366	Ship and Boat Building	605	0.6	398	95	68	12	23	1	6	2
3369	Other Transportation Equipment Manufacturing	596	0.6	384	74	100	2	29	1	4	2
	Sub-Total NAICS 336	19,488	20.2	10,235	3,321	4,233	543	839	32	185	100
337	FURNITURE AND RELATED PRODUCT MANUFACTURING										
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	221	0.2	111	47	44	3	14	-	1	1
3372	Office Furniture (including Fixtures) Manufacturing	85	0.1	24	22	27	2	10	-	-	-
3379	Other Furniture Related Product Manufacturing	11	-	2	2	3	1	3	-	-	-
	Sub-Total NAICS 337	317	0.3	137	71	74	6	27	-	1	1
339	MISCELLANEOUS MANUFACTURING										
339112	Surgical and Medical Instrument Manufacturing	1,901	2.0	590	455	553	82	182	2	21	16
339113	Surgical Appliance and Supplies Manufacturing	1,192	1.2	546	209	295	32	78	1	14	17
339114	Dental Equipment and Supplies Manufacturing	752	0.8	576	70	61	12	29	-	3	1
339115	Ophthalmic Goods Manufacturing	115	0.1	57	21	25	1	7	-	2	2
339116	Dental Laboratories	601	0.6	559	10	19	-	9	-	2	2
33991	Jewelry and Silverware Manufacturing	254	0.3	203	28	16	-	5	-	1	1
33992	Sporting and Athletic Goods Manufacturing	443	0.5	294	63	48	5	27	-	6	-
33993	Doll, Toy, and Game Manufacturing	124	0.1	98	15	5	1	2	-	2	1
33994	Office Supplies (except Paper) Manufacturing	131	0.1	88	26	6	1	3	-	6	1
33995	Sign Manufacturing	782	0.8	692	53	19	-	16	-	-	2
33999	All Other Miscellaneous Manufacturing	1,131	1.2	668	188	184	10	46	-	23	12
	Sub-Total NAICS 339	7,426	7.7	4,371	1,138	1,231	144	404	3	80	55
311-324	OTHER MISCELLANEOUS MANUFACTURING	579	0.6	279	136	100	3	32	1	24	4
42	WHOLESALE TRADE	2,953	3.1	1,518	334	390	20	78	5	584	24
541	Professional, Scientific, and Technical Services	2,080	2.1	994	204	540	19	225	23	57	18
611	Educational Services	662	0.7	149	73	62	1	33	333	3	8
	OTHER QUALIFIED NAICS, N.E.C.	1,657	1.7	867	304	272	10	87	27	59	31
	TOTAL QUALIFIED CIRCULATION	96,390	100.0	48,265	20,227	18,014	1,984	4,117	501	2,622	660

(B,L) COMPANY MANAGEMENT, CORPORATE EXECUTIVE, PURCHASING titles include Chairman, General Manager, Owner, Partner, President, Vice President, Buyer, Purchasing Manager and Procurement Chief

(C,R) MANUFACTURING PRODUCTION MANAGEMENT, FACTORY AUTOMATION MANAGEMENT titles include Factory Manager, Machine Shop Manager, Manufacturing Manager, Manufacturing Production Manager, Plant Manager, Production Manager, Shop Manager, Tool Room Manager, Works Manager, Factory Automation Manager, Chief Factory Automation Engineer, Manager of Systems Design and Chief Systems Engineer.

(D,G,S) MANUFACTURING PRODUCTION DEPARTMENT, MANUFACTURING (OTHER MANUFACTURING PERSONNEL), FACTORY AUTOMATION ENGINEERS titles include Foreman, Department Supervisor, Manufacturing Supervisor, Master Mechanic, Plant Supervisor, Production Supervisor, Diemaker, Expediter, Leadman, Factory Automation Engineer, Automation Foreman, CNC Programmer, Systems Designer and Systems Engineer.

(E,V) 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.

(F,T) MANUFACTURING ENGINEERING (ENGINEERS) include most engineering titles where the individual does not manage the department.

(P,Q) QUALITY ASSURANCE/CONTROL MANAGEMENT, ENGINEERS titles include Quality Assurance Manager, Quality Control Director, Chief of Quality Engineering, Quality Assurance Engineer, Quality Control Foreman and Quality Supervisor.

(H,I,J) PRODUCT DESIGN, RESEARCH and DEVELOPMENT MANAGEMENT, ENGINEERS, & OTHER DESIGN PERSONNEL titles include Director of Design Engineering, Chief Draftsman, Manager of Product Engineering, Director of Research, Design Project Engineer, Development Engineer, Research & Design Engineer, and Draftsman.

(N) EDUCATIONAL or GOVERNMENT titles include Professor, Instructor and other Educational titles.

(X,Z) SALES & MARKETING titles include Regional Sales Director, National Sales Director, National Accounts Manager, Marketing Director, PR Director and other sales/marketing titles.

(A,U) OTHER QUALIFIED TITLES, N.E.C.

SUPPLEMENTARY DATA FOR ISSUE OF MAY 2018

This is an analysis of 82,218 or 85.3% recipients who manufacture for the following industries. 60,163 are classified based on their response to the question 'Which of the following markets do you manufacture for?' and 22,055 are classified based on NAICS for their company indicating they are an OEM for the given market.

Business and Industry	Totals	Company Management, Corporate Executives, Purchasing (B,L)	Manufacturing Production Management or Department (C,D,G,R,S)	Manufacturing Engineering Management or Department (E,F,T,V)	Quality Assurance, Quality Control (P,Q)	Product Design, Research & Development (H,I,J)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
Aerospace/Aviation									
OEMs, Components & Parts	6,514	2,699	1,274	1,874	237	314	13	69	34
Captive Shops, Contract Shops & Job Shops	38,704	16,936	9,851	7,599	999	1,609	49	1,379	282
Other Qualified: R&D, Consultants, Testing & Design, Q/A	4,344	2,037	512	762	33	201	160	595	44
Totals	49,562	21,672	11,637	10,235	1,269	2,124	222	2,043	360
Automotive/Transportation									
OEMs, Components & Parts	12,082	6,849	1,943	2,310	303	489	18	107	63
Captive Shops, Contract Shops & Job Shops	40,117	17,709	10,003	8,033	908	1,746	55	1,377	286
Other Qualified: R&D, Consultants, Testing & Design, Q/A	4,631	2,335	512	753	28	221	169	573	40
Totals	56,830	26,893	12,458	11,096	1,239	2,456	242	2,057	389
Medical/Dental									
OEMs, Components & Parts	4,753	2,388	803	1,008	134	329	3	50	38
Captive Shops, Contract Shops & Job Shops	28,803	12,183	7,438	5,824	710	1,263	38	1,134	213
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,387	1,602	356	552	23	197	122	501	34
Totals	36,943	16,173	8,597	7,384	867	1,789	163	1,685	285
Military/Defense									
OEMs, Components & Parts	911	320	200	288	17	64	4	4	14
Captive Shops, Contract Shops & Job Shops	38,649	15,334	10,121	8,654	1,090	1,767	59	1,356	268
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,568	1,570	431	658	28	192	117	538	34
Totals	43,128	17,224	10,752	9,600	1,135	2,023	180	1,898	316
Offroad/Construction/Agriculture									
OEMs, Components & Parts	1,110	370	286	324	25	84	1	14	6
Captive Shops, Contract Shops & Job Shops	43,708	19,477	10,747	8,851	1,107	1,811	54	1,361	300
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,827	1,859	477	624	18	179	130	510	30
Totals	48,645	21,706	11,510	9,799	1,150	2,074	185	1,885	336
Oil & Gas/Energy									
OEMs, Components & Parts	661	252	234	128	8	26	-	12	1
Captive Shops, Contract Shops & Job Shops	35,818	14,692	9,600	7,551	914	1,487	51	1,274	249
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,407	1,570	430	582	23	154	95	521	32
Totals	39,886	16,514	10,264	8,261	945	1,667	146	1,807	282

OEM, Components & Parts: Corresponding Industry NAICS

Captive Shops, Contract Shops & Job Shops: Respondents in Mfg NAICS (311-339) not Industry-Specific

Other Qualified: R&D, Consultants, Testing & Design, Q/A: Respondents in non-Mfg NAICS

SUPPLEMENTARY DATA FOR ISSUE OF MAY 2018

This is an analysis of 31,289 recipients in the indicated NAICS classifications, of whom 28,443 manufacture for the following industries based on their response to the question "Which of the following markets do you manufacture for?"

Contract Shops & Job Shops (NAICS 326199, 33271, 33272, 33281, 333511, 333514, 333999)	Totals	Company Management, Corporate Executives, Purchasing (B,L)	Manufacturing Production Management or Department (C,D,G,R,S)	Manufacturing Engineering Management or Department (E,F,T,V)	Quality Assurance, Quality Control (P,Q)	Product Design, Research & Development (H,I,J)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
Aerospace/Aviation	18,816	9,919	4,884	2,483	515	422	22	440	131
Automotive/Transportation	19,531	10,338	4,945	2,678	462	497	19	458	134
Medical/Dental	14,383	7,316	3,814	2,036	381	349	16	368	103
Military/Defense	16,589	8,422	4,444	2,312	471	381	19	430	110
Offroad/Construction/Agriculture	18,946	10,395	4,727	2,378	478	399	17	425	127
Oil & Gas/Energy	15,783	8,275	4,189	2,043	422	327	19	401	107

3b. QUALIFICATION SOURCE BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 2018

Qualification Source	Qualified Within			Total Qualified	Percent
	1 Year	2 Years	3 Years		
I. Direct Request:	65,673	18,960	-	84,633	87.8
II. Request from recipient's company:	4	-	-	4	-
III. Membership Benefit:	-	-	-	-	-
IV. Communication from recipient or recipient's company (other than request):	1,127	-	-	1,127	1.2
V. TOTAL - Sources other than above (listed alphabetically):	10,626	-	-	10,626	11.0
Association rosters and directories	-	-	-	-	-
*Business directories	10,609	-	-	10,609	11.0
Manufacturer's, distributor's, and wholesaler's lists	-	-	-	-	-
*Other sources	17	-	-	17	-
VI. Single Copy Sales:	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	77,430	18,960	-	96,390	100.0
PERCENT	80.3	19.7	-	100.0	

*See Additional Data

AVERAGE ANNUAL AUDITED QUALIFIED CIRCULATION AND CURRENT UNAUDITED CIRCULATION STATEMENTS

6-Month Period Ended:	Audited Data		Audited Data		Audited Data		Circulation Claim
	July – December 2015	January – June 2016	July – December 2016	January – June 2017	July – December 2017	January – June 2018*	
Total Audit Average Qualified:	96,619	96,675	98,571	98,294	97,891	96,328	
Qualified Non-Paid:	96,619	96,675	98,571	98,294	97,891	96,328	
Qualified Paid:	-	-	-	-	-	-	
Post Expire Copies included in Total Qualified Circulation:	**NC	**NC	**NC	**NC	**NC	**NC	
Average Annual Order Price:	**NC	**NC	**NC	**NC	**NC	**NC	

***NOTE: January – June 2018 data is unaudited. With each successive period, new data will be added until six 6-month periods are displayed.**

**NC = None Claimed.

GEOGRAPHICAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 2018*

State	Total Qualified	Percent	State	Total Qualified	Percent
Maine	394		Kentucky	1,131	
New Hampshire	698		Tennessee	1,620	
Vermont	247		Alabama	1,062	
Massachusetts	2,179		Mississippi	385	
Rhode Island	320		EAST SO. CENTRAL	4,198	4.3
Connecticut	1,829		Arkansas	559	
NEW ENGLAND	5,667	5.9	Louisiana	738	
New York	3,634		Oklahoma	1,017	
New Jersey	1,677		Texas	4,895	
Pennsylvania	4,725		WEST SO. CENTRAL	7,209	7.5
MIDDLE ATLANTIC	10,036	10.4	Montana	253	
Ohio	7,278		Idaho	368	
Indiana	3,896		Wyoming	149	
Illinois	6,734		Colorado	937	
Michigan	6,895		New Mexico	324	
Wisconsin	4,365		Arizona	1,251	
EAST NO. CENTRAL	29,168	30.3	Utah	752	
Minnesota	2,805		Nevada	311	
Iowa	1,483		MOUNTAIN	4,345	4.5
Missouri	1,943		Alaska	108	
North Dakota	231		Washington	1,776	
South Dakota	391		Oregon	1,057	
Nebraska	649		California	8,565	
Kansas	1,131		Hawaii	79	
WEST NO. CENTRAL	8,633	9.0	PACIFIC	11,585	12.0
Delaware	130		UNITED STATES	91,201	94.6
Maryland	877		U.S. Territories	92	
Washington, DC	41		Canada	4,991	
Virginia	1,251		Mexico	106	
West Virginia	290		Other International	-	
North Carolina	2,113		APO/FPO	-	
South Carolina	1,149				
Georgia	1,582				
Florida	2,927				
SOUTH ATLANTIC	10,360	10.7			
			TOTAL QUALIFIED CIRCULATION	96,390	100.0

*See Additional Data

E-NEWSLETTER CHANNEL

2018	MMS Extra	The Shop - Blog
JANUARY		
January 5	-	56,449
January 10	56,662	-
January 12	-	55,472
January 19	-	60,970
January 24	60,959	-
January 26	-	60,965
FEBRUARY		
February 2	-	60,867
February 7	60,492	-
February 9	-	60,502
February 16	-	60,286
February 21	60,192	-
February 23	-	60,115
MARCH		
March 2	-	60,014
March 7	59,822	-
March 9	-	59,986
March 16	-	59,798
March 21	60,157	-
March 23	-	60,656
March 30	-	60,185
APRIL		
April 4	59,405	-
April 6	-	58,191
April 13	-	59,458
April 18	59,129	-
April 20	-	59,463
April 27	-	59,841
MAY		
May 2	59,642	-
May 4	-	59,490
May 11	-	59,086
May 16	59,335	-
May 18	-	59,206
May 25	-	59,222
JUNE		
June 1	-	59,164
June 8	-	58,919
June 13	58,777	-
June 15	-	58,659
June 22	-	60,178
June 27	59,992	-
June 29	-	59,903
AVERAGE:	59,547	59,502

MMS Extra (12 issued in the period)
 The Shop - Blog (26 issued in the period)

WEBSITE CHANNEL

WWW.MMSONLINE.COM

2018	Pageviews	Sessions	Users	Average Session Duration
January	245,017	156,547	120,951	1:32
February	246,022	157,428	125,118	1:29
March	255,487	171,869	132,145	1:21
April	236,692	161,627	126,265	1:16
May	234,104	160,900	125,651	1:14
June	223,032	151,222	116,711	1:19
AVERAGE:	240,059	159,932	124,473	1:21

January – June 2018 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 Cookied 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

Modern Machine Shop Social Media



Twitter followers

<http://twitter.com/mmsonline>



Facebook likes

<http://www.facebook.com/mmsonline>



LinkedIn group members

<http://www.linkedin.com/grp/home?gid=4074615>



YouTube views*

<https://www.youtube.com/user/mmsonlinevideos>

2018

	Twitter followers	Facebook likes	LinkedIn group members	YouTube views*
Beginning Balance:	8,942	8,542	1,971	208,330
January	9,169	8,664	1,968	220,611
February	9,325	8,880	1,967	231,444
March	9,483	9,195	1,963	245,438
April	9,633	9,488	1,959	255,905
May	9,769	9,603	1,960	279,462
June	9,851	9,859	1,959	288,328

*YouTube Monthly Views data is an aggregate figure

ADDITIONAL DATA

MAGAZINE:

PARAGRAPH 3b:

Business directories include 2 sources of circulation for quantities of 5,254 copies or 5.4% and 5,355 copies or 5.6%
Other sources include 1 source of circulation for a quantity of 17 copies or -%.

GEOGRAPHIC DISTRIBUTION:

Geographic data for E-Newsletters, 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.

Travis Egan, Publisher

Julie Ball, Audience Development 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

July 18, 2018

State

Ohio

County

Hamilton

Received by BPA Worldwide

July 18, 2018

Type

BD

ID Number

M102B0J8

About BPA Worldwide:

A not-for-profit organization since 1931, BPA Worldwide is governed by a tripartite board comprised of media owners, advertising agencies and advertisers. Headquartered in Shelton, Connecticut, USA, BPA has the largest membership of any media-auditing organization in the world, spanning more than 30 countries. Globally, BPA audits media properties including consumer magazines, newspapers, web sites, events, email newsletters, databases, wireless, social media and other advertiser-supported media—as well as advertiser and agency members. Visit www.bpaww.com for the latest audit reports, membership information and publishing and advertising industry news.