

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
86,010 average circulation

MODERN MACHINE SHOP E-NEWSLETTERS



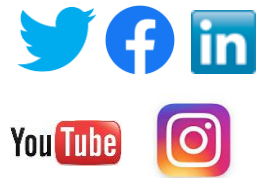
2 E-Newsletters in the period
50 total issued in the period
56,483 average per occurrence
55,961 average per occurrence

MODERN MACHINE SHOP WEBSITE



148,053 average users

MODERN MACHINE SHOP SOCIAL MEDIA



11,200 Twitter followers
12,934 Facebook likes
2,476 LinkedIn group members
409,000 YouTube views
1,861 Instagram members

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)	86,010	-	86,010
MODERN MACHINE SHOP E-NEWSLETTERS			
a. MMS Extra (24 issued in the period)	56,483	-	56,483
b. The Shop - Blog (26 issued in the period)	55,961	-	55,961
MODERN MACHINE SHOP WEBSITE (Monthly Users with 275,293 average Pageviews)	148,053	-	148,053
MODERN MACHINE SHOP SOCIAL MEDIA			
a. Twitter followers	*11,200	-	*11,200
b. Facebook followers	*12,934	-	*12,934
c. LinkedIn group members	*2,476	-	*2,476
d. YouTube views	*409,000	-	*409,000
e. Instagram members	*1,861	-	*1,861

*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	72
Advertiser and Agency	4,125
Allocated for Trade Shows and Conventions	217
All Other	995
TOTAL	5,409

1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR PERIOD

Qualified Circulation	Total Qualified		Qualified Non-Paid		Qualified Paid	
	Copies	Percent	Copies	Percent	Copies	Percent
Individual	86,010	100.0	86,010	100.0	-	-
Sponsored Individually	-	-	-	-	-	-
Addressed	-	-	-	-	-	-
Membership Benefit	-	-	-	-	-	-
Multi-Copy Same Addressee	-	-	-	-	-	-
Single Copy Sales	-	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	86,010	100.0	86,010	100.0	-	-

2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD

2019 Issue	Total Qualified
January	85,607
February	85,694
March	85,762
April	86,445
May	85,974
June	86,581

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

This issue is 0.1% or 44 copies below the average of the other 5 issues reported in Paragraph 2.

NAICS	Business and Industry	Total Qualified	Percent of Total	Manufacturing		Company Management, Corporate Executives and Purchasing (B, L)	Product Design, R&D, QA/QC (H,I,J,P,Q)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)		
				Production	Engineering							
325	CHEMICAL MANUFACTURING	476	0.6			164	107	149	45	-	9	2
326	PLASTICS AND RUBBER PRODUCTS MANUFACTURING											
326 (Excl. 326199)	Plastics and Rubber Products Manufacturing	523	0.6			131	159	175	55	-	2	1
326199	All Other Plastics Product Manufacturing	1,555	1.8			533	493	423	101	-	3	2
	Subtotal NAICS 326	2,078	2.4			664	652	598	156	-	5	3
327	NONMETALLIC MINERAL PRODUCT MANUFACTURING	305	0.4			88	85	91	36	-	5	-
331	PRIMARY METAL MANUFACTURING											
3311	Iron and Steel Mills and Ferroalloy Manufacturing	354	0.4			149	110	58	20	-	16	1
3312	Steel Product Manufacturing from Purchased Steel	204	0.2			61	54	59	17	1	9	3
3313	Alumina and Aluminum Production and Processing	224	0.3			60	64	70	15	1	9	5
3314	Nonferrous Metal (except Aluminum) Production and Processing	177	0.2			52	55	49	16	-	5	-
3315	Foundries	699	0.8			177	237	218	49	4	13	1
	Sub-Total NAICS 331	1,658	1.9			499	520	454	117	6	52	10
332	FABRICATED METAL PRODUCT MANUFACTURING											
33211	Forging and Stamping	1,159	1.3			478	340	241	73	1	14	12
33221	Cutlery and Handtool Manufacturing	519	0.6			220	141	105	28	1	18	6
33231	Plate Work and Fabricated Structural Product Manufacturing	871	1.0			468	221	124	33	-	18	7
33232	Ornamental and Architectural Metal Products Manufacturing	793	0.9			399	214	129	26	1	17	7
33241	Power Boiler and Heat Exchanger Manufacturing	51	0.1			16	12	18	5	-	-	-
33242	Metal Tank (Heavy Gauge) Manufacturing	43	0.1			20	8	11	3	-	1	-
33243	Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing	44	0.1			19	11	11	2	-	-	1
33251	Hardware Manufacturing (pt)	288	0.3			93	98	73	16	2	5	1
33261	Spring and Wire Product Manufacturing	290	0.3			138	62	58	24	-	7	1
33271	Machine Shops	20,791	24.2			13,059	4,504	1,955	835	18	322	98
33272	Turned Product and Screw, Nut and Bolt Manufacturing	2,123	2.5			968	612	337	154	3	43	6
33281	Coating, Engraving, Heat Treating, and Allied Activities	608	0.7			325	133	81	29	-	37	3
33291	Metal Valve Manufacturing	960	1.1			174	422	275	70	1	13	5
332991	Ball and Roller Bearing Manufacturing	218	0.3			33	60	102	17	-	6	-
332992	Small Arms Ammunition Manufacturing	47	0.1			12	14	14	6	-	-	1
332993	Ammunition (except Small Arms) Manufacturing	37	-			7	11	12	6	1	-	-
332994	Small Arms Ordnance, and Ordnance Accessories Manufacturing	338	0.4			148	93	66	27	-	1	3
332996	Fabricated Pipe and Pipe Fitting Manufacturing	191	0.2			64	70	40	9	-	7	1
332999	All Other Miscellaneous Fabricated Metal Product Manufacturing (pt)	1,560	1.8			904	339	205	70	2	34	6
	Sub-Total NAICS 332	30,931	36.0			17,545	7,365	3,857	1,433	30	543	158
333	MACHINERY MANUFACTURING											
333111	Farm Machinery and Equipment Manufacturing (pt)	520	0.6			218	130	124	38	-	8	2
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	87	0.1			39	21	21	5	-	1	-
33312	Construction Machinery Manufacturing	429	0.5			119	124	129	48	-	7	2
333131	Mining Machinery and Equipment Manufacturing	171	0.2			57	63	34	15	-	2	-
333132	Oil and Gas Field Machinery and Equipment Manufacturing	494	0.6			182	164	106	34	2	5	1
333241	Food Product Machinery Manufacturing	283	0.3			134	66	74	5	1	-	3
333242	Semiconductor Machinery Manufacturing	44	0.1			12	13	16	2	-	1	-
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	302	0.4			157	77	40	17	-	9	2
333244	Printing Machinery and Equipment Manufacturing	106	0.1			46	33	16	7	-	4	-
333249	All Other Industrial Machinery Manufacturing	1,034	1.2			487	219	211	70	3	41	3
333314	Optical Instrument and Lens Manufacturing	188	0.2			52	46	55	26	-	7	2
333316	Photographic and Photocopying Equipment Manufacturing	72	0.1			20	24	22	6	-	-	-
333318	Other Commercial and Service Industry Machinery Manufacturing (pt)	569	0.7			295	103	125	28	1	13	4

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing		Product Design, R&D, QA/QC (H,I,J,P,Q)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
					Production	Engineering				
					Manufacturing Production Management or Department (C,D,G,R,S)	Manufacturing Engineering Management or Department (E,F,T,V)				
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	192	0.2	85	44	47	10	-	5	1
333414	Heating Equipment except Warm Air Furnaces - Manufacturing (pt)	101	0.1	41	20	29	10	-	1	-
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	359	0.4	174	50	88	38	-	8	1
333511	Industrial Mold Manufacturing	2,167	2.5	1,029	635	302	127	1	63	10
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	1,930	2.3	1,011	537	247	82	-	38	15
333515	Cutting Tool and Machine Tool Accessory Manufacturing	1,548	1.8	667	295	250	105	7	208	16
333517	Machine Tool Manufacturing	1,989	2.3	907	372	431	76	2	195	6
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	349	0.4	149	87	76	13	-	20	4
333611	Turbine and Turbine Generator Set Unit Manufacturing	185	0.2	41	51	78	13	-	2	-
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	259	0.3	75	83	69	22	-	9	1
333613	Mechanical Power Transmission Equipment Manufacturing	285	0.3	83	87	86	21	1	5	2
333618	Other Engine Equipment Manufacturing (pt)	381	0.5	168	77	103	29	-	3	1
333912	Air and Gas Compressor Manufacturing	176	0.2	47	60	43	19	2	4	1
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	360	0.4	86	132	112	22	-	8	-
333921	Elevator and Moving Stairway Manufacturing	31	-	15	5	7	3	-	-	1
333922	Conveyor and Conveying Equipment Manufacturing (pt)	248	0.3	73	91	46	20	1	16	1
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing (pt)	94	0.1	22	25	37	8	-	2	-
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	171	0.2	48	34	70	13	3	2	1
333991	Power-Driven Handtool Manufacturing	126	0.2	39	19	44	16	-	8	-
333992	Welding and Soldering Equipment Manufacturing	108	0.1	41	33	22	8	2	2	-
333993	Packaging Machinery Manufacturing	180	0.2	25	91	46	13	-	4	1
333994	Industrial Process Furnace and Oven Manufacturing	118	0.1	34	28	37	14	-	4	1
333995	Fluid Power Cylinder and Actuator Manufacturing	177	0.2	60	67	37	9	-	4	-
333996	Fluid Power Pump and Motor Manufacturing	178	0.2	42	56	63	12	-	5	-
333997	Scale and Balance (except Laboratory) Manufacturing	30	-	7	7	13	2	-	1	-
333999	All Other Miscellaneous General Purpose Machinery Manufacturing (pt)	1,242	1.5	663	282	198	54	-	40	5
	Sub-Total NAICS 333	17,283	20.1	7,450	4,351	3,554	1,060	26	755	87
334	COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING									
3341	Computer and Peripheral Equipment Manufacturing	166	0.2	53	37	53	20	-	3	-
3342	Communications Equipment Manufacturing	278	0.3	65	75	95	39	1	2	1
3343	Audio and Video Equipment Manufacturing	46	0.1	17	8	16	5	-	-	-
3344	Semiconductor and Other Electronic Component Manufacturing	903	1.0	226	232	304	122	-	16	3
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2,102	2.4	752	537	560	183	5	54	11
3346	Manufacturing and Reproducing Magnetic and Optical Media	46	0.1	21	7	10	6	-	2	-
	Sub-Total NAICS 334	3,541	4.1	1,134	896	1,038	375	6	77	15
335	ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING									
33511	Electric Lamp Bulb and Part Manufacturing	15	-	3	4	6	2	-	-	-
33512	Lighting Fixture Manufacturing	133	0.2	54	30	35	11	-	2	1
33521	Small Electrical Appliance Manufacturing	43	-	7	11	16	8	-	-	1
33522	Major Household Appliance Manufacturing	49	0.1	7	13	20	9	-	-	-
33531	Electrical Equipment Manufacturing	805	0.9	180	196	328	81	-	16	4
33591	Battery Manufacturing	50	0.1	11	14	21	3	-	-	1
33592	Communication and Energy Wire and Cable Manufacturing	41	-	7	7	19	7	-	-	1
33593	Wiring Device Manufacturing	198	0.2	31	84	63	17	-	3	-
33599	All Other Electrical Equipment and Component Manufacturing	339	0.4	120	80	87	31	-	19	2
	Sub-Total NAICS 335	1,673	1.9	420	439	595	169	-	40	10
336	TRANSPORTATION EQUIPMENT MANUFACTURING									
336111	Automobile Manufacturing	624	0.7	262	115	170	61	2	10	4
336112	Light Truck and Utility Vehicle Manufacturing	44	0.1	16	7	13	4	-	4	-
336120	Heavy Duty Truck Manufacturing	172	0.2	78	33	44	16	-	-	1
336211	Motor Vehicle Body Manufacturing (pt)	702	0.8	391	149	102	48	-	12	-
336212	Truck Trailer Manufacturing	552	0.7	377	91	56	14	-	13	1
336213	Motor Home Manufacturing	62	0.1	33	11	14	3	-	-	1
336214	Travel Trailer and Camper Manufacturing (pt)	202	0.2	130	33	18	16	-	5	-
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	501	0.6	248	86	114	38	2	13	-
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	626	0.7	311	106	143	60	-	5	1
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	100	0.1	36	20	34	7	-	1	2
336340	Motor Vehicle Brake System Manufacturing	158	0.2	51	39	48	18	-	1	1
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	417	0.5	149	82	135	46	-	4	1

NAICS	Business and Industry	Total Qualified	Percent of Total	Company Management, Corporate Executives and Purchasing (B, L)	Manufacturing		Product Design, R&D, QA/QC (H,I,J,P,Q)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
					Production Management or Department (C,D,G,R,S)	Engineering Management or Department (E,F,T,V)				
336360	Motor Vehicle Seating and Interior Trim Manufacturing	134	0.2	52	33	33	15	-	1	-
336370	Motor Vehicle Metal Stamping	461	0.5	170	117	109	58	-	3	4
336390	Other Motor Vehicle Parts Manufacturing	3,612	4.2	1,384	726	1,074	365	5	45	13
336411	Aircraft Manufacturing	813	0.9	294	152	279	80	3	4	1
336412	Aircraft Engine and Engine Parts Manufacturing (pt)	773	0.9	214	167	291	89	5	6	1
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	2,853	3.3	990	748	764	286	1	51	13
336414	Guided Missile and Space Vehicle Manufacturing	188	0.2	38	51	78	17	1	2	1
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	101	0.1	21	31	38	10	-	-	1
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	95	0.1	24	27	34	8	-	1	1
3365	Railroad Rolling Stock Manufacturing	165	0.2	71	34	41	12	-	7	-
3366	Ship and Boat Building	484	0.6	314	80	57	25	1	5	2
3369	Other Transportation Equipment Manufacturing	521	0.6	342	74	75	25	-	5	-
	Sub-Total NAICS 336	14,360	16.7	5,996	3,012	3,764	1,321	20	198	49
337	FURNITURE AND RELATED PRODUCT MANUFACTURING									
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	238	0.3	110	72	40	16	-	-	-
3372	Office Furniture (including Fixtures) Manufacturing	94	0.1	28	25	32	9	-	-	-
3379	Other Furniture Related Product Manufacturing	21	-	13	3	4	1	-	-	-
	Sub-Total NAICS 337	353	0.4	151	100	76	26	-	-	-
339	MISCELLANEOUS MANUFACTURING									
339112	Surgical and Medical Instrument Manufacturing	1,957	2.3	608	499	548	261	3	28	10
339113	Surgical Appliance and Supplies Manufacturing	1,115	1.3	523	195	261	113	-	12	11
339114	Dental Equipment and Supplies Manufacturing	481	0.6	302	55	63	54	-	5	2
339115	Ophthalmic Goods Manufacturing	128	0.1	62	23	27	10	-	1	5
339116	Dental Laboratories	598	0.7	553	13	19	9	-	-	4
33991	Jewelry and Silverware Manufacturing	197	0.2	153	19	17	3	-	2	3
33992	Sporting and Athletic Goods Manufacturing	337	0.4	197	59	36	33	1	9	2
33993	Doll, Toy, and Game Manufacturing	83	0.1	62	9	8	3	-	1	-
33994	Office Supplies (except Paper) Manufacturing	99	0.1	64	20	7	4	-	4	-
33995	Sign Manufacturing	639	0.7	553	49	20	13	-	2	2
33999	All Other Miscellaneous Manufacturing	1,200	1.4	683	225	190	63	-	33	6
	Sub-Total NAICS 339	6,834	7.9	3,760	1,166	1,196	566	4	97	45
311-324	OTHER MISCELLANEOUS MANUFACTURING	580	0.7	233	158	133	52	-	4	-
42	WHOLESALE TRADE	2,469	2.9	1,471	320	373	68	3	227	7
541	Professional, Scientific, and Technical Services	1,834	2.1	969	205	485	143	3	22	7
611	Educational Services	494	0.6	159	101	80	35	117	2	-
	OTHER QUALIFIED NAICS, N.E.C.	1,105	1.3	630	207	202	47	3	12	4
	TOTAL QUALIFIED CIRCULATION	85,974	100.0	41,333	19,684	16,645	5,649	218	2,048	397

(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) includes 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 2019

This is an analysis of 79,357 or 92.3% recipients who manufacture for the following industries. 62,733 are classified based on their response to the question 'Which of the following markets do you manufacture for?' and 16,624 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)	Product Design, R&D, QA/QC (H,I,J,P,Q)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
Aerospace/Aviation								
OEMs, Components & Parts	5,203	1,693	1,264	1,618	530	10	68	20
Captive Shops, Contract Shops & Job Shops	38,468	17,408	9,908	7,120	2,500	43	1,297	192
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,425	1,886	461	657	168	52	194	7
Totals	47,096	20,987	11,633	9,395	3,198	105	1,559	219
Automotive/Transportation								
OEMs, Components & Parts	8,367	3,688	1,648	2,107	769	9	117	29
Captive Shops, Contract Shops & Job Shops	39,326	17,936	10,022	7,386	2,483	48	1,246	205
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,659	2,140	447	653	166	60	185	8
Totals	51,352	23,764	12,117	10,146	3,418	117	1,548	242
Medical/Dental								
OEMs, Components & Parts	4,458	2,106	832	961	472	3	52	32
Captive Shops, Contract Shops & Job Shops	28,547	12,390	7,508	5,470	1,917	38	1,072	152
Other Qualified: R&D, Consultants, Testing & Design, Q/A	2,707	1,500	343	509	145	40	164	6
Totals	35,712	15,996	8,683	6,940	2,534	81	1,288	190
Military/Defense								
OEMs, Components & Parts	865	272	238	263	78	2	5	7
Captive Shops, Contract Shops & Job Shops	38,035	15,699	10,106	7,988	2,750	49	1,264	179
Other Qualified: R&D, Consultants, Testing & Design, Q/A	2,854	1,494	417	580	147	35	174	7
Totals	41,754	17,465	10,761	8,831	2,975	86	1,443	193
Offroad/Construction/Agriculture								
OEMs, Components & Parts	1,036	376	275	274	91	-	16	4
Captive Shops, Contract Shops & Job Shops	43,795	20,178	10,961	8,328	2,780	53	1,291	204
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,019	1,716	404	540	136	44	173	6
Totals	47,850	22,270	11,640	9,142	3,007	97	1,480	214
Oil & Gas/Energy								
OEMs, Components & Parts	665	239	227	140	49	2	7	1
Captive Shops, Contract Shops & Job Shops	35,547	15,138	9,714	6,989	2,283	46	1,206	171
Other Qualified: R&D, Consultants, Testing & Design, Q/A	2,629	1,435	382	492	121	34	161	4
Totals	38,841	16,812	10,323	7,621	2,453	82	1,374	176

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 2019

This is an analysis of 29,808 recipients in the indicated NAICS classifications, of whom 27,562 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)	Product Design, R&D, QA/QC (H,I,J,P,Q)	Educational or Government (N)	Sales & Marketing (X,Z)	Other NEC (A,U)
Aerospace/Aviation	19,223	10,356	4,992	2,355	986	15	430	89
Automotive/Transportation	19,741	10,661	5,073	2,515	958	13	426	95
Medical/Dental	14,783	7,661	3,950	1,947	772	11	369	73
Military/Defense	17,079	8,886	4,587	2,193	913	12	413	75
Offroad/Construction/Agriculture	19,674	10,983	4,955	2,291	931	14	410	90
Oil & Gas/Energy	16,300	8,674	4,404	1,949	783	13	398	79

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

Qualification Source	Qualified Within			Total Qualified	Percent
	1 Year	2 Years	3 Years		
I. Direct Request:	54,715	25,808	-	80,523	93.7
II. Request from recipient's company:	-	-	-	-	-
III. Membership Benefit:	-	-	-	-	-
IV. Communication from recipient or recipient's company (other than request):	-	-	-	-	-
V. TOTAL - Sources other than above (listed alphabetically):	5,451	-	-	5,451	6.3
Association rosters and directories	-	-	-	-	-
*Business directories	5,451	-	-	5,451	6.3
Manufacturer's, distributor's, and wholesaler's lists	-	-	-	-	-
Other sources	-	-	-	-	-
VI. Single Copy Sales:	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	60,166	25,808	-	85,974	100.0
PERCENT	70.0	30.0	-	100.0	

*See Additional Data

GEOGRAPHICAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF MAY 2019*

State	Total Qualified	Percent	State	Total Qualified	Percent
Maine	361		Kentucky	963	
New Hampshire	640		Tennessee	1,437	
Vermont	217		Alabama	886	
Massachusetts	1,929		Mississippi	352	
Rhode Island	292		EAST SO. CENTRAL	3,638	4.2
Connecticut	1,634		Arkansas	490	
NEW ENGLAND	5,073	5.9	Louisiana	658	
New York	3,291		Oklahoma	876	
New Jersey	1,486		Texas	4,386	
Pennsylvania	4,352		WEST SO. CENTRAL	6,410	7.5
MIDDLE ATLANTIC	9,129	10.6	Montana	210	
Ohio	6,616		Idaho	351	
Indiana	3,309		Wyoming	118	
Illinois	5,979		Colorado	841	
Michigan	6,160		New Mexico	269	
Wisconsin	3,962		Arizona	1,049	
EAST NO. CENTRAL	26,026	30.3	Utah	672	
Minnesota	2,581		Nevada	263	
Iowa	1,347		MOUNTAIN	3,773	4.4
Missouri	1,786		Alaska	85	
North Dakota	177		Washington	1,589	
South Dakota	352		Oregon	937	
Nebraska	566		California	7,411	
Kansas	1,007		Hawaii	65	
WEST NO. CENTRAL	7,816	9.1	PACIFIC	10,087	11.7
Delaware	117		UNITED STATES	80,991	94.2
Maryland	774		U.S. Territories	95	
Washington, DC	23		Canada	4,760	
Virginia	1,063		Mexico	128	
West Virginia	257		Other International	-	
North Carolina	1,798		APO/FPO	-	
South Carolina	1,052				
Georgia	1,384				
Florida	2,571				
SOUTH ATLANTIC	9,039	10.5			
			TOTAL QUALIFIED CIRCULATION	85,974	100.0

*See Additional Data

E-NEWSLETTER CHANNEL

2019	MMS Extra	The Shop - Blog
JANUARY		
January 4	-	58,878
January 9	60,592	-
January 11	-	60,111
January 16	59,837	-
January 18	-	59,491
January 23	60,308	-
January 25	-	59,390
January 30	59,677	-
FEBRUARY		
February 1	-	59,488
February 6	59,556	-
February 8	-	59,031
February 13	59,462	-
February 15	-	58,510
February 20	59,207	-
February 22	-	58,421
February 27	58,626	-
MARCH		
March 1	-	58,834
March 6	58,903	-
March 8	-	57,703
March 13	58,858	-
March 15	-	58,425
March 20	58,637	-
March 22	-	58,332
March 27	58,597	-
March 29	-	57,377
APRIL		
April 3	58,446	-
April 5	-	58,047
April 10	58,310	-
April 12	-	57,887
April 17	58,108	-
April 19	-	57,733
April 24	57,802	-
April 26	-	57,543
MAY		
May 1	44,708	-
May 3	-	44,177
May 8	44,580	-
May 10	-	44,066
May 15	53,924	-
May 17	-	53,433
May 22	53,635	-
May 24	-	53,230
May 31	-	53,103
JUNE		
June 5	53,582	-
June 7	-	53,035
June 12	53,439	-
June 14	-	52,989
June 19	53,431	-
June 21	-	52,900
June 26	53,357	-
June 28	-	52,855
AVERAGE:	56,483	55,961

MMS Extra (24 issued in the period)
The Shop - Blog (26 issued in the period)

WEBSITE CHANNEL

WWW.MMSONLINE.COM

2019	Pageviews	Sessions	Users	Average Session Duration
January	316,272	212,233	169,362	1:19
February	296,436	199,462	159,342	1:20
March	288,225	197,381	156,162	1:15
April	288,740	198,524	156,138	1:16
May	259,419	178,777	139,375	1:17
June	202,668	136,525	107,940	1:19
AVERAGE:	275,293	187,150	148,053	1:17

January – June 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 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



Facebook followers



LinkedIn group members



YouTube views*



Instagram members

2019

<http://twitter.com/mmsonline>

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

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

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

<https://instagram.com/modernmachineshop>

	Twitter followers	Facebook followers	LinkedIn group members	YouTube views*	Instagram members
Beginning Balance:	10,600	11,229	1,948	353,663	-
January	10,700	11,282	1,946	363,587	1,372
February	10,700	11,000	1,949	372,557	1,487
March	10,900	12,000	1,960	387,500	1,599
April	11,000	12,000	1,966	394,923	1,682
May	11,100	12,000	1,970	402,500	1,779
June	11,200	12,934	2,476	409,000	1,861

*YouTube data is cumulative views for all videos on the channel.

ADDITIONAL DATA

MAGAZINE:

PARAGRAPH 3b:

Business directories include 1 source of circulation for a quantity of 5,451 copies or 6.3%.

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.

Bryce Ellis, 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

State

County

Received by BPA Worldwide

Type

ID Number

July 12, 2019

Ohio

Hamilton

July 12, 2019

BD

M102B0J9

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.