

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
86,527 average circulation

MODERN MACHINE SHOP E-NEWSLETTERS



2 E-Newsletters in the period
49 total issued in the period
49,385 average per occurrence
49,451 average per occurrence

MODERN MACHINE SHOP WEBSITE



108,097 average users

MODERN MACHINE SHOP SOCIAL MEDIA



11,700 Twitter followers
14,595 Facebook followers
2,478 LinkedIn group members
441,500 YouTube views
2,517 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)	86,527	-	86,527
MODERN MACHINE SHOP E-NEWSLETTERS	-	-	-
a. MMS Extra (23 issued in the period)	49,385	-	49,385
b. The Shop - Blog (26 issued in the period)	49,451	-	49,451
MODERN MACHINE SHOP WEBSITE (Monthly Users with 199,826 average Pageviews)	108,097	-	108,097
MODERN MACHINE SHOP SOCIAL MEDIA			
a. Twitter followers	*11,700	-	*11,700
b. Facebook followers	*14,595	-	*14,595
c. LinkedIn group members	*2,478	-	*2,478
d. YouTube views	*441,500	-	*441,500
e. Instagram members	*2,517	-	*2,517

*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	66
Advertiser and Agency	3,554
Allocated for Trade Shows and Conventions	667
All Other	1,196
TOTAL	5,483

1. AVERAGE QUALIFIED CIRCULATION BREAKOUT FOR PERIOD

Qualified Circulation Individual	Total Qualified		Qualified Non-Paid		Qualified Paid	
	Copies	Percent	Copies	Percent	Copies	Percent
Sponsored Individually Addressed	-	-	-	-	-	-
Membership Benefit	-	-	-	-	-	-
Multi-Copy Same Addressee	-	-	-	-	-	-
Single Copy Sales	-	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	86,527	100.0	86,527	100.0	-	-

2. QUALIFIED CIRCULATION BY ISSUES FOR PERIOD

2019 Issue	Total Qualified
July	87,578
August	87,100
September	86,301
October	86,597
November	85,794
December	85,789

3a. BUSINESS/OCCUPATIONAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 2019
This issue is 1.0% or 879 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	390	0.5	138	86	122	30	-	13	1
326	PLASTICS AND RUBBER PRODUCTS MANUFACTURING	402	0.5	122	118	120	35	-	6	1
326 (Excl. 326199)	Plastics and Rubber Products Manufacturing									
326199	All Other Plastics Product Manufacturing	1,475	1.7	546	449	362	105	1	9	3
	Subtotal NAICS 326	1,877	2.2	668	567	482	140	1	15	4
327	NONMETALLIC MINERAL PRODUCT MANUFACTURING	284	0.3	89	78	76	31	1	8	1
331	PRIMARY METAL MANUFACTURING	303	0.3	130	91	51	21	-	8	2
3311	Iron and Steel Mills and Ferroalloy Manufacturing	190	0.2	63	53	46	12	1	13	2
3312	Steel Product Manufacturing from Purchased Steel	190	0.2	54	56	57	11	1	6	5
3313	Alumina and Aluminum Production and Processing	161	0.2	56	51	39	8	-	7	-
3314	Nonferrous Metal (except Aluminum) Production and Processing	569	0.7	158	187	167	41	3	13	-
3315	Foundries	1,413	1.6	461	438	360	93	5	47	9
	Sub-Total NAICS 331	1,413	1.6	461	438	360	93	5	47	9
332	FABRICATED METAL PRODUCT MANUFACTURING	1,306	1.5	599	364	238	81	-	19	5
33211	Forging and Stamping	638	0.8	346	139	95	29	1	22	6
33221	Cutlery and Handtool Manufacturing	1,839	2.1	1,182	337	201	67	2	41	9
33231	Plate Work and Fabricated Structural Product Manufacturing	1,450	1.7	923	286	142	47	2	45	5
33241	Ornamental and Architectural Metal Products Manufacturing	76	0.1	26	20	19	10	-	1	-
33242	Power Boiler and Heat Exchanger Manufacturing	82	0.1	41	17	13	6	-	4	1
33243	Metal Tank (Heavy Gauge) Manufacturing	72	0.1	44	16	6	3	-	2	1
33251	Metal Can, Box, and Other Metal Container (Light Gauge) Manufacturing	365	0.4	166	99	71	22	-	4	3
33261	Hardware Manufacturing (pt)	424	0.5	245	73	57	27	-	18	4
33271	Spring and Wire Product Manufacturing	26,350	30.7	17,746	4,920	1,920	890	34	718	122
33272	Machine Shops	2,078	2.4	1,251	463	231	74	3	50	6
33281	Turned Product and Screw, Nut and Bolt Manufacturing	1,089	1.3	693	194	93	57	-	43	9
33291	Coating, Engraving, Heat Treating, and Allied Activities	997	1.2	258	398	255	62	1	19	4
332991	Metal Valve Manufacturing	187	0.2	34	63	74	11	-	5	-
332992	Ball and Roller Bearing Manufacturing	68	0.1	28	13	18	8	-	-	1
332993	Small Arms Ammunition Manufacturing	40	-	9	14	13	4	-	-	-
332994	Ammunition (except Small Arms) Manufacturing	345	0.4	180	80	56	25	-	2	2
332996	Small Arms Ordnance, and Ordnance Accessories Manufacturing	227	0.3	108	65	33	10	-	11	-
332999	Fabricated Pipe and Pipe Fitting Manufacturing	1,556	1.8	956	309	186	59	4	35	7
	Sub-Total NAICS 332	39,189	45.7	24,835	7,870	3,721	1,492	47	1,039	185
333	MACHINERY MANUFACTURING	457	0.5	202	108	101	37	-	6	3
333111	Farm Machinery and Equipment Manufacturing (pt)	67	0.1	36	12	17	1	-	1	-
333112	Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	369	0.4	105	105	113	39	-	6	1
33312	Construction Machinery Manufacturing	148	0.2	55	45	32	13	1	2	-
333131	Mining Machinery and Equipment Manufacturing	409	0.5	151	139	88	24	2	5	-
333132	Oil and Gas Field Machinery and Equipment Manufacturing	223	0.2	105	58	50	7	-	1	2
333241	Food Product Machinery Manufacturing	39	-	12	11	13	2	-	1	-
333242	Semiconductor Machinery Manufacturing	263	0.3	133	67	43	12	-	7	1
333243	Sawmill, Woodworking, and Paper Machinery Manufacturing	97	0.1	48	30	12	5	-	2	-
333244	Printing Machinery and Equipment Manufacturing	853	1.0	408	182	162	51	2	43	5
333249	All Other Industrial Machinery Manufacturing	157	0.2	47	38	46	22	-	2	2
333314	Optical Instrument and Lens Manufacturing	56	0.1	21	18	13	4	-	-	-
333316	Photographic and Photocopying Equipment Manufacturing	452	0.5	246	83	91	18	1	10	3
333318	Other Commercial and Service Industry Machinery Manufacturing (pt)									

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				
					Management or Department (C,D,G,R,S)	Management or Department (E,F,T,V)				
333413	Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	141	0.2	64	32	35	4	-	5	1
333414	Heating Equipment except Warm Air Furnaces - Manufacturing (pt)	75	0.1	32	17	18	7	-	1	-
333415	Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	274	0.3	132	33	72	30	-	7	-
333511	Industrial Mold Manufacturing	1,577	1.8	830	411	206	79	2	45	4
333514	Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	1,611	1.9	870	425	207	66	1	34	8
333515	Cutting Tool and Machine Tool Accessory Manufacturing	1,324	1.5	578	225	221	95	3	191	11
333517	Machine Tool Manufacturing	1,597	1.9	779	297	297	70	3	149	2
333519	Rolling Mill and Other Metalworking Machinery Manufacturing	301	0.4	129	79	60	11	-	20	2
333611	Turbine and Turbine Generator Set Unit Manufacturing	132	0.2	33	31	55	12	-	1	-
333612	Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	204	0.2	62	68	52	17	-	4	1
333613	Mechanical Power Transmission Equipment Manufacturing	229	0.3	75	64	74	12	1	3	-
333618	Other Engine Equipment Manufacturing (pt)	296	0.3	143	57	67	26	1	2	-
333912	Air and Gas Compressor Manufacturing	147	0.2	46	46	37	15	-	3	-
333914	Measuring, Dispensing, and Other Pumping Equipment Manufacturing	296	0.3	75	100	95	17	-	9	-
333921	Elevator and Moving Stairway Manufacturing	34	-	15	5	8	5	-	-	1
333922	Conveyor and Conveying Equipment Manufacturing (pt)	198	0.2	59	72	36	18	-	12	1
333923	Overhead Traveling Crane, Hoist, and Monorail System Manufacturing (pt)	85	0.1	21	21	33	9	-	1	-
333924	Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	147	0.2	49	25	58	10	3	2	-
333991	Power-Driven Handtool Manufacturing	98	0.1	35	15	35	7	-	6	-
333992	Welding and Soldering Equipment Manufacturing	84	0.1	33	25	18	5	2	1	-
333993	Packaging Machinery Manufacturing	138	0.2	22	73	32	9	-	2	-
333994	Industrial Process Furnace and Oven Manufacturing	101	0.1	35	17	33	10	-	5	1
333995	Fluid Power Cylinder and Actuator Manufacturing	134	0.2	52	48	25	6	-	3	-
333996	Fluid Power Pump and Motor Manufacturing	148	0.2	34	46	53	10	-	5	-
333997	Scale and Balance (except Laboratory) Manufacturing	20	-	6	6	7	1	-	-	-
333999	All Other Miscellaneous General Purpose Machinery Manufacturing (pt)	1,076	1.3	610	228	158	45	-	34	1
	Sub-Total NAICS 333	14,057	16.4	6,388	3,362	2,773	831	22	631	50
334	COMPUTER AND ELECTRONIC PRODUCT MANUFACTURING									
3341	Computer and Peripheral Equipment Manufacturing	157	0.2	48	36	51	18	-	4	-
3342	Communications Equipment Manufacturing	265	0.3	85	61	83	33	1	1	1
3343	Audio and Video Equipment Manufacturing	45	0.1	18	10	13	4	-	-	-
3344	Semiconductor and Other Electronic Component Manufacturing	769	0.9	231	193	234	96	-	13	2
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	3,099	3.6	1,650	575	624	198	-	48	4
3346	Manufacturing and Reproducing Magnetic and Optical Media	44	-	19	7	10	5	-	3	-
	Sub-Total NAICS 334	4,379	5.1	2,051	882	1,015	354	1	69	7
335	ELECTRICAL EQUIPMENT, APPLIANCE, AND COMPONENT MANUFACTURING									
33511	Electric Lamp Bulb and Part Manufacturing	6	-	2	1	2	1	-	-	-
33512	Lighting Fixture Manufacturing	134	0.2	63	35	25	8	-	2	1
33521	Small Electrical Appliance Manufacturing	32	-	7	10	10	5	-	-	-
33522	Major Household Appliance Manufacturing	38	-	10	11	12	5	-	-	-
33531	Electrical Equipment Manufacturing	656	0.8	167	146	262	62	1	16	2
33591	Battery Manufacturing	50	0.1	15	12	19	3	-	-	1
33592	Communication and Energy Wire and Cable Manufacturing	200	0.2	118	26	44	8	-	3	1
33593	Wiring Device Manufacturing	166	0.2	33	68	51	12	-	2	-
33599	All Other Electrical Equipment and Component Manufacturing	419	0.5	198	88	92	25	1	13	2
	Sub-Total NAICS 335	1,701	2.0	613	397	517	129	2	36	7
336	TRANSPORTATION EQUIPMENT MANUFACTURING									
336111	Automobile Manufacturing	435	0.5	200	77	116	31	1	6	4
336112	Light Truck and Utility Vehicle Manufacturing	31	-	14	3	10	2	-	2	-
336120	Heavy Duty Truck Manufacturing	128	0.2	66	22	27	11	-	1	1
336211	Motor Vehicle Body Manufacturing (pt)	518	0.6	322	102	60	27	-	7	-
336212	Truck Trailer Manufacturing	447	0.5	326	60	38	9	-	14	-
336213	Motor Home Manufacturing	42	-	24	7	9	1	-	-	1
336214	Travel Trailer and Camper Manufacturing (pt)	152	0.2	118	18	7	6	-	3	-
336310	Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	380	0.5	203	59	79	27	1	11	-
336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing	420	0.5	241	59	79	35	-	5	1
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	68	0.1	24	17	22	3	-	1	1
336340	Motor Vehicle Brake System Manufacturing	119	0.1	37	27	41	12	-	1	1
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing	295	0.4	122	57	90	23	1	1	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)
					Management or Department (C,D,G,R,S)	Management or Department (E,F,T,V)				
336360	Motor Vehicle Seating and Interior Trim Manufacturing	84	0.1	33	18	22	9	-	2	-
336370	Motor Vehicle Metal Stamping	294	0.3	120	65	72	31	-	2	4
336390	Other Motor Vehicle Parts Manufacturing	2,424	2.8	1,076	442	652	213	3	33	5
336411	Aircraft Manufacturing	526	0.6	202	99	173	45	4	2	1
336412	Aircraft Engine and Engine Parts Manufacturing (pt)	534	0.6	128	130	222	48	4	2	-
336413	Other Aircraft Parts and Auxiliary Equipment Manufacturing	1,872	2.2	697	497	477	162	1	32	6
336414	Guided Missile and Space Vehicle Manufacturing	106	0.1	25	33	39	7	-	1	1
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	66	0.1	12	26	22	6	-	-	-
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	68	0.1	18	18	25	7	-	-	-
3365	Railroad Rolling Stock Manufacturing	149	0.2	66	30	35	13	-	5	-
3366	Ship and Boat Building	451	0.5	286	82	54	21	2	5	1
3369	Other Transportation Equipment Manufacturing	417	0.5	279	66	51	17	-	4	-
	Sub-Total NAICS 336	10,026	11.7	4,639	2,014	2,422	766	17	140	28
337	FURNITURE AND RELATED PRODUCT MANUFACTURING									
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	200	0.2	91	62	33	14	-	-	-
3372	Office Furniture (including Fixtures) Manufacturing	85	0.1	26	25	26	8	-	-	-
3379	Other Furniture Related Product Manufacturing	20	-	13	3	3	-	-	-	1
	Sub-Total NAICS 337	305	0.3	130	90	62	22	-	-	1
339	MISCELLANEOUS MANUFACTURING									
339112	Surgical and Medical Instrument Manufacturing	1,312	1.5	430	337	365	151	1	23	5
339113	Surgical Appliance and Supplies Manufacturing	654	0.8	343	107	146	43	-	12	3
339114	Dental Equipment and Supplies Manufacturing	909	1.1	734	68	47	50	-	9	1
339115	Ophthalmic Goods Manufacturing	83	0.1	40	17	16	5	-	2	3
339116	Dental Laboratories	529	0.6	482	11	21	13	-	-	2
33991	Jewelry and Silverware Manufacturing	166	0.2	128	16	12	5	-	2	3
33992	Sporting and Athletic Goods Manufacturing	268	0.3	160	43	26	29	1	7	2
33993	Doll, Toy, and Game Manufacturing	64	0.1	46	8	7	2	-	1	-
33994	Office Supplies (except Paper) Manufacturing	59	0.1	38	12	5	2	-	2	-
33995	Sign Manufacturing	525	0.6	454	41	15	10	-	3	2
33999	All Other Miscellaneous Manufacturing	972	1.1	589	169	137	44	-	30	3
	Sub-Total NAICS 339	5,541	6.5	3,444	829	797	354	2	91	24
311-324	OTHER MISCELLANEOUS MANUFACTURING	592	0.7	255	149	125	54	2	7	-
42	WHOLESALE TRADE	2,339	2.7	1,365	293	325	53	6	287	10
541	Professional, Scientific, and Technical Services	1,739	2.0	920	179	450	141	5	37	7
611	Educational Services	512	0.6	125	116	74	32	162	2	1
	OTHER QUALIFIED NAICS, N.E.C.	1,450	1.7	849	262	244	57	6	27	5
	TOTAL QUALIFIED CIRCULATION	85,794	100.0	46,970	17,612	13,565	4,579	279	2,449	340

(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 NOVEMBER 2019

This is an analysis of 74,012 or 86.3% recipients who manufacture for the following industries. 52,666 are classified based on their response to the question 'Which of the following markets do you manufacture for?' and 21,346 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	3,575	1,194	898	1,106	318	9	42	8
Captive Shops, Contract Shops & Job Shops	34,184	16,714	8,408	5,542	1,996	44	1,334	146
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,559	1,869	486	662	165	79	282	16
Totals	41,318	19,777	9,792	7,310	2,479	132	1,658	170
Automotive/Transportation								
OEMs, Components & Parts	5,837	2,926	1,033	1,324	440	6	89	19
Captive Shops, Contract Shops & Job Shops	36,409	18,291	8,678	5,906	2,033	52	1,299	150
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,807	2,147	492	634	164	90	265	15
Totals	46,053	23,364	10,203	7,864	2,637	148	1,653	184
Medical/Dental								
OEMs, Components & Parts	3,664	2,094	586	642	278	1	49	14
Captive Shops, Contract Shops & Job Shops	26,095	12,395	6,463	4,444	1,557	36	1,088	112
Other Qualified: R&D, Consultants, Testing & Design, Q/A	2,829	1,485	368	506	144	64	250	12
Totals	32,588	15,974	7,417	5,592	1,979	101	1,387	138
Military/Defense								
OEMs, Components & Parts	740	287	196	190	59	-	4	4
Captive Shops, Contract Shops & Job Shops	34,233	15,530	8,653	6,349	2,189	56	1,326	130
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,018	1,515	441	585	148	57	260	12
Totals	37,991	17,332	9,290	7,124	2,396	113	1,590	146
Offroad/Construction/Agriculture								
OEMs, Components & Parts	893	343	225	231	77	-	13	4
Captive Shops, Contract Shops & Job Shops	39,650	20,151	9,438	6,347	2,153	54	1,354	153
Other Qualified: R&D, Consultants, Testing & Design, Q/A	3,135	1,730	439	521	126	68	237	14
Totals	43,678	22,224	10,102	7,099	2,356	122	1,604	171
Oil & Gas/Energy								
OEMs, Components & Parts	557	206	184	120	37	3	7	-
Captive Shops, Contract Shops & Job Shops	31,962	15,035	8,199	5,466	1,828	48	1,266	120
Other Qualified: R&D, Consultants, Testing & Design, Q/A	2,807	1,457	426	499	117	56	242	10
Totals	35,326	16,698	8,809	6,085	1,982	107	1,515	130

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 NOVEMBER 2019

This is an analysis of 35,256 recipients in the indicated NAICS classifications, of whom 27,867 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	18,297	10,334	4,465	1,967	859	21	570	81
Automotive/Transportation	19,330	11,115	4,599	2,129	832	26	548	81
Medical/Dental	14,178	7,752	3,577	1,645	660	17	462	65
Military/Defense	16,588	9,049	4,213	1,887	802	24	543	70
Offroad/Construction/Agriculture	18,903	11,102	4,490	1,883	780	26	543	79
Oil & Gas/Energy	15,667	8,804	3,958	1,624	679	22	512	68

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		
I. Direct Request:	54,096	21,280	-	75,376	87.8
II. Request from recipient's company:	-	-	-	-	-
III. Membership Benefit:	-	-	-	-	-
IV. *Communication from recipient or recipient's company (other than request):	1,190	-	-	1,190	1.4
V. TOTAL - Sources other than above (listed alphabetically):	9,228	-	-	9,228	10.8
Association rosters and directories	-	-	-	-	-
*Business directories	9,228	-	-	9,228	10.8
Manufacturer's, distributor's, and wholesaler's lists	-	-	-	-	-
Other sources	-	-	-	-	-
VI. Single Copy Sales:	-	-	-	-	-
TOTAL QUALIFIED CIRCULATION	64,514	21,280	-	85,794	100.0
PERCENT	75.2	24.8	-	100.0	

*See Additional Data

GEOGRAPHICAL BREAKOUT OF QUALIFIED CIRCULATION FOR ISSUE OF NOVEMBER 2019*

State	Total Qualified	Percent	State	Total Qualified	Percent
Maine	372		Kentucky	888	
New Hampshire	664		Tennessee	1,420	
Vermont	208		Alabama	917	
Massachusetts	2,069		Mississippi	380	
Rhode Island	314		EAST SO. CENTRAL	3,605	4.2
Connecticut	1,670		Arkansas	508	
NEW ENGLAND	5,297	6.2	Louisiana	746	
New York	3,398		Oklahoma	952	
New Jersey	1,567		Texas	4,846	
Pennsylvania	4,553		WEST SO. CENTRAL	7,052	8.2
MIDDLE ATLANTIC	9,518	11.1	Montana	225	
Ohio	6,181		Idaho	402	
Indiana	2,779		Wyoming	135	
Illinois	5,130		Colorado	945	
Michigan	5,272		New Mexico	295	
Wisconsin	3,401		Arizona	1,141	
EAST NO. CENTRAL	22,763	26.5	Utah	700	
Minnesota	2,535		Nevada	311	
Iowa	1,260		MOUNTAIN	4,154	4.8
Missouri	1,769		Alaska	78	
North Dakota	207		Washington	1,617	
South Dakota	330		Oregon	1,070	
Nebraska	557		California	7,736	
Kansas	967		Hawaii	70	
WEST NO. CENTRAL	7,625	8.9	PACIFIC	10,571	12.3
Delaware	125		UNITED STATES	79,925	93.1
Maryland	765		U.S. Territories	97	
Washington, DC	25		Canada	5,512	
Virginia	1,116		Mexico	260	
West Virginia	274		Other International	-	
North Carolina	1,882		APO/FPO	-	
South Carolina	1,033				
Georgia	1,344				
Florida	2,776				
SOUTH ATLANTIC	9,340	10.9			
			TOTAL QUALIFIED CIRCULATION	85,794	100.0

*See Additional Data

E-NEWSLETTER CHANNEL

2019	MMS Extra	The Shop - Blog
JULY		
July 3	53,415	-
July 5	-	52,922
July 10	53,469	-
July 12	-	52,991
July 17	53,320	-
July 19	-	52,851
July 24	53,248	-
July 26	-	52,791
AUGUST		
August 2	-	52,807
August 7	53,188	-
August 9	-	52,682
August 14	53,125	-
August 16	-	52,616
August 21	53,042	-
August 23	-	52,528
August 28	52,921	-
August 30	-	52,439
SEPTEMBER		
September 4	36,328	-
September 6	-	36,001
September 11	36,377	-
September 13	-	36,043
September 18	36,338	-
September 20	-	35,984
September 25	39,120	-
September 27	-	38,784
OCTOBER		
October 2	41,118	-
October 4	-	42,839
October 9	47,246	-
October 11	-	46,878
October 16	52,923	-
October 18	-	52,682
October 23	52,930	-
October 25	-	52,536
NOVEMBER		
November 1	-	52,465
November 6	52,835	-
November 8	-	52,387
November 13	52,726	-
November 15	-	52,316
November 20	52,536	-
November 22	-	52,127
November 27	52,478	-
November 29	-	52,084
DECEMBER		
December 4	52,436	-
December 6	-	52,053
December 11	52,333	-
December 13	-	52,019
December 18	52,392	-
December 20	-	51,972
December 27	-	51,940
AVERAGE:	49,385	49,451

MMS Extra (23 issued in the period)
 The Shop - Blog (26 issued in the period)

WEBSITE CHANNEL

WWW.MMSONLINE.COM

2019	Pageviews	Sessions	Users	Average Session Duration
July	185,174	122,499	93,718	1:26
August	196,669	130,833	102,090	1:29
September	205,270	144,038	114,385	1:15
October	211,313	147,188	115,915	1:17
November	218,600	154,598	120,901	1:13
December	181,935	128,088	101,577	1:16
AVERAGE:	199,826	137,874	108,097	1:19

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 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
Beginning Balance:	11,200	12,934	2,476	409,000	1,861
July	11,200	13,115	2,495	415,700	1,923
August	11,300	13,462	2,498	423,000	1,984
September	11,400	13,725	2,498	431,900	2,155
October	11,600	14,112	2,500	440,100	2,262
November	11,700	14,435	2,500	449,700	2,404
December	11,700	14,595	2,478	441,500	2,517

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

ADDITIONAL DATA

MAGAZINE: PARAGRAPH 3b:

Communication from recipient or recipient's company (other than request) includes 7 sources of circulation for quantities of 56 copies or -% to 793 copies or 0.1%. Business directories include 1 source of circulation for quantities of 9,228 copies or 10.8% including D&B/Hoovers.

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

January 13, 2020

Ohio

Hamilton

January 13, 2020

BD

M102B0D9

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-Compli 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.