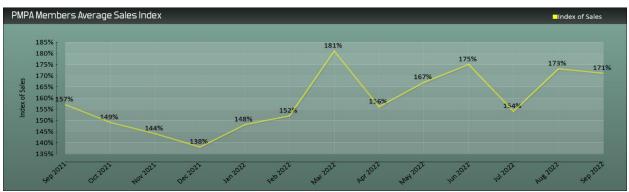


October 27, 2022

REPORT ON BUSINESS TRENDS September 2022

"Sales Level in September Maintaining Record Levels to Close Third Quarter"



September 2022 precision machining industry sales level at 171- down just 1% from August- fourth highest level ever.

The PMPA Business Trends Index remained level in September, dropping just 2 points or 1.2 percent from August's 173. The September Reading is our index's fourth highest level ever. For the year, our index is up 23 points over the 2021 calendar year average of 141, an increase of 1.63 percent. The average sales for Q3 2022 was 166, up 20 points or 13.6 percent from Q3 2021's 146 average. Seventy shops reported this month. None reported scheduling less than 40 hours.

According to the Federal Reserve: "Industrial production increased 0.4 percent in September and 2.9 percent at an annual rate in the third quarter. In September, manufacturing output rose 0.4 percent after advancing a similar amount in the previous month. At 105.2 percent of its 2017 average, total industrial production in September was 5.3 percent above its year-earlier level. Capacity utilization moved up 0.2 percentage point in September to 80.3 percent, a rate that is 0.7 percentage point above its long-run (1972–2021) average."

PMPA's Business Trends September Index remained level, supporting the broader industrial production sector's performance.

Note: PMPA Business Trends follows sales dollars, not count of parts shipped.

The **"Average Length of First Shift (Hours)"** reported by our respondents increased by 0.1 of an hour, from 44.1 to 44.2, essentially no change. No shops reported scheduling less than forty hours in September. Twenty shops- 29 percent of respondents- scheduled a straight forty hours. Twenty-two shops 31 percent-scheduled between 41-44 hours, with the remainder- twenty-eight shops or 40 percent-scheduling forty-five hours or more. Seventy-one percent of respondents scheduled overtime in September- not surprising given we are shipping at fourth highest monthly demand ever.



Sentiment Indicators Indicate Softening Ahead

Outlook for Lead Times remained level. All other indicators continued to decline in September.

Sales Outlook (*Reporting of Sales Outlook is counts of respondents, not percent of sales*): **Positive Sentiment for Sales over the next three months remained level in September.** Seventeen shops- 24 percent of respondents- expect sales volume for the next three months to increase. Thirty-four companies made up the 49 percent of respondents expecting sales to remain level for the next three months. Nineteen shops- up 26.6 percent from last month's fifteen- made up the 27 percent of respondents expecting sales to decline in the next three months. *The outlook for Sales declined in September looking ahead to the next three months*. (Blue line on Sentiment Chart)

Lead Times: Forward looking sentiment for Lead Times plummeted in August. Thirteen shops or 19 percent of respondents expect Lead Times to increase for the next three months. This is barely changed from July's 15, and 21 percent. However, forty-five shops, same as August's number, expect lead times to remain the same for the next three months. This "expect to remain the same" cohort is up 2 percent to 64 percent from August's 62 percent. This month twelve shops, down from fourteen last month, expect lead times to decline. *The outlook for Lead Times to remain the same or to increase remains level at 83 percent in September*. (Yellow line on Sentiment Chart)

Employment: Outlook for Employment prospects declined in September. Eleven shops, or 16 percent of respondents expect employment prospects to increase. Eight shops (11 percent) expect them to decline. The majority of respondents- fifty-one shops or 73 percent- believe that employment prospects will remain the same for the next three months. Sixty-two shops, (73 percent) of respondents expect positive or level Employment trends for the next three months. *Prospects for employment declined from 88 percent to 73 percent of respondents expecting level or increased opportunities for employment.* (Orange Line on Sentiment Chart)

Profitability: Outlook for the next three months declined in August. Only twelve shops- down from seventeen in August- or 17 percent of respondents- expect improved profitability in the next three months. However, the number of shops expecting profitability to remain the same is level at 42 or 60 percent. No change for the majority of respondents. Sixteen shops or 23 percent of respondents expect profitability to decrease. Seventy-seven percent of shops in September, compared to eighty-one percent (81 percent) of respondents in August expect Profitability to remain the same or improve in the next three months. *Overall sentiment for Profitability continued to decline in September.* (Dark Red Line on Sentiment Chart)

(over)



Opinions for the next three months compared to today:

- \Rightarrow Net Sales: The outlook for Sales declined in September looking ahead to the next three months.
- \Rightarrow Lead Times: The outlook for Lead Times to remain the same or increase remains level at 83 percent in September.
- ⇒ **Employment:** *Prospects for Employment declined from 88 percent to 73 percent of respondents expecting level or increased opportunities for employment.*
- ⇒ **Profitability:** *Overall sentiment for Profitability continued to decline in September.*

Current Environment: Outlook has pivoted toward a softening in the months ahead despite August and September's Sales remaining strong. Strong sales performance in September chalked up a fourth highest level of sales ever. For the year, our index is up 23 points over 2021 calendar year average, an increase of 16 percent. Our production and sales keep pace with the broader Industrial Production indicator. While softening is considered to be a negative indicator, our shops have been running on high levels of overtime and at never before considered levels of sales. So, a softening is not unexpected, and our indicators do not suggest panic is warranted. Sales are traditionally lower in the fourth quarter, so it is not unexpected. *Our sales index has not dropped below the calendar year average (141) of 2021 in any month of 2022.* Our year-to-date average is 164, on track for a banner calendar year for Precision Machining Industry Sales in 2022.

The data continues to show a strong year for our shops' sales, despite the challenges that we face in the overall economy. The combination of all factors discussed in this report make a persuasive case for an adjustment back toward more typical levels of sales and production in the next three months. The three-month moving average has turned toward, but not crossed, the twelve-month moving average line.

Miles Free, Director, Industry Research and Technology PMPA MKF: vd Results from: September 2022

1. INDEX OF SALES OF PRECISION MACHINED PRODUCTS

INDUSTRY AVERAGE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC	AVG
Base 2010	87	89	106	100	99	109	101	111	109	107	105	93	101
2018	135	129	143	133	138	138	127	143	132	141	130	113	134
2019	142	133	147	137	140	129	132	134	132	135	123	110	133
2020	139	133	129	84	86	112	117	119	129	131	125	128	119
2021	129	130	152	136	129	148	134	149	157	149	144	138	141
2022	148	152	181	156	167	175	154	173	171				164
% YR AGO	115	117	119	115	129	118	115	116	109				
Y-T-D	115	116	117	117	119	119	118	118	117				

Note: See "Sales" chart on last page, reflecting activity over a 5 year period.

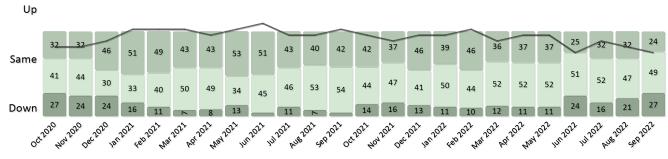
2. AVERAGE LENGTH OF FIRST SHIFT PER WEEK

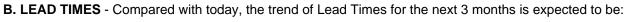
	YEAR-T	O-DATE		AVERAG		
	2021	2022		Aug	Sep	
Average length first shift (hours)	44.1	44.2	-	44.1	44.2	
% Companies Reporting						
Less Than 40 Hours	3%	0%		0%	0%	
40 Hours	32%	30%	:	35%	29%	
41-44 Hours	18%	23%	:	23%	31%	
45 Hours	20%	18%		12%	16%	
46-49 Hours	12%	13%		12%	7%	
50 and Over	15%	15%		18%	17%	

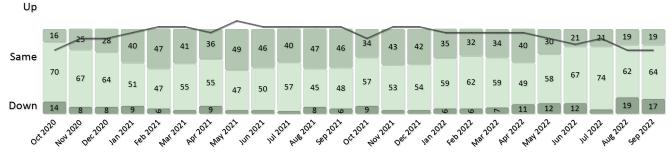
Note: Periodically, we update prior period data which was not previously available at the time of input. When these changes are made, you will probably see some discrepancy between prior month figures shown on the current report and the prior month report as originally issued.

The figures reported below reflect the view of respondents based on conditions as of the end of: September 2022

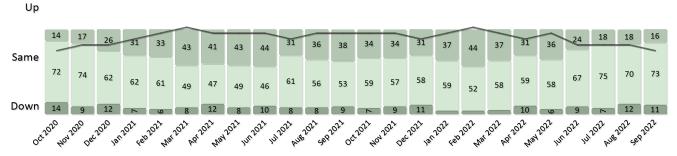
3. A. NET SALES OF MACHINED PRODUCTS - Compared with today, the trend of Net Sales volume for the next 3 months is expected to be:

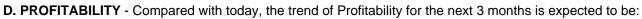


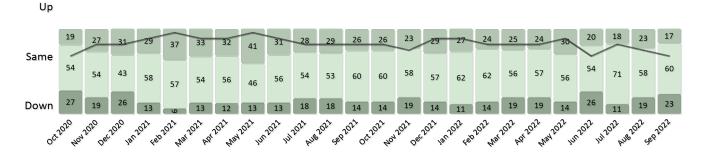




C. EMPLOYMENT - Compared with today, the trend of Employment for the next 3 months is expected to be:







EXPLANATION OF GRAPHS: The line in each chart represents a graph for that charts data to allow for easy comparison and tracking of trends. The full range from top to bottom on that line represents 0% (bottom) to 100% (top) of the respondents. In other words, the higher the line, the greater the ration of respondents who answered the top option as opposed to the bottom option.



BUSINESS TRENDS

Index of Sales and Average Weekly Hours Charts



