2013 Iowa Industry Survey Report

Plastics and Rubber Manufacturing
(NAICS: 326, 325211, 325212)

Center for Industrial Research and Service, Iowa State University
Iowa State University’s Center for Industrial Research and Service (CIRAS) surveyed the Iowa plastics and rubber manufacturing industry to understand their business characteristics and attitudes toward continuous improvement, technology adoption, product development, process development and process upgrades. Data was collected in the Fall of 2013 with an online survey targeting the plastics and rubber subsector (NAICS Code: 326, 325211, 325212).

The results of the survey are contained on the following pages together with your individual response for comparison purposes. Your company specific information is noted on all figures where you provided a response.

**Survey Sample Summary**

<table>
<thead>
<tr>
<th>Survey Target Industry by NAICS Code:</th>
<th>Iowa Plastics and Rubber Manufacturing Subsector. NAICS Code:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>326- Plastics and Rubber Products Manufacturing.</td>
</tr>
<tr>
<td></td>
<td>325211- Plastics Material and Resin Manufacturing.</td>
</tr>
<tr>
<td></td>
<td>325212- Synthetic Rubber Manufacturing.</td>
</tr>
<tr>
<td>Survey Sample</td>
<td>201</td>
</tr>
<tr>
<td>Response rate</td>
<td>33.80%</td>
</tr>
</tbody>
</table>
Executive Summary

1) 34% of the companies have been in business for less than 25 years.
2) 43% of the companies produced 'Components for an assembly in a subsystem'.
3) 62% of the companies supply to OEMs.
4) 52% of the companies have multiple manufacturing facilities.
5) 56% of the companies are Iowa only companies.
6) 34% of the companies have less than 50 employees.
7) 54% of the companies engage 5% or less of their employees in product development activities.
8) 64% of the companies engage 5% or less of their employees in process development activities.
9) 82% of the companies did not use or are unaware of state or federal financial assistance for their continuous improvement activities.
10) The respondents identified 'Technology adoption and/or upgrades' are important toward many company goals.
11) The respondents identified 'Capital availability' as the factor that most influences their ability to adopt new technologies.
12) 69% of the companies are considering or currently in the process of developing a new product line.
13) 80% of the companies are considering or currently in the process of upgrading their product line.
14) The respondents identified marketing-related hurdles as two of the top three factors preventing their companies from developing or upgrading their products.
15) 34% of the companies price their products above competition.
16) 28% of the companies have over 40% of their sales income from a single customer.
17) The respondents rated process innovation, product innovation, and process automation as important to their company goals.
1). How many years has your company been in business?

![Bar chart showing the number of companies by years in business]

**Fig 1. Number of years in business.**
(2). Which categories below best describe the primary product(s) manufactured by your company?

Fig 2. Primary product categories manufactured by companies.
(3). Which categories below best describe your primary customers?

![Bar chart showing response rates for different customer categories.]

Fig 3. Primary customer categories served by companies.
(4). Does your company have multiple manufacturing facilities?

Fig 4. Companies with multiple manufacturing facilities.
(5). Please enter the number of manufacturing and/or product development facilities your company owns in the following locations.

Fig 5. Locations of companies' manufacturing and/or product development facilities.
(6). How many people does your company employ at all facilities?

Fig 6. Number of employees in companies with an Iowa presence.
(7). How many of your employees are directly engaged in product development activities?

![Bar chart showing the fraction of companies with different engagement levels in product development activities.](Image)

**Fig 7.** Employees engaged in product development activities in companies.
(8). How many of your employees are directly engaged in process development activities?

Fig 8. Employees engaged in process development activities in companies.
(9). Is your company currently considering new technology adoption and/or upgrades for either products or existing manufacturing processes?

Fig 9. Companies considering or adopting new technologies.
(10). To achieve your technology adoption objectives, has your company applied for and/or received financial assistance from the state or federal government for your research?

Fig 10. Companies accessing state or federal financial tools for adopting new technologies.
(11). How important are technology adoption and/or upgrades for products and processes to the following goals of your company?

![Graph showing importance ratings for various company goals related to technology adoption.]

Average Response

- Competitiveness: 4.2
- Higher profitability: 4.0
- Your 5 year business plan: 3.8
- Meeting labor needs: 3.8
- Improved quality control: 4.0
- Other factors: 1.8

*1 = Not Important, 5 = Critically Important*

Fig 11. Importance of technology adoption toward companies' goals.
(12). How much do the following factors influence your ability to adopt new technologies?

![Graph showing factors influencing companies' ability to adopt new technology.](image)

**Fig 12. Factors influencing companies' ability to adopt new technology.**
(13). Are you either considering or in the process of developing a new product line?

Fig 13. Companies considering or developing new product lines.
(14). Are you either considering or in the process of upgrading your product line?

Fig 14. Companies considering or upgrading product lines.
The table below lists several factors that can prevent manufacturing companies from developing or upgrading their products. How much of a challenge is each of these factors for your company?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Average Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product cost</td>
<td>3.15</td>
</tr>
<tr>
<td>Accessing new markets</td>
<td>2.92</td>
</tr>
<tr>
<td>Marketing</td>
<td>2.92</td>
</tr>
<tr>
<td>Product development infrastructure</td>
<td>2.92</td>
</tr>
<tr>
<td>Process design capabilities</td>
<td>2.92</td>
</tr>
<tr>
<td>Product design capabilities</td>
<td>2.92</td>
</tr>
<tr>
<td>Supply chain</td>
<td>2.92</td>
</tr>
<tr>
<td>Your capacity to develop prototypes</td>
<td>2.92</td>
</tr>
<tr>
<td>Access to materials</td>
<td>2.92</td>
</tr>
<tr>
<td>Other factors</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Fig 15. Challenges preventing companies from developing or upgrading products.
(16). Which of the following best describes how you price your products and services?

Fig 16. Pricing Strategies of companies.
(17). What percentage of your company’s annual sales do you attribute to the following customers?

**Fig 17. Annual sales profile of companies.**

- Your largest customer:
  - 1-20%: 16%
  - 21-40%: 46%
  - 41-60%: 22%
  - 61-80%: 4%
  - 81-100%: 2%
  - Unsure: 8%

- Your second largest customer:
  - 1-20%: 26%
  - 21-40%: 58%
  - 41-60%: 2%
  - 61-80%: 2%
  - 81-100%: 10%
  - Unsure: 8%

- Your top 5 customers:
  - 1-20%: 20%
  - 21-40%: 16%
  - 41-60%: 18%
  - 61-80%: 12%
  - 81-100%: 8%
  - Unsure: 8%
(18). Rate the importance of the following activities to your company’s long-term success.

![Bar chart showing importance ratings for various activities]

Fig 18. Importance of company activities for long term success.