# 33271 - Machine Shop Services in the US



**iExpert** 

Key Statistics Snapshot \$40.1bn

\$2.3bn

Annual Growth 13-18

-1.2%

\$13.9bn

Annual Growth 18-23

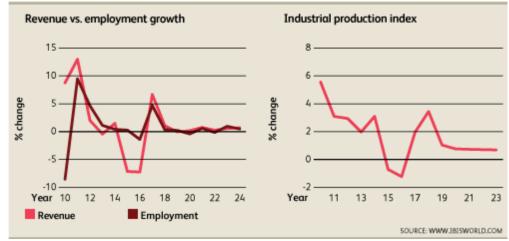
0.3%

Businesses

18,548

### **Market Share**

There are no major players in this industry



#### **Key External Drivers**

Industrial production index

Demand from metal stamping and forging

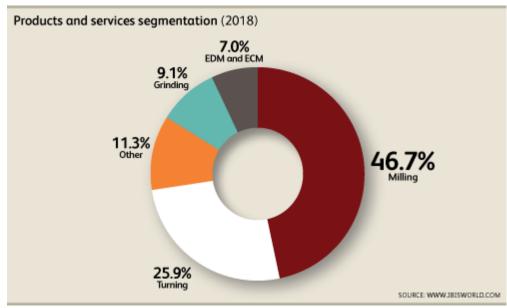
Demand from car and automobile manufacturing

Price of steel

Aggregate private investment

Prime rate

Federal funding for defense



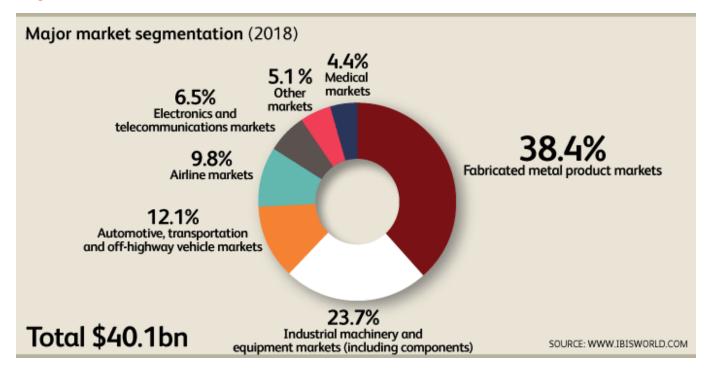
### **Industry Structure**

Life Cycle Stage	Mature
Revenue Volatility	Medium
Capital Intensity	Low
Industry Assistance	Low
Concentration Level	Low

Regulation Level	Light
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Technology Change	Medium
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Barriers to Entry	Low
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Industry Globalization	Low
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Competition Level	High

# **Industry Benchmarks**

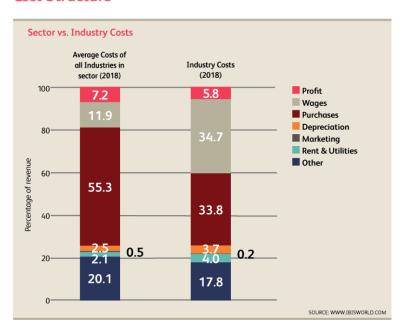
# Major Markets



This chart shows the size of the markets that buy the industry's products or use its services.

It is based on the proportion of revenue each buying segment contributes to total industry revenue.

#### Cost Structure



This chart represents the latest cost structure of the industry. It shows the proportion of revenue each cost item absorbs, with the remainder representing profit.

The comparison to all other industries in the sector provides a benchmark that shows how the industry differs from its peers.

# **Industry Performance**

# Performance Summary

The Machine Shop Services industry slowly contracted over the five years to 2018 after posting revenue declines in three of the past five years. A further decline was mitigated by a robust rebound in the industry's major markets, specifically commercial aerospace and transportation manufacturing, which picked up in 2012. In fact, nearly all of this industry's downstream markets have expanded over the past five years and are currently operating with improved market conditions. However, as a result of falling metals prices from 2013 to 2016, the industry was not able to expand during the five-year period; industry revenue is expected to decrease an annualized 1.2% to \$40.1 billion over the five years to 2018. Industry revenue is expected to increase 1.1% in 2018, as demand continues to rise. Technological advancement in machining is largely driven by the defense and aerospace markets. These markets require parts that are as light as possible, made to exceptionally tight tolerances and shaped into complex geometries. Industry operators serving these markets have increased their investment in computer numerical control machines that increase

automation and precision, leading to a significant rise in the industry's capital costs over the past five years. As defense spending has tapered off due to the United States' withdrawal of combat operations in the Middle East, many of these operators' machines have been repurposed to satisfy growing demand from the commercial manufacturing sector. However, military spending is expected to increase in 2018, which will help prevent the industry from further decline.

Over the next five years, operators will devote further resources to satisfy projected growing demand from manufacturers in markets like automobile manufacturing, commercial aircraft manufacturing and metal forging. Demand from medical device manufacturers is also expected to increase due to a progressively aging US population with an increasing need for medical care. This will heighten the need for micromachined products. However, steel prices are expected to grow over the five years to 2023, boosting industry growth. As a result, industry revenue is forecast to grow at an annualized rate of 0.3% to \$40.8 billion over the five years to 2023.

## Industry Issues

#### **THREAT**

The prime rate refers to the interest rate charged by banks to their most creditworthy and largest corporate customers. A higher prime rate will make it more expensive for companies to fund expansionary activities. Downstream markets will experience challenges as the prime rate is expected to rise in 2018, presenting a threat to the industry.

#### **OPPORTUNITY**

The industrial production index is a composite measure of output from the economy's manufacturing, mining and utilities sectors. Higher industrial production increases demand for manufactured metal, machined products and machining services. The industrial production index is expected to increase in 2018, representing a potential opportunity for the industry.

# **Call Preparation Questions**

### **Role Specific Questions**

#### Role: Sales & Marketing

#### How is your company impacted by rising imports from abroad?

• Although the USITC does not provide information on trade for this industry, the industry still faces pressure from abroad. This is in line with the manufacturing sector as a whole, where companies face intense competition from abroad including Canada and China.

#### Are your company's sales heavily dependent on the health of the US economy?

• The industry's major markets indicate that this industry performs best in a period of macroeconomic growth. Other manufacturing industries and the construction sector are key buyers of industry products; macroeconomic events generally play a role in the performance of those industries.

#### **Role: Strategy & Operations**

#### Has your company located in proximity to its key downstream distributors to reduce shipping costs?

• Industry companies should look to be based in locations with high concentrations of manufacturing companies. Given the wide-array of key buyers, companies that manufacture for a specific industry, including oil and gas, aerospace and automotive, should be in proximity to those companies.

### Has your company been exposed to volatile input prices over the past few years?

• Steel is a key input for industry companies; as a result, steel prices play a major role in industry revenue and profit. The price of steel has exhibited some significant volatility over the past five years, decreasing as much as 11.5% in 2015 before rising 12.5% in 2017.

#### Role: Technology

#### Have you been able to reduce wage costs by automating operations over the past five years?

• Companies should look to increase efficiency and decrease wage expense by working with third-party robotic companies that build specifically for manufacturing.

#### How is your company leveraging new technology, such as [example: RFDI tags, etc.], in its operations?

• The blockchain will continue to grow in importance to this logistics-heavy industry. Using the blockchain, transparency will increase throughout the supply chain process, which will increase efficiency and decrease the likelihood of error.

#### **Role: Compliance**

#### Do you work with trade associations or other interest groups to advance your company's interests?

• Tax incentives play a major role in this industry. The majority of companies utilize incentives, including the Bonus Depreciation and Section 179 of the tax code. These deductions allow companies to save money on tax while also expanding their businesses.

#### What effect have international tariffs had on your ability to import and export products?

• The Trump Administration is exploring implementing tariffs on foreign-made steel and aluminum. As metals are a key input for the industry, a tariff may increase purchase costs for industry companies.

#### **Role: Finance**

#### Do you have any big projects requiring that require capital financing on the horizon?

• While interest rates are still low, companies should consider expansion if they are able to. However, interest rates are expected to rise, which will make projects costlier.

#### How has price volatility of inputs affected profit margins over the past 12 months?

• The price of steel is a key input and therefore its price has a major effect on the industry. Over the past five years, steel prices have exhibited volatility; however, steel is expected to post only modest loss in 2018, which will decrease industry volatility.

### **External Impact Questions**

Issue: Prime rate

# Will your clients limit or suspend spending on your products or services because of higher interest rates?

• The prime rate refers to the interest rate charged by banks to their most creditworthy and largest corporate customers.

Issue: Federal funding for defense

#### How heavily does your company rely on contracts in the defense sector?

 Machining involves techniques by which metal can be processed into shapes that exceed the capabilities of forging.

Issue: Industrial production index

# Does your company monitor the industrial production index? When manufacturing output is low, how does your company secure revenue?

• The industrial production index is a composite measure of output from the economy's manufacturing, mining and utilities sectors.

#### **Internal Issues Questions**

#### Issue: Ability to vary services to suit different needs

#### Do you offer a diverse range of services? Do you cater any specific market with the services you offer?

• Industry operators are contracted to manufacture products that meet customer specifications.

#### Issue: Access to multiskilled and flexible workforce

#### How do you attract and retain skilled employees?

The growing sophistication of the industry's technology requires an increasingly skilled workforce.

#### Issue: Effective quality control

#### Do you rely on the superiority of products and services to attract repeat purchasers?

 Products that are defective cause a one-time loss of labor costs and machine time and the possible loss of repeat business.