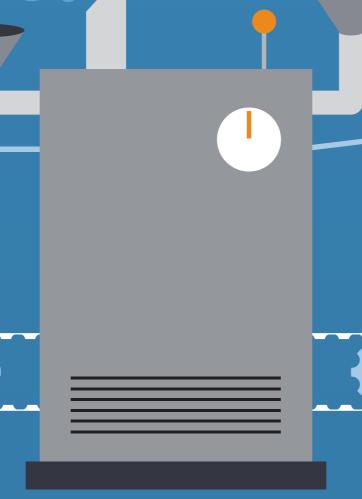
# MANUFACTURINGJOB

OF THE MOMENT.. AND BEYOND

THE NEED FOR **MAINTENANCE TECHNICIANS** 



GROWING.

of Manufacturing Managers state that manufacturing technologies are / Increasingly becoming computer-based (per a 2012 Manpower survey).

The growing need for technology creates demand for an occupation in manufacturing — THE MAINTENANCE TECHNICIAN — and specialization within the occupation.

### MAINTENANCE TECHNICIANS ARE IN DEMAND!

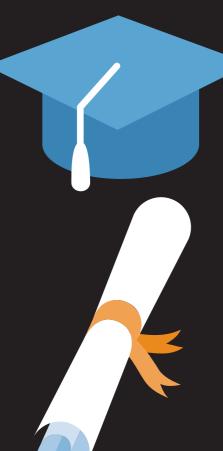
SUPPLY



DEMAND **15,141** 

### WHAT DOES IT TAKE TO BECOME A **MAINTENANCE TECHNICIAN?**

### **AVERAGE MAINTENANCE** TECHNICIAN EDUCATION LEVEL



HIGH SCHOOL **33%** 29% **ASSOCIATE'S DEGREE** 

**12% BACHELOR'S DEGREE** 

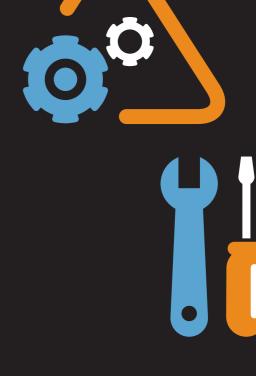
MASTER'S DEGREE

<1% **DOCTORATE** 

#### 1. TROUBLESHOOTING

**SKILLS REQUIRED** 

- 2. SALES AND OPERATIONS
- **PLANNING** 3. PREVENTATIVE MAINTENANCE
- **INSPECTIONS** 4. PREVENTATIVE MAINTENANCE
- **5. MICROMETERS**

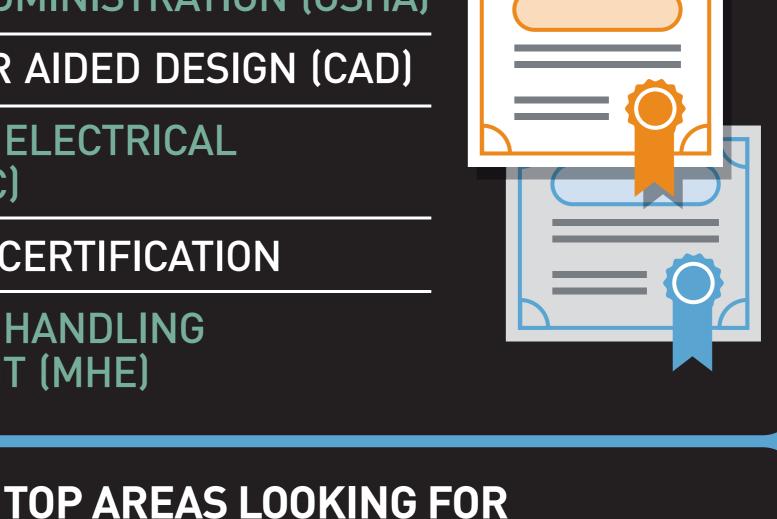


#### 1. OCCUPATIONAL SAFETY & **HEALTH ADMINISTRATION (OSHA)**

**CERTIFICATION REQUIRED** 

- 2. COMPUTER AIDED DESIGN (CAD) 3. NATIONAL ELECTRICAL
- CODE (NEC) 4. FORKLIFT CERTIFICATION
- **EQUIPMENT (MHE)**

5. MATERIAL HANDLING



### 1 CHICAGO, IL 2. HOUSTON, TX

**MAINTENANCE TECHNICIANS**\*

- 3. CLEVELAND/AKRON, OH
- **GREATER ATLANTA**

**GREATER DETROIT** 



#### THE 4 FUTURE MANUFACTURING TECHNOLOGIES AND THE REQUIREMENTS MAINTENANCE

TECHNICIANS WILL NEED TO WORK WITH THEM

**JOB OVERVIEW** 

Control the motion of

routers, drills, milling

and automatic welding



#### machines using computer/ digital numerical control devices.

machines, turning centers

Robot use to expand from highly repetitive actions to collaboration with humans.

#### A background in CAD tools (computer-aided design).

PREFERRED:

**EDUCATION** 

**REQUIRED:** 

**REQUIRED:** CNC programming education

(offered in technical schools).

Specialized robotics training.

CNC programming education

(offered in technical schools).

ROBOTICS

#### To program and maintain robots.

These machines sort,

conduct material handling

PREFERRED:

**REQUIRED:** CNC programming education (offered in technical schools).



#### and guide robot movement and grasping. To program and configure Machine Vision Systems.

**REQUIRED:** 

## (offered in technical schools).

PREFERRED: A background in CAD tools (computer-aided design). Other specialized training

CNC programming education



machine which adds material in layers to create a desired 3D product.

A new manufacturing

Troubleshoot, program and maintain 3D printing machines.

may be required.