

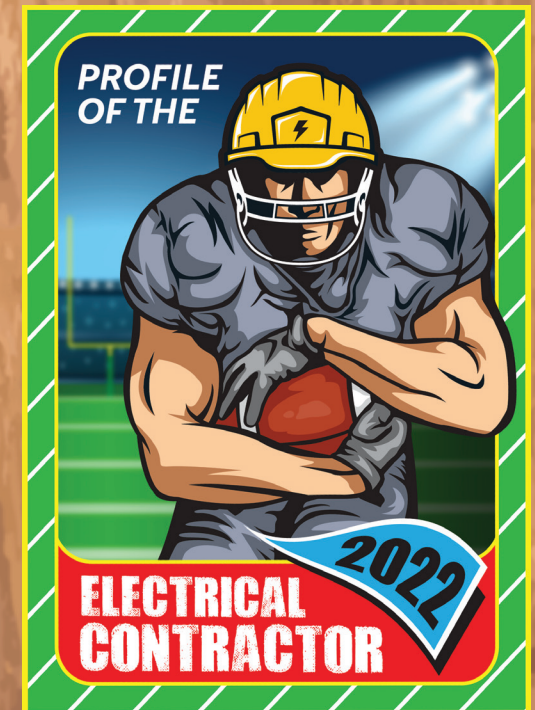


# ELECTRICAL CONTRACTOR

## 2022 Profile of the Electrical Contractor

### Electrical Contractors: Their Use, Purchase and Lease of: Construction Site Tools and Equipment

Hand tools • Power tools • Measuring tools (including digital) • Fishing tools • Pipe threaders/Benders/Cutters • Cable pullers • Aerial lifts and scaffolding • Digging/HDD/Boring equipment • Cranes • Mobile office space • Portable generators • Trailers (to haul equipment) • Personal protective equipment/apparel • Job-site safety equipment • Temporary job-site lighting • Temporary power • Surveying tools • Wearable technology • Robots



*A special report prepared by Renaissance Research & Consulting, Inc. for  
ELECTRICAL CONTRACTOR Magazine, December 2022*

**2022 “ELECTRICAL CONTRACTOR MAGAZINE PROFILE”  
DATABASE REPORT**

**ELECTRICAL CONTRACTORS:  
THEIR USE, PURCHASE AND LEASE OF:  
CONSTRUCTION SITE TOOLS AND EQUIPMENT  
HAND TOOLS  
POWER TOOLS  
MEASURING TOOLS (INCLUDING DIGITAL)  
FISHING TOOLS  
PIPE THREADERS/BENDERS/CUTTERS  
CABLE PULLERS  
AERIAL LIFTS AND SCAFFOLDING  
DIGGING/HDD/ BORING EQUIPMENT  
CRANES  
MOBILE OFFICE SPACE  
PORTABLE GENERATORS  
TRAILERS (TO HAUL EQUIPMENT)  
PERSONAL PROTECTIVE EQUIPMENT/APPAREL  
JOB-SITE SAFETY EQUIPMENT  
TEMPORARY JOB-SITE LIGHTING  
TEMPORARY POWER  
SURVEYING TOOLS  
WEARABLE TECHNOLOGY  
ROBOTS**

**INCLUDING ESTIMATES BASED ON THE 2020 COUNTY BUSINESS PATTERNS**

**A SPECIAL REPORT PREPARED BY  
RENAISSANCE RESEARCH & CONSULTING, INC.**

**FOR:  
©2022 ELECTRICAL CONTRACTOR MAGAZINE  
WASHINGTON, DC 20004**

**DECEMBER 2022**

# TABLE OF CONTENTS

## Contents

<b>KEY FINDINGS .....</b>	<b>1</b>
<b>METHODOLOGY .....</b>	<b>9</b>
<b>DETAILED FINDINGS .....</b>	<b>10</b>
<b>Tools and Equipment Use, Purchase and Rental/Lease Overview.....</b>	<b>10</b>
Tools and Equipment Used in 2021 .....	10
Percent That Purchase Different Types of Tools and Equipment.....	13
Percent That Rent/Lease Different Types of Tools and Equipment .....	18
<b>Tools:.....</b>	<b>23</b>
Hand Tools Purchase and Rental/Lease Behavior .....	23
Power Tools Purchase and Rental/Lease Behavior .....	25
Measuring Tools (Including Digital) Purchase and Rental/Lease Behavior .....	27
Fishing Tools Purchase and Rental/Lease Behavior.....	29
Pipe Threaders/Benders/Cutters Purchase and Rental/Lease Behavior.....	31
Cable Pullers Purchase and Rental/Lease Behavior .....	33
<b>Construction Site Equipment.....</b>	<b>35</b>
Aerial Lifts/Scaffolding Rental/Lease and Purchase Behavior .....	37
Digging/HDD/Boring Equipment Rental/Lease and Purchase Behavior .....	39
Cranes Rental/Lease and Purchase Behavior.....	41
Mobile Office Space (Trailers) Rental/Lease and Purchase Behavior .....	43
Portable Generators Purchase and Rental/Lease Behavior .....	45
Trailers (To Haul Equipment/Materials) Purchase and Rental Behavior .....	47
Personal Protective Equipment, Including Apparel and Accessories: Purchase and Rental Behavior .....	49
Job-Site Safety Equipment Purchase and Rental/Lease Behavior .....	51
Temporary Job-site Lighting Purchase and Rental/Lease Behavior .....	53
Temporary Power Purchase and Rental/Lease Behavior.....	55
Surveying Tools and Equipment Purchase and Rental/Lease Behavior .....	56
Wearable Technology Purchase and Rental/Lease Behavior .....	57
Robots Purchase and Rental/Lease Behavior (This section also appears in the second volume of this report).....	58

## KEY FINDINGS

This report is volume one of a two-volume report covering different types of tools and equipment as well as use of electronic devices and software. Pages 1 and 2, as well as pages 9 –22 are common to both reports.

### USE, PURCHASE AND RENTAL/LEASE BEHAVIOR OVERVIEW:

#### Tools and Equipment Used in 2021

In the 2022 Profile Study, electrical contractors were asked to indicate which of 28 types of tools and equipment they or their firm **used** in the *previous* year.

In 2022, the following four tool types were added to the list asked in the 2020 Profile study: Temporary power, Surveying tools and equipment, Wearable technology, Robots.

Not surprisingly, as was the case two and four years ago, many of the top categories mentioned were those that received high levels of purchase and/or rental/lease in previous Profile Studies, with about 8 in 10 mentioning: Hand tools, Electrical testers, multimeters, Power tools, and/or Fishing tools. About 7 in 10 mentioned Phones (including Smartphones, Mobile, Cell, Two-way radios and Push-to-talk phones), Measuring tools and/or Pipe threaders, benders, cutters on their list of items used in the previous year..

Between about 50% and 60% of the firms surveyed said that they or their firm used the following in 2021: Personal protective equipment (PPE), including apparel and accessories, Labeling/identification, Cable pullers, Job-site safety equipment, Cable pullers, Portable generators, Tablets or portable reading devices and/or Temporary job-site lighting,

Between about 40% and 46% used Aerial lifts/scaffolding, Temporary power (new in 2022), Job-site safety equipment, Trailers (to haul material/equipment), Thermal imaging and/or LAN, datacom, low voltage meters.

31% mentioned Digging/HDD/boring equipment, 26% mentioned Surveying tools and equipment (new in 2022),

About 20% mentioned Wearable technology (new in 2022), Cranes, Mobile office space (trailers)

The fewest mentioned these newer technology categories: Drones, 3D scanners, 3D printers and/or Robots.

Reported usage remained quite constant between 2019 and 2021 with only three statistically significant changes emerging: Usage of Thermal imaging rose significantly while two types of tools and equipment posted a significant decline compared to 2019: Labeling/identification and Job-site safety equipment. Interestingly, these two had risen between 2017 and 2019 and now appear to be returning to their 2017 level.

Note that in 2021, the vast majority of electrical contracting firms make *use* of **multiple** types of tools and equipment, about 90% across the total sample.

## Tools and Equipment **Purchased** in 2021

Almost nine in ten of the electrical contractors surveyed (87%) reported purchasing tools and equipment in 2021, statistically unchanged from two years earlier.

In 2021, Hand tools and Power tools continue to top the list at around 75% each, followed distantly by Electrical testers, multimeters, Measuring tools (including digital), Fishing tools and Phones at around 50%.

Given the upsets caused by the COVID pandemic, the war in Ukraine, supply chain issues and other disruptions, it is quite impressive that purchase levels in 2021 are unchanged from what was reported in 2019.

As has been the case in earlier Profile studies, in 2021, the bulk of electrical contractors made purchases in *multiple* categories (83% in 2021), statistically unchanged compared to two years ago.

- There are no statistically significant differences between 2019 and 2021 in the number of category purchase made (that is, purchase in 2+, 4+, 6+ or 9+ categories).

## Tools and Equipment **Rented/Leased** in 2021

In 2021, as was the case in 2019 and in 2017, six in ten electrical contractors (60%) *rented/leased* equipment. Note that in 2015 and 2013, the rental/lease rate was substantially and significantly lower -- in the 37% to 40% range.

Nevertheless, as has been the case in recent Profile studies, fewer electrical contractors continue to obtain tools and equipment through rental/lease (61%) than through outright purchase (87%).

As was also the case two years ago, in addition to Aerial lifts/scaffolding and Digging/HDD/boring equipment, Cranes and Mobile office space (trailers) are the only four categories that are more likely to be obtained through *rental/lease* than through *purchase*. All are statistically unchanged compared to two years earlier.

Compared with two years earlier, rental/lease levels increased significantly only for three categories: Temporary job-site lighting, Electrical testers and multimeters and Measuring tools.

Rental/lease levels declined slightly but significantly in the case of Fishing tools and Labeling/identification (cable/panel) between 2019 and 2021.

- Among the total sample, four in ten electrical contractors rented or leased in *multiple* categories. This is statistically unchanged from two years earlier. Not surprisingly, rental/lease “Any”, and in multiple categories is higher among larger firms and/or among firms that work primarily on CII rather than smaller firms and/or those who work primarily on residential projects.

## **KEY FINDINGS: TOOLS**

### **Hand Tools**

74% of respondent firms made a purchase in the Hand tools category in 2021, statistically unchanged compared with 2019. 7.5% said that their firm obtained Hand tools through rental/lease, also statistically unchanged compared with two years earlier.

In 2021, there were no subgroup differences either by number of employees or primary type of work performed in terms of either purchase or rental/lease.

### **Power Tools**

75% of electrical contracting firms reported making a 2021 purchase of Power tools. This purchase level is statistically unchanged from the 2019 purchase level of 68%. 8.5% of electrical contractors reported renting or leasing Power tools in 2021. This is a statistically unchanged from the level observed two years earlier.

In 2021, there were no subgroup differences either by number of employees or primary type of work performed in terms of either purchase or rental/lease.

### **Measuring Tools (Including Digital)**

52% of electrical contracting firms purchased Measuring tools (including digital) in 2021; 5.7 % rented or leased in this category in 2021. Rental/lease levels tripled compared with two years earlier resulting in a statistically significant increase.

- There are no subgroup differences in *purchase levels* by number of employees or by the primary type of work performed.
- Firms working primarily on CII projects are substantially and significantly more likely to rent/lease Measuring tools compared with firms working primarily on residential projects. There are no differences in rental/lease by number of employees.

### **Fishing Tools**

47% of electrical contracting firms purchased Fishing tools in 2021; none of the firms reported renting or leasing in this category in 2021. This is a statistically significant decline from the 2.5% that reported renting/leasing Fishing tools two years earlier.

There are no statistically significant differences in purchase or rental/lease levels by number of employees or primary type of work performed.

## Pipe Threaders, Benders and Cutters

36% of electrical contracting firms purchased Pipe threaders/benders/cutters in 2021, statistically unchanged from two years earlier.

- In 2021, larger firms and/or those who work primarily on CII projects are far more likely to *purchase* Pipe threaders/benders/cutters compared with smaller firms and/or those that work primarily on residential projects.
- In 2021, there are no statistically significant differences by subgroups in terms of renting/leasing Pipe threaders/benders/cutters. The lack of statistical significance could be due, in part, to the small base sizes of the subgroups.

## Cable Pullers

24% of electrical contracting firms purchased Cable pullers in 2021, which is statistically unchanged vs. the 2017 level of 25%. The percentage of electrical contracting firms renting/leasing, at 6.6%, is also statistically unchanged compared with two years ago.

- There is no difference by number of employees or by primary type of work performed in the likelihood of purchasing Cable pullers.
- Firms working primarily on CII projects are more likely than those working primarily on residential projects to have rented or leased Cable pullers in 2021. There is no difference in 2021 rental or lease of cable pullers by number of employees.

## KEY FINDINGS: CONSTRUCTION SITE EQUIPMENT

Overview: Construction Site Equipment is one of the few categories where some equipment is more likely to be obtained through *rental/lease* rather than through *purchase*. In fact, far more electrical contracting firms continue to obtain Aerial lifts/scaffolding, Digging/HDD/boring equipment, and Cranes and Mobile office space (trailers) through *rental/lease* than through *purchase*.

- In contrast, however, Personal protective equipment, Temporary power, Job-site safety equipment and Temporary job-site lighting are far more likely to be purchased rather than rented/leased.
  - In all other cases –Trailers to haul equipment/materials and Portable generators – the difference between renting/lease and purchase is less than 10 percentage points.

## **Aerial Lifts/Scaffolding Rental/Lease and Purchase Behavior**

In 2021, 48% of firms obtained Aerial lifts/scaffolding through *rental/lease* and 10% through *purchase*. The percentage *renting/leasing* and the percentage *purchasing* Aerial Lifts and Scaffolding held steady compared with two years earlier.

Rental/Lease: Larger firms and/or those that work primarily on CII projects are more likely than smaller firms and/or those that work primarily on residential projects to have *rented or leased* Aerial lifts/scaffolding in 2021.

Purchase: There is no difference in terms of purchase levels by number of employees. However, firms that work primarily on CII projects are more likely than firms that work primarily on residential projects to have made a 2021 *purchase* of Aerial lifts/scaffolding.

## **Digging/HDD/Boring Equipment**

In 2021, 30% of electrical contracting firms obtained Digging/HDD/boring equipment through *rental/lease* and 4.7% through *purchase*. Both rental/lease levels and purchase levels are statistically unchanged compared with two years earlier.

Rental/Lease: larger firms are more likely than smaller firms to rent/lease Digging/HDD/boring equipment while there is no subgroup difference by primary type of work performed.

Purchase: There are no subgroup differences by number of employees or by primary type of work performed in the likelihood of purchasing Digging/HDD/boring equipment.

## **Cranes Rental/Lease and Purchase Behavior**

23% of electrical contractors obtained Cranes in 2021 through *rental/lease* and 1.9% through *purchase*; both are statistically unchanged compared with two years earlier.

Cranes are far more likely to be *rented/leased* by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

However, in 2021, there is no difference by number of employees or by the primary type of work performed in the *purchase* levels of Cranes.

*Continues on the next page...*



## Mobile Office Space

20% of electrical contractors obtained Mobile office space (trailers) in 2021 through *rental/lease* and 2.8% through *purchase*. The levels of rental/lease and purchase are each statistically unchanged compared to two years earlier.

Mobile office space (trailers) is more likely to have been obtained by *rental/lease* in 2021 by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

Mobile office space (trailers) is also more likely to have been obtained by *purchase* in 2021 by larger firms compared with smaller firms but there is no difference in purchase levels by primarily type of work performed.

**In the next two sections -- Portable generators and Trailers (to haul equipment/materials) --the percentages obtaining through *purchase* and *rental/lease* are more comparable to each other than is the case with other types of job site equipment.**

## Portable Generators

16% of electrical contracting firms *purchased* Portable generators in 2021, statistically unchanged from the 2019 results. 15% obtained Portable generators through *rental/lease*, also statistically unchanged compared to two year earlier.

Larger firms are significantly more likely than smaller firms to have made a 2021 *purchase* in this category. However, there is no difference in *purchase* level by primary type of work performed.

Larger firms and/or those that work primarily on CII projects are significantly more likely than smaller firms and/or those that work primarily on residential projects to have made a *rental/lease* in this category.

## Trailers (to Haul Equipment)

This is the second of the two categories where rental/lease plays at least a non-negligible role, but where the level of *purchase* is actually higher than the level of *rental/lease*.

18% of electrical contracting firms *purchased* Trailers (to haul equipment/materials) in 2021. This is statistically unchanged from the level observed in 2019.

12% *rented or leased* Trailers (to haul equipment/materials) in 2021, also statistically unchanged compared with 2019 results.

*Purchase* levels are higher among firms with 10+ employees while there is no difference by primary type of work performed.

*Rental/lease* levels of Trailers to haul equipment/materials are higher among firms with 10+ employees while there is no difference by primary type of work performed.

**In the remaining sections -- Personal protective equipment, Job-site safety equipment, and Temporary job-site lighting -- *purchase* plays a much more dominant role than does *rental/lease*.**

## **Personal Protective Equipment/Apparel**

44% of electrical contracting firms reported a 2021 *purchase* of Personal protective equipment, including apparel and accessories, statistically unchanged compared with 2019.

Only 1.9% of electrical contracting firms *rented/leased* in this category; also statistically unchanged from the levels observed in 2019.

Purchase levels are higher among larger companies and/or firms that work primarily on CII construction rather than for smaller firms and/or those that primarily work on residential construction.

Rental/lease levels are a fraction of the purchase levels and in the case of *rental/lease*, there are no statistically significant differences by either number of employees or by primary type of work performed.

## **Job-site Safety Equipment**

35% of electrical contracting firms reported a 2021 purchase of Job-site safety equipment. 4% obtained Job-site safety equipment through rental/lease. Both purchase levels and levels of rental/lease are statistically unchanged compared with two years earlier.

In 2021, *purchase* levels of Job-site safety equipment were higher among larger companies and/or companies that work primarily on CII projects compared with companies that have 1-9 employees and/or that work primarily on residential projects.

In 2021, companies that work primarily on CII projects were more likely than companies that work primarily on residential projects to have *rented or leased* Job-site safety equipment. However, there was no difference in the 2021 *rental/lease* of Job-site safety equipment by number of employees.

## **Temporary Job-site Lighting Purchase and Rental/Lease Behavior**

23% of electrical contracting firms *purchased* Temporary job-site lighting in 2021, which is statistically unchanged from the 26% which was measured two years earlier. Ten percent (10%) *rented or leased* in this category in 2021, which is a statistically significant increase compared with two years earlier.

Both *purchase* levels and *rental/lease* levels are significantly higher among larger electrical contracting firms and/or among those that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

## **New Categories Added in 2022**

Four new categories were added to the 2022 questionnaire: Temporary power, Robots, Wearable technology (such as smart watches or heated outerwear), Surveying tools and equipment.

## Temporary Power

In 2021, 26% of electrical contractors *purchased* Temporary power and 8% *rented or leased* in this category.

Purchase levels of Temporary power are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

Rental/lease: There are no statistically significant subgroup differences in *rental/lease* of Temporary power either by number of employees or by primary type of work performed.

## Surveying Tools

In 2021, 14% of electrical contracting firms obtained Surveying tools and equipment by *purchase* and 7% by *rental/lease*.

Both purchase and rental/lease of surveying tools and equipment are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

## Wearable Technology

In 2021, 14% of electrical contractors made a *purchase* of wearable technology (defined in the survey as smart watches or heated outerware) and 1.9% *rented/leased* in this category .

There is no statistically significant difference in *purchase* or in *rental/lease* levels by number of employees or by the primary type of work performed.

## Robots [Robots is also included in the Communications report]

Both 2021 *purchase* and *rental/lease* is low in this category:

- 2.8% reported purchasing a Robot in 2021.
- 1.9% reported rental/lease of a Robot in 2021

Purchase levels are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

Rental/lease levels: There are no statistically significant differences in rental/lease by either number of employees or primary type of work performed.

## METHODOLOGY

This report focuses on electrical contractors' use, purchase, rental/lease of hand tools and power tools and construction site equipment. In 2022, four new categories were included. They are: Robots, Surveying tools, Temporary power and Wearable technology. Please note that the Profile study is conducted in even years (2022 or 2020) and asks about the previous year (2021 or 2019).

The survey was conducted by internet among subscribers to ELECTRICAL CONTRACTOR magazine. In addition, in 2022, as in 2020 and 2018, about 100 members of the ELECTRICAL CONTRACTOR Subscriber Research Panel also participated in the survey. The field period for the survey began on January 26, 2022, and ran through April 15, 2022, which was the deadline for the July 2022 article. A total of 843 completed the survey during that time period.

As postal mail participation (also called the "print" sample, since they received their printed survey via postal mail) had dwindled, for the first time in 2022, the survey was only offered on the internet.

Since there was no print sample, the data were not weighted. Data were also not weighted in 2020. In that case, there was no weighting since the proportion of the total attributable to the print list was so low weighting would distort the total statistics.

Each respondent who received the survey through the internet was sent up to seven follow-up emails. An incentive was offered for participation in the survey: For each completed survey, ELECTRICAL CONTRACTOR would contribute \$5 to charity, up to a total of \$10,000. In addition, as was the case since 2018, the magazine also offered a sweepstakes drawing for a chance to win one of ten \$150 Amazon e-gift cards. In 2018 and 2020, the drawing was for one of five \$150 Amazon e-gift cards.

The internet option was first introduced in 2004.

As was the case since 2004, the survey was produced in different versions. Starting with the 2008 Profile study, there were four versions of the survey, which differed from each other on fewer than 10 questions. The first 30 questions were common to all versions. Since 2018, there have been 7 versions.

This report and its companion report are drawn from Versions 3 – tools and equipment used, purchased, rented/leased -- and from Version 8 – business activities conducted in-house, using a computer – and use/ownership and planned acquisition of electronic devices. The base sizes of those version are as follows: Version 3 has a base size of 106 and Version 8 has a base size of 172.

As in the past, statistical testing was done at the 90% level of confidence.

**This research was conducted by New York, NY-based Renaissance Research & Consulting, Inc. ([www.renaiss.com](http://www.renaiss.com)), an independent marketing research firm that has, as one of its specialties, market research for the construction industry.**

## DETAILED FINDINGS

### Tools and Equipment Use, Purchase and Rental/Lease Overview

#### Tools and Equipment Used in 2021

In the 2022 Profile study, electrical contractors were asked to indicate which of 28 types of tools and equipment they or their firm **used** in the *previous* year.

In 2022, the following four tool types were added to the list asked in the 2020 Profile study: Temporary power, Surveying tools and equipment, Wearable technology, Robots.

Not surprisingly, as was the case two and four years ago, many of the most mentioned categories were those that received high levels of purchase and/or rental/lease in previous Profile Studies, with about 8 in 10 mentioning: Hand tools, Electrical testers, multimeters, Power tools, and/or Fishing tools. About 7 in 10 mentioned Phones (including Smartphones, Mobile, Cell, Two-way radios and Push-to-talk phones), Measuring tools and/or Pipe threaders, benders, cutters on their list of items used in the previous year.

Between about 50% and 60% of the firms surveyed said that they or their firm used the following in 2021: Personal protective equipment (PPE), including apparel and accessories, Labeling/identification, Cable pullers, Job-site safety equipment, Cable pullers, Portable generators, Tablets or portable reading devices and/or Temporary job-site lighting,

Between about 40% and 46% used Aerial lifts/scaffolding, Temporary power (new in 2022), Job-site safety equipment, Trailers (to haul material/equipment), Thermal imaging and/or LAN, datacom, low voltage meters.

31% mentioned Digging/HDD/boring equipment, 26% mentioned Surveying tools and equipment (new in 2022),

About 20% mentioned Wearable technology (new in 2022), Cranes, Mobile office space (trailers)

The fewest -- in the 6% to 12% range-- mentioned these newer technology categories: Drones, 3D scanners, 3D printers or Robots.

The table follows on the next page.

Reported usage remained quite constant between 2019 and 2021 with only three statistically significant changes emerging: Usage of Thermal imaging rose significantly while two types of tools and equipment posted a significant decline compared to 2019: Labeling/identification and Job-site safety equipment. Interestingly, these two had risen between 2017 and 2019 and now appear to be returning to their 2017 level.

In 2022, we did not include individual<sup>1</sup> types of software in this question. This was done because we believe that the word “software” may have been ambiguous to survey participants, for example, if it comes pre-loaded is it viewed as “software”? Instead, in a separate part of the survey, we asked if the respondent handled each of 13 tasks “internally” using a computer. Based on asking the question this way, we believe that asking about *individual* types of software had underestimated software usage.

---

<sup>1</sup>Such as BIM, CAD, Estimating, Project management, Tool/ equipment inventory control, Scheduling /service work/logistics. Etc.

<b>Tools and Equipment <u>Used</u></b>	<b>Total 2021</b>		<b>Total 2019</b>		<b>Total 2017</b>
	(106)		(236)		(234)
	%		%		%
“Any”	91		90		91
Hand tools	82		81		82
Electrical testers, multimeters, etc.	78		78		80
Power tools	77		79		82
Fishing tools	75		76		N/A
Phones: smart/mobile/cell or two-way radios/push-to-talk	74		71		71
Measuring tools (including digital)	72		78		N/A
Pipe Threaders, benders, cutters	69		70		71
Personal protective equipment, including apparel and accessories	59		65		59
Labeling/identification (cable/panel)	56	<	67	>	55
Cable pullers	54		54		53
Portable generators	51		51		46
Tablets or portable reading devices	50		51	>	42
Temporary job-site lighting	49		48		48
Aerial lifts/scaffolding	46		49		52
Job-site safety equipment	44	<	58	>	45
Trailers (to haul equipment/materials)	43		46	>	39
Thermal imaging	42	>	32		26
LAN, datacom, other low-voltage	40		37		34
Digging/HDD/boring equipment	31		33		26
Cranes	18		14		11
Mobile office space (construction trailers)	17		14		13
Drones	12		8		5
3D scanner	9		8		5
3D printer	9		8		N/A
Software (e.g. CAD, estimating, procurement, etc.)	NA		50		45
Temporary power	46		NA		NA
Surveying tools and equipment	26		NA		NA
Wearable technology (such as smart watches or heated outerwear)	20		NA		NA
Robots	6		NA		NA

Note that the vast majority of electrical contracting firms make *use* of **multiple** types of tools and equipment, about 90% across the total sample.

- Reported use of 4-5 types of tools is higher among firms with 1-9 employees compared with firms with 10+ employees, while firms with 10+ employees are significantly more likely to use 6+ categories of tools and equipment, particularly 9+ types of equipment.
- The main finding by primary type of work performed is that firms that work primarily on CII projects are significantly more likely to make use of 9 or more types of tools and equipment compared with firms that work primarily on residential projects (80% vs. 58%). Another interesting finding is the high percentage of smaller firms and firms that work primarily on residential construction that make use of 6 or more types of tools and equipment (67% and 75%, respectively).

	Use in Multiple Categories in 2021					
	Number of Employees			Work Primarily In		
	Total	1-9	10+		Residential	CII
	(106)	(58)	(48)		(36)*	(50)
	%	%	%		%	%
<b>Any Use</b>	<u>91</u>	<u>88</u>	<u>94</u>		<u>89</u>	<u>92</u>
Use Only 1 Category	2	3	0		6	0
<b>Use in Multiple Categories</b>	89	85	94		83	92
Use in 2 – 3 Categories	5	<b>5</b>	4		0	<b>&lt;6</b>
<b>Use in 4+ Categories</b>	84	79	90		83	86
Use in 4 – 5 Categories	8	<b>12&gt;</b>	2		8	4
Use in 6+ Categories	76	67	<b>&lt;88</b>		75	82
<b>Use 6-8</b>	7	<b>10&gt;</b>	2		<b>17&gt;</b>	2
Use 9+ Categories	70	57	<b>&lt;85</b>		58	<b>&lt;80</b>

\* Caution – small base

Bolded numbers denote and arrows significant differences at the 90% level of confidence

## **Percent That Purchase Different Types of Tools and Equipment**

Almost nine in ten electrical contractors (87%) reported purchasing tools and equipment in 2021, statistically unchanged from two years earlier.

In 2021, Hand tools and Power tools continue to top the list at around 75% each, followed distantly by Electrical testers, multimeters, Measuring tools (including digital), Fishing tools and Phones at around 50%.

About 4 in 10 electrical contracting firms reported a 2021 purchase of: Personal protective equipment, including apparel and accessories, Labeling/identification (cable/panel), Pipe Threaders, benders, cutters and Job-site safety equipment.

About one-quarter of electrical contracting firms reported a 2021 purchase of: Tablets or portable reading devices, Temporary power, LAN, datacom, other low-voltage, Cable pullers and Temporary job-site lighting.

Between 10% and 20% of electrical contracting firms reported a 2021 purchase of: Thermal imaging, Trailers (to haul equipment/materials), Portable generators, Wearable technology (such as Smart watches or Heated outerware), Surveying tools and Aerial lifts/scaffolding.

Fewer than 10% of electrical contracting firms reported a 2021 purchase of: 3D printers, 3D scanners, Drones, Digging/HDD/boring equipment, Mobile office space (trailers, Robots or Cranes).

Given the upsets caused by the COVID pandemic, the war in Ukraine, supply chain issues and other disruptions, it is quite impressive that purchase levels in 2021 are unchanged from what was reported in 2019.



# PURCHASE OF TOOLS AND EQUIPMENT

V3, Q 14A, T74 (Trend p.211)	In 2021		In 2019		In 2017		In 2015		In 2013
	Total		Total		Total		Total		Total
Bolded numbers denote and arrows significant differences at the 90% level of confidence	(106)		(236)		(234)		(376)		(374)
	%		%		%		%		%
<b>“Any” Purchase ...</b>	87	=	84	=	81	>	79	<	<b>84</b>
Power tools	75	=	68	=	66	=	70	=	<b>72</b>
Hand tools	74	=	74	=	70	=	70	<	<b>77</b>
Electrical testers, multimeters, etc.	53	=	55	>	45	=	46	<	<b>60</b>
Measuring tools (including digital) (first asked in 2020 Profile Study)	52	=	49		N/A		N/A		N/A
Fishing tools (first asked in 2020 Profile Study)	47	=	46		N/A		N/A		N/A
Phones: smart/mobile/cell or two-way radios/push-to-talk	47	=	43	=	37	=	37	<	47
Personal protective equipment, including apparel and accessories	44	=	43	=	<b>42</b>	>	31	<	44
Labeling/identification (cable/panel)	40	=	36	=	<b>34</b>	>	22	<	33
Pipe Threaders, benders, cutters	36	=	35	=	<b>28</b>	>	22	<	28
Job-site safety equipment	35	=	34	=	28	=	26	<	32
Tablets or portable reading devices	27	=	31	=	<b>24</b>	>	16	<	22
Temporary power (first asked in 2022)	26		NA		NA		NA		NA
LAN, datacom, other low-voltage	25	=	<b>22</b>	>	<b>14</b>	>	9	<	16
Cable pullers (first asked in 2014 Profile Study)	24	=	25	=	<b>19</b>	>	10	<	14
Temporary job-site lighting (first asked in 2016)	23	=	26	=	<b>23</b>	>	15		N/A
Thermal imaging (first asked in 2014)	19	=	12	=	10	=	8	=	10
Trailers (to haul equipment/materials) (first asked in 2016)	18	=	17	=	<b>12</b>	=	9		N/A
Portable generators (first asked in 2016 Profile Study)	16	=	19	=	16	=	19		N/A
Wearable technology (first asked in 2022)	14		NA		NA		NA		NA
Surveying tools (first asked in 2022)	14		NA		NA		NA		NA
Aerial lifts/scaffolding	10	=	<b>11</b>	>	6	<	10	<	16
3D printer (first asked in 2020 Profile Study)	8	=	4		N/A		N/A		N/A
3D scanner (first asked in 2018 Profile Study)	7	=	5	=	2		N/A		N/A
Drones (first asked in 2018 Profile Study)	7	=	5	>	2		N/A		N/A
Digging/HDD/boring equipment	5	=	<b>9</b>	>	4	=	7	=	9
Mobile office space (construction trailers) (first asked in 2016 Profile Study)	3	=	5	=	3	=	4		N/A
Robots (first asked in 2022)	3		NA		NA		NA		NA
Cranes (first asked in 2016 Profile Study)	2	=	3	=	1		2		N/A

Bolded numbers denote and arrows significant differences at the 90% level of confidence

## Purchase in Multiple Categories

As has been the case in earlier Profile studies, in 2021, the bulk of electrical contractors made purchases in *multiple* categories (83% in 2021), statistically unchanged compared to two years ago.

- There are no statistically significant differences between 2019 and 2021 in the number of category purchases made.

PURCHASE IN MULTIPLE CATEGORIES										
V3, Q 14A, T74 (Trend p.216)	In 2021		In 2019		In 2017		In 2015		In 2013	In 2011
	Total		Total		Total		Total		Total	Total
	(106)		(236)		(234)		(376)		(374)	(234)
	%		%		%		%		%	%
<u>Any Purchase</u>	87	=	84	=	81	=	79	<	<b>84</b>	> 77
Purchased Only 1 Category	4	=	5	=	6	=	5	=	3	5
Purchase in <b>Multiple</b> (2+) Categories	<b>83</b>	=	<b>79</b>	=	<b>75</b>	=	<b>74</b>	<	<b>81</b>	> 72
Purchased in 2 – 3 Categories	16	=	13	<	22	=	21	=	20	17
Purchase in <b>4+</b> Categories	<b>67</b>	=	<b>66</b>	>	<b>53</b>	=	<b>53</b>	<	<b>61</b>	<b>55</b>
Purchased in 4 – 5 Categories	9	=	13	=	16	=	18	=	19	24
Purchased in 6+ Categories	58	=	53	>	37	=	<b>35</b>	<	<b>42</b>	> 31
Purchased in 6-8 Categories	20	=	17		--		--		--	--
Purchased in 9+ Categories	38	=	36		--		--		--	--

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Purchase in Multiple Categories, continued

By number of employees: Those in smaller firms were significantly more likely to have purchased in only 1 category or in 2-3 categories, while those in larger firms are significantly more likely to have purchased in 6+ categories, particularly in 9+ categories

By primary type of work: Firms that work on primarily residential projects are more likely to have purchases in only a single category in 2021, while firms working primarily on CII projects are significantly more likely to have made purchases in 9+ categories.

	PURCHASE IN MULTIPLE CATEGORIES (2021)					
		Number of Employees			Work Primarily In	
		1-9	10+		Residential	CII
	(106)	(58)	(48)		(36)*	(50)
	%	%	%		%	%
<u>Any Purchase</u>	87	88	85		89	82
Purchased Only 1 Category	4	<b>7&gt;</b>	0		<b>11&gt;</b>	0
<u>Purchase in Multiple (2+) Categories</u>	83	81	85		78	82
Purchased in 2 – 3 Categories	16	<b>24&gt;</b>	6		17	12
<u>Purchase in 4+ Categories</u>	67	57	<b>&lt;79</b>		61	70
Purchased in 4 – 5 Categories	9	12	6		14	8
Purchased in 6+ Categories	58	45	<b>&lt;73</b>		47	62
Purchased in 6-8 Categories	20	22	17		25	16
Purchased in 9+ Categories	38	22	<b>&lt;56</b>		22	<b>&lt;46</b>

V3, Q 14A, T74 (Trend p.216), B1, p 244, 249; B2, p259

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

There are no statistically significant differences between 2021 and 2019 in the table shown below among the total sample or by number of employees.

- Given the number of crises and disruptions that took place in 2021, this type of stability is remarkable.

PURCHASE in MULTIPLE CATEGORIES (By Firm Size)														
	Total Sample					1-9 Employees					10+ Employees			
	2021	2019	2017	2015		2021	2019	2017	2015		2021	2019	2017	2015
	(106)	(236)	(234)	(376)		(58)	(150)	(162)	(278)		(48)	(85)	(71)	(98)
	%	%	%	%		%	%	%	%		%	%	%	%
<u>Any Purchase</u>	87	84	81	<u>79</u>		88	83	78 =	<u>81</u>		85	87	<b>87 &gt;</b>	<u>74</u>
Only 1 Category	4	5	6	5		7	<b>7</b>	9 =	5		0	1	0 =	3
<u>In Multiple Categories</u>	83	79	<u>75</u>	<b>74</b>		81	75	69 =	<u>75</u>		85	86	<b>87 &gt;</b>	<u>71</u>
In 2 – 3 Categories	16	13	< <b>22</b>	21		24	18	< <b>27</b> =	25		6	5	10	10
<u>In 4+ Categories</u>	67	<b>66 &gt;</b>	<u>53</u>	<u>53</u>		57	<b>57 &gt;</b>	<b>42</b>	<u>&lt; 51</u>		79	81	<b>77 &gt;</b>	<u>61</u>
In 4 – 5 Categories	9 =	13	16	18		12	15	18 =	21		6	8	11	10
<u>In 6+ Categories</u>	58	<b>53 &gt;</b>	37	35		45	<b>42 &gt;</b>	24 =	30		73	73	<b>66 &gt;</b>	51
In 6-8 Categories	20	17	--	--		22	19	--	--		17	14	--	--
In 9+ Categories	38	36	--	--		22	23	--	--		56	59	--	--

V3, Q 14A, T74 (Trend p.216), B1, p 244, 249; B2, p259

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Percent That Rent/Lease Different Types of Tools and Equipment

In 2021, as was the case in 2019 and in 2017, six in ten electrical contractors (60%) *rented/leased* equipment. Note that in 2015 and 2013, the rental/lease rate was substantially and significantly lower -- in the 37% to 40% range.

Nevertheless, as has been the case in recent Profile studies, fewer electrical contractors continue to obtain tools and equipment through rental/lease (61%) than through outright purchase (87%).

As was also the case two and four years ago, in addition to Aerial lifts/scaffolding and Digging/HDD/boring equipment, Cranes and Mobile office space (trailers) are the only four categories that are more likely to be obtained through *rental/lease* than through *purchase*. All are statistically unchanged compared to two years earlier.

Aerial Lifts/scaffolding and Digging/HDD/boring equipment continue to be the two categories that are obtained through rental/lease most often. Both are statistically unchanged compared to two years earlier. (There was also no statistically significant change between 2019 and 2017 on this measure.)

- Compared with two years earlier, rental/lease levels increased significantly only for three categories: Temporary job-site lighting, Electrical testers and multimeters and Measuring tools.
- Rental/lease levels declined slightly but significantly in the case of Fishing tools and Labeling/identification (cable/panel) between 2019 and 2021.

RENTAL/LEASE OF TOOLS AND EQUIPMENT									
	In 2021		In 2019		In 2017		In 2015		In 2013
	Total		Total		Total		Total		Total
	(106)		(236)		(234)		(376)		(374)
	%		%		%		%		%
“Any” Lease/Rental...	61		60	=	57	>	37		40
Software	NA		4.2	=	2.6	>	0.9		1
Aerial lifts/scaffolding	48		45	=	46	>	28		29
Digging/HDD/boring equipment	30		34	=	28	>	12	=	16
Cranes	23		25	>	17	>	6		N/A
Mobile office space (trailers)	20		14	=	12	>	6		N/A
Portable generators	15		13	=	11	>	4		N/A
Trailers (to haul equipment/materials)	12		9	=	8	>	3		N/A
Temporary job-site lighting	10	>	5	=	4	=	2		N/A
Power Tools	9	=	12	>	8	>	4	<	7
Electrical testers, multimeters, etc.	9	>	3	=	4	=	2		3
Hand tools	8		6	=	4	=	2	<	5
Cable pullers	7		8	=	8	>	3		4
Thermal imaging	7		5	=	4	>	1	<	3
3D scanner	5.7	=	2.1	=	1.6		N/A		N/A
Measuring tools (including digital)	5.7	>	1.7		N/A		N/A		N/A
Job-site safety equipment	4		7	=	6	>	1		4
Pipe threaders, benders, cutters	4		6	=	5	>	2		5
3D printer	4		2		N/A		N/A		N/A
Phones: smart/mobile/cell or two-way radios/push-to-talk	3	=	3	=	3	>	0.8		3
LAN, datacom, other low-voltage	3	=	2	=	2.8	>	0.6		1
Personal protective equipment, including apparel and accessories	2		3	=	2	=	0.6		1
Tablets	1.9		1.7	=	0.4	=	1		1
Drones	1.9		1.7	=	0.4		N/A		N/A
Fishing tools	0	<	3		N/A		N/A		N/A
Labeling/identification (cable/panel)	0	<	1.3	=	0.4	=	0.6		1
Temporary power	8		NA		NA		NA		NA
Surveying tools	7		NA		NA		NA		NA
Wearable technology	1.9		NA		NA		NA		NA
Robots	1.9		NA		NA		NA		NA

V3, Q 14A, T75 (Trend p.218), B1, p 250, B2, p259

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

## Rental/Lease in Multiple Categories

Among the total sample, 40% of electrical contractors rented/leased in two or more categories, statistically unchanged from the 46% observed two years ago.

RENTAL/LEASE IN MULTIPLE CATEGORIES									
	2021		2019		2017		2015		2013
	(106)		(236)		(234)		(376)		(374)
	%		%		%		%		%
Any Lease/Rental	<u>61</u>	=	<u>60</u>	=	<u>57</u>	>	<u>37</u>		<u>40</u>
Only 1 Category	22	>	14	=	16	=	18	=	21
Lease/Rent in Multiple/2+ Categories	<u>40</u>	=	<u>46</u>	=	<u>41</u>	>	<u>19</u>	=	<u>19</u>
In 2 Categories	8	=	13	=	14	>	8	=	10
In 3+ Categories	32	=	33	=	27	>	11	=	9

V3, Q 14A, T75 (Trend p.223)

- As was the case two years ago, larger electrical contracting companies are more likely than smaller electrical contractors to have leased/rented tools and equipment at all (“any”) and also in the multiple categories of 2+ and 3+ types of tools and equipment.
- As was also the case two years ago, a higher percentage of firms that work primarily on CII projects have rented/leased at all (“any”) and in the multiple categories of 2+ and 3+ types of tools and equipment compared with firms working primarily on residential projects.
  - As noted in the past, we believe that this is due to the larger companies being involved in larger, more complex and sophisticated projects that require *more different types* of tools and equipment.

	In 2021				
		Number of Employees		Work Primarily In	
	<b>Total</b>	<b>1-9</b>	<b>10+</b>	<b>Residential</b>	<b>CII</b>
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
<b>Any Lease/Rental</b>	<u>61</u>	45	<81	<u>47</u>	<u>&lt;72</u>
<b>Only 1 Category</b>	22	26	17	25 =	18
Lease/Rent in <b>Multiple /2+ Categories</b>	<u>40</u>	<u>19</u>	<u>&lt;64</u>	22	<u>&lt;54</u>
<b>In 2 Categories</b>	8	<u>5</u>	10	8	8
<b>In 3+ Categories</b>	32	14	<54	14	<46

V3, Q 14A, T75 (Trend p.223), B1, p 254, B2, p266

\* Caution: small base

## Lease/Rental in Multiple Categories, continued

Trended: In 2021, across the total sample and among firms with 1-9 employees, electrical contractors are more likely to have rented/leased in only a single category than was the case two years ago and, among firms with 1-9 employees, correspondingly less likely to have rented or leased in 3+ categories.

In contrast, there are no statistically significant differences compared with two years earlier among firms with 10+ employees in the number of categories in which they rent or lease.

RENTAL/LEASE in MULTIPLE CATEGORIES (By Firm Size)														
	Total Sample					1-9 Employees					10+ Employees			
	2021	2019	2017	2015		2021	2019	2017	2015		2021	2019	2017	2015
	(106)	(236)	(234)	(376)		(58)	(150)	(162)	(276)		(50)	(85)	(71)	(98)
	%	%	%	%		%	%	%	%		5	%	%	%
“Any” Lease/Rental	<u>61</u>	60	<u>57 &gt;</u>	<u>37</u>		45	<u>51</u>	<u>47 &gt;</u>	<u>33</u>		81=	<u>75</u>	<u>81 &gt;</u>	<u>48</u>
Only 1 Category	22>	14	16	18		26>	15	17	19		17=	12	13	13
<u>Lease/Rent in Multiple/2+ Categories</u>	<u>40</u>	<u>46=</u>	<u>41 &gt;</u>	<u>19</u>		<u>19</u>	<u>&lt;37</u>	<u>30 &gt;</u>	<u>14</u>		<u>64</u>	<u>64</u>	<u>68 &gt;</u>	<u>35^</u>
In 2 Categories	8	13	<u>14 &gt;</u>	8		<u>5</u>	<u>&lt;12</u>	<u>12 =</u>	8		10	14	<u>19 &gt;</u>	10
In 3+ Categories	32	33 =	<u>27 &gt;</u>	11		14	<u>&lt;25</u>	<u>18 &gt;</u>	6		54	49	<u>49 &gt;</u>	<u>25^</u>

V3, Q 14A, T75 (Trend p.223)

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.



Before we delve into the individual types of tools and equipment, here is an overview of use of the tools and equipment measured in this survey along with the method of obtaining each in 2021. As shown below there are a small number of areas, including – Aerial lifts, Cranes and Mobile office space -- where a higher percentage said that they made a 2021 *purchase* and/or *rental/lease* than say that their firm *used* this type of equipment in 2021. This could be an error in reporting on the part of participants or it could be that these items were acquired in anticipation of their later use or some combination of the two.

The differences in the case of Digging/HDD, 3D Printers and 3D Scanners amounts to only 1% or 2% and are being disregarded because they are so close.

	Use in 2021	Purchase in 2021	Lease/ Rent in 2021	Purchase or Lease/Rent in 2021	Use Vs. Obtained (A minus D)
	A	B	C	D	E
	Total	Total	Total	Total	Total
	(106)	(106)	(106)	(106)	(106)
	%	%	%	%	%
<b>“Any” ...</b>	91	87	61	89	2
Hand tools	82	74	8	74	8
Electrical testers, multimeters, etc.	78	53	9	55	23
Power tools	77	75	9	75	2
Fishing tools	75	47	0	47	28
Phones: smart/mobile/cell or two-way radio/push-to-talk	74	47	3	47	27
Measuring tools (including digital)	72	52	6	54	18
Pipe threaders, benders, cutters	69	36	4	39	30
Personal protective equipment, including apparel and accessories	59	44	2	46	13
Labeling/identification (cable/panel)	56	40	0	40	16
Cable pullers	54	24	7	30	24
Portable generators	51	16	15	26	25
Tablets or portable reading devices	50	27	2	28	22
Temporary job-site lighting	49	23	10	28	21
Aerial lifts/scaffolding	46	10	48	55	-9
Temporary power	46	26	8	30	16
Job-site safety equipment	44	35	4	36	8
Trailers (to haul equipment/materials)	43	18	12	26	17
Thermal imaging	42	19	7	26	16
LAN, datacom, other low-voltage	40	25	3	26	14
Digging/HDD/boring equipment	31	5	30	32	-1
Surveying tools and equipment	26	14	7	18	8
Wearable technology (such as smart watches or heater outerwear)	20	14	2	16	4
Cranes	18	2	23	24	-6
Mobile office space (trailers)	17	3	20	21	-4
Drones	12	7	2	9	3
3D scanner	9	7	6	11	-2
3D printer	9	8	4	10	-1
Robots	6	3	2	5	1

## Tools:

### Hand Tools Purchase and Rental/Lease Behavior

74% of respondent firms made a purchase in the Hand tools category in 2021, statistically unchanged compared with 2019.

7.5% said that their firm obtained Hand tools through rental/lease, also statistically unchanged compared with two years earlier.

HAND TOOLS (2021 Trended)										
	In 2021		In 2019		In 2017		In 2015		In 2013	In 2011
	Total		Total		Total		Total		Total	Total
	(106)		(236)		(234)		(376)		(374)	(234)
Purchase Level	74%		74%	=	<b>70%</b>	=	<b>70%</b>	<	<b>77%</b>	> 69%
Rental/Lease	7.5%	=	6.4%	=	3.5%		--		--	--

Purchase: V3, Q 14A, T74 (Trend p.211); Rent/Lease: V3, Q14A, T75, (Trend p 2218)

- In 2021, there were no subgroup differences by number of employees or by primary type of work performed in terms of purchase or rental/lease.

HAND TOOLS (2021 by Subgroups)					
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
Purchase Level	74%	78% =	69%	81% =	68%
Rental/Lease	7.5%	10% =	4.2%	11% =	4%

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

\* Caution: small base

## Trended Results

- Both purchase and *rental/lease* levels are unchanged compared with two years ago among the total sample (shown on previous page) and among firms with 1-9 employees and with 10+ employees.
- Interestingly, *purchase* levels of Hand tools *rose* dramatically and statistically significantly among firms working primarily on residential projects but *declined* among firms working primarily on CII projects. We don't have an explanation for this except that Hand tool purchase levels rose between 2017 and 2019 for firms working primarily on CII projects and appear to have returned to its 2017 level in 2021. *Rental/lease* levels are unchanged compared with two years ago.

HAND TOOLS (2021 By Subgroups Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017
	(58)	(150)	(162)	(48)	(85)	(71)	(36)*	(84)	(81)	(50)	(116)	(107)
Purchase Level	78%=	73%	70%	69%=	78%	71 %	<b>81%&gt;</b>	66%	74%	68%	<b>&lt;81% &gt;</b>	71%
Rental/Lease	10%=	6.7%	2.9%	4.2%=	5.9%	5.2%	11%=	7.1%	3.2%	4% =	6.0%	3.6%

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Hand Tools

### ALL INDUSTRY ESTIMATE OF 2021 FIRMS PURCHASING AND RENTING/LEASING: HAND TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Rented
<b>Hand tools</b>	%	#	#
Purchase	73.6	77,079	<b>56,730</b>
Rental/Lease	7.5	77,079	<b>5,781</b>

## Power Tools Purchase and Rental/Lease Behavior

Among the total sample, 75% of the electrical contracting firms interviewed reported making a 2021 *purchase* of Power tools. This purchase level is statistically unchanged from the 2019 purchase level of 68%.

- 8.5% of the electrical contractors interviewed reported *renting or leasing* Power tools in 2021. This is a statistically unchanged compared to two years earlier.

POWER TOOLS (2021 Trended)										
	In 2021		In 2019		In 2017		In 2015		In 2013	In 2011
	Total		Total		Total		Total		Total	Total
	(106)		(236)		(234)		(376)		(374)	(234)
	%		%		%		%		%	%
Purchase	75	=	68	=	66	=	70	=	72	> 64
Rental/Lease	8.5	=	12.3	>	<b>7.5</b>	>	4	<	<b>7</b>	= 10

Purchase: In 2021, there is no difference in *purchase* levels by company size or by the primary type of work performed.

Rental/Lease: In 2021, there is no difference in *rental/lease* levels purchase levels by company size or by the primary type of work performed.

POWER TOOLS (2021 by Subgroups)						
	Number of Employees				Work Primarily In	
	Total	1-9	10+		Residential	CII
	(106)	(58)	(48)		(36)*	(50)
	%	%	%		%	%
Purchase	75	72	77		72	72
Rental/Lease	8.5	8.6	8.3		11	10

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

Compared with two years ago, 2021 *purchase* levels are unchanged among the total sample (shown on the previous page) and, as shown below, among firms with 1-9 and with 10+ employees. Purchase levels of Power tools rose among firms working primarily on residential projects, while there is no change between 2019 and 2021 among firms working primarily on CII projects.

Compared to two years ago, 2021 *rental/lease* levels are also unchanged among the total sample (shown on the previous page), by company size and by primary type of work performed.

POWER TOOLS (2021 By Subgroups Trended)																
	Number of Employees								Work Primarily In							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Purchase Level	72=	63	62	< 71	77	77=	76	68%	72>	55	67	< 77	72=	77	73	67
Rental/Lease	8.6=	10	5.2	3.9	8.3 =	17	13 >	5.4	11=	5%	6%	3.1	10	=18>	10>	4.7

\* Caution: small base

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Power Tools

### ALL INDUSTRY ESTIMATE OF NUMBER OF 2021 FIRMS PURCHASING AND RENTING/LEASING: POWER TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Power tools</b>	%		
Purchase	74.5	77,079	<b>57,424</b>
Rental/Lease	8.5	77,079	<b>6,552</b>

## Measuring Tools (Including Digital) Purchase and Rental/Lease Behavior

52% of the electrical contracting firms surveyed *purchased* Measuring tools (including digital) in 2021, statistically unchanged from the 2019 level of 49%.

5.7% rented or leased in this category in 2021; this is a large and statistically significant increase from the 1.7% that reported *renting/leasing* Measuring tools in 2019.

MEASURING TOOLS (Including Digital) 2021 TRENDED			
	In 2021		In 2019
	Total		Total
	(106)		(236)
	%		%
Purchase	52		49
Rental/Lease	<b>5.7</b>		1.7

Purchase levels: There is no statistically significant difference in purchase levels of Measuring tools by number of employees or by primary type of work done.

Rental/lease levels: Rental/lease levels are significantly higher among firms that work primarily on CII projects compared to firms that work primarily on residential projects. There is no difference by number of employees.

MEASURING TOOLS (INCLUDING DIGITAL) 2021 (By Firm Size and Primary Work Type)						
	In 2021					
	Number of Employees			Work Primarily In		
	Total	1-9	10+	Residential	CII	
	(106)	(58)	(48)	(36)*	(50)	
	%	%	%	%	%*	
Purchase Level	52	48	56	50	54	
Rental/Lease	5.7	5.2	6.3	0	<8	

\* Caution: small base

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow

## Trended Results

- Purchase levels of Measuring tools are unchanged compared with two years ago among the total sample and by number of employees and by primary type of work performed.
- Rental/lease levels of Measuring tools posted a significant increase among the total sample and among firms with 1-9 employees but was statistically unchanged among firms with 10+ employees and by primary type of construction performed.

MEASURING TOOLS (Including Digital) 2021 Trended										
	Total		Number of Employees				Work Primarily In			
			1-9		10+		Residential		CII	
	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019
	(106)	(236)	(58)	(150)	(48)	(85)	(36)*	(84)	(50)	(116)
	%	%	%	%	%	%	%	%	%	%
Purchase Level	52	49	48	46	56	55	50	41	54	57
Rental/Lease	5.7>	1.7	5.2>	0	6.3=	4.7	0	0	8=	3.4

\* Caution: small base

## Estimates and Projections: Measuring Tools (including Digital)

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: MEASURING TOOLS (INCLUDING DIGITAL)

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Measuring Tools</b>	%	#	#
Purchase	51.9	77,079	<b>40,004</b>
Rental/lease	5.7	77,079	<b>4,394</b>

## Fishing Tools Purchase and Rental/Lease Behavior

47% of the electrical contracting firms surveyed purchased Fishing tools in 2021; statistically unchanged from the 2019 level of 46%.

No one (0%) reported 2021 rental or leasing in this category. This is a statistically significant decline from the 2.5% reported for 2019.

FISHING TOOLS 2021 TRENDED			
	In 2021		In 2019
	Total		Total
	(106)		(236)
	%		%
Purchase	47	=	46
Rental/Lease	0	<	2.5

Purchase levels: There are no statistically significant differences by number of employees or by primary type of work performed.

Rental/lease levels: Since there was no reported rental/lease of Fishing tools in 2021, there cannot be any statistically significant subgroup differences.

FISHING TOOLS 2021 (By Firm Size and Primary Work Type)						
	In 2021					
	Number of Employees			Work Primarily In		
	Total	1-9	10+	Residential	CII	
	(106)	(58)	(48)	(36)*	(50)	
	%	%	%	%	%	
Purchase Level	47	41	54	44	44	
Rental/Lease	0	0	0	0	0	

\* Caution: small base



## Trended Results

- Purchase levels of Fishing tools are unchanged compared with two years ago among the total sample, by number of employees and by primary type of work performed.
- Rental/lease levels of Fishing tools declined among the total sample and (either directionally or significantly) among all of the subgroups compared with two years ago.

FISHING TOOLS 2021 Trended										
	Total		Number of Employees				Work Primarily In			
			1-9		10+		Residential		CII	
	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019
	(106)	(236)	(58)	(150)	(48)	(85)	(36)*	(84)	(50)	(116)
	%	%	%	%	%	%	%	%	%	%
Purchase Level	47	46	41	43	54	52	44	38	44	53
Rental/Lease	0	<2.5	0	1.3	0	<4.7	0	2.4	0	<2.6

\* Caution: small base

## ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING: FISHING TOOLS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying
<b>Fishing Tools</b>	%	#	#
Purchase	47.2	77,079	<b>36,381</b>

## Pipe Threaders/Benders/Cutters Purchase and Rental/Lease Behavior

36% of the electrical contracting firms surveyed purchased Pipe threaders/benders/cutters in 2021, statistically unchanged from two years earlier.

3.8 % said that their firm obtained Pipe threaders/benders/cutters through rental/lease, which is also statistically unchanged compared with two years earlier.

PIPE THREADERS/BENDERS/CUTTERS (2021 Trended)											
	In 2021		In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total		Total
	(106)		(236)		(234)		(376)		(374)		(234)
	%		%		%		%		%		%
Purchase	36	=	35	(>)	<b>28</b>	>	22	<	<b>28</b>		25
Rental/Lease	3.8	=	5.9	=	<b>4.8</b>	>	2.3		--		--

(> or <) just short of statistical significance

In 2021, larger firms and/or those who work primarily on CII projects are far more likely to *purchase* Pipe threaders/benders/cutters compared with smaller firms and/or those that work primarily on residential projects.

In 2021, there are no statistically significant differences by subgroups in terms of renting/leasing Pipe threaders/benders/cutters. The lack of statistical significance could be due, in part, to the small base sizes of the subgroups.

PIPE THREADERS/BENDERS/CUTTERS (2021 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	36	24	< <b>50</b>	22	< <b>42</b>
Rental/Lease	3.8	1.7	6.3	0	4.0

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

As noted on the preceding page, *purchase* levels are statistically unchanged among the total sample compared with two years earlier. This is also the case by number of employees or by primary type of work performed.

Similarly, in the case of rental/lease, there are no statistically significant differences among the total sample, nor are there any statistically significant differences by number of employees or by primary type of work performed.

PIPE THREADERS/BENDERS/CUTTERS (2021 by Subgroups Trended)																
	Number of Employees								Work Primarily In...							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
Purchase Level	24%	26% >	16%	14%	50%	51%	57%	47%	22%=	14%	13%	17%	42%=	50%	40%>	28%
Rental/Lease	1.7%=	4%	4.1%	1.9%	6.3%=	9.4%	6.4	3.3%	0	2.4%	4.3%>	0%	4.0	8.6%	4.5%	4.3%

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Pipe Threaders/Bender/Cutters

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: PIPE THREADERS, BENDERS, CUTTERS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Pipe threaders, benders, cutters</b>	%	#	#
Purchase	35.8	77,079	<b>27,594</b>
Rental/Lease	3.8	77,079	<b>2,929</b>

## Cable Pullers Purchase and Rental/Lease Behavior

24% of the electrical contracting firms surveyed purchased Cable pullers in 2021, statistically unchanged from the 2019 level of 25%. The percentage of electrical contracting firms renting/leasing, at 6.6%, is also statistically unchanged compared with two years ago.

CABLE PULLERS (2021)							
	In 2021		In 2019		In 2017		In 2015
	Total		Total		Total		Total
	(106)		(236)		(234)		(376)
Purchase	24%	=	25%	=	<b>19%</b>	>	10%
Rented/Leased	6.6%	=	8.1%	=	<b>8.2%</b>	>	2.7%

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

In 2021, there are no statistically significant differences in *purchase* level of Cable pullers by number of employees or primary type of work performed.

In 2021, firms working primarily on CII projects are significantly more likely to have *rented/leased* Cable pullers compared with firms working primarily on residential projects but there is no difference by number of employees. Note that no one reported renting/leasing among firms working primarily on residential projects.

CABLE PULLERS (2021 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	24	19=	29	14=	28
Rented/Leased	6.6	3.4=	10	0	<b>&lt;8</b>

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

As shown on the previous page, compared to two years ago, there are no statistically significant differences in purchase or rental/lease of Cable pullers among the total sample.

Purchase: As shown below, compared with two years ago, purchase levels of Cable pullers declined among firms with 10+ employees. There is no statistically significant difference among firms with 1-9 employees or by primary type of work performed.

Rental/lease: Compared to two years ago, the only statistically significant difference shown below is that firms working primarily on residential projects are significantly less likely to have rented/leased Cable pullers in the previous year, compared with two years earlier.

CABLE PULLERS (2021 Trended)																	
	Number of Employees									Work Primarily In...							
	1-9				10+					Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015		2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)		(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
Purchase Level	19%	13%	10% >	5%	29%	<46%	41% >	24%		14%=	4.8%	4.9%	7%	28% =	38%	29%>	14%
Rental/Lease	3.4%	5.3%	4.3%	3%	10%	13%	18% >	1.7%		0	<6%	3.5%	3.5%	8%	10%	11%>	2.9%

\* Caution: small base

## Estimates and Projections: Cable Pullers

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING:

#### CABLE PULLERS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Cable pullers</b>	%	#	#
Purchase	23.6	77,079	<b>18,191</b>
Rental/Lease	6.6	77,079	<b>5,087</b>

## Construction Site Equipment

Construction Site Equipment is one of the few categories where some equipment is more likely to be obtained through *rental/lease* than through *purchase*. In fact, far more electrical contracting firms continue to obtain Aerial lifts/scaffolding, Digging/HDD/boring equipment, and Cranes and Mobile office space (trailers) through *rental/lease* than through *purchase*.

- In contrast, however, Personal protective equipment, Temporary power, Job-site safety equipment and Temporary job-site lighting are far more likely to be purchased rather than rented/leased.
  - In all other cases –Trailers to haul equipment/materials and Portable generators – the difference between renting/lease and purchase is less than 10 percentage points.

**NB: Bolding for emphasis; stat testing doesn't make sense because the sample that rented/leased overlaps with the sample that made purchases.**

2021 Rental/Lease to Purchase Comparison		
	Rental/Lease	Purchase
	2021	2021
	(106)	(106)
	%	%
<b><u>“Any” Purchase/Lease ...</u></b>		
Aerial lifts/scaffolding	<b>48</b>	10
Digging/HDD/boring equipment	<b>30</b>	5
Cranes	<b>23</b>	2
Mobile office space (trailers)	<b>20</b>	3
Trailers (to haul equipment/materials)	12	18
Portable generators	15	16
Personal protective equipment, including apparel and accessories	1.9	<b>44</b>
Temporary power	8	<b>26</b>
Job-site safety equipment	4	<b>35</b>
Temporary job-site lighting	10	<b>23</b>

## Trended Results

- *Rental/lease* levels jumped dramatically and significantly for only one category – Temporary job-site lighting -- compared with two years earlier. Rental/lease in all of the other categories remained statistically unchanged compared with two years earlier.
- In contrast, *purchase* levels in all of the Construction site equipment categories remain statistically unchanged compared with two years earlier.

	Rental/Lease Comparisons Trended							Purchase Comparison Trended					
	2021	2019	2017	2015	2013	2011		2021	2019	2017	2015	2013	2011
	(106)	(236)	(234)	(376)	(374)	(234)		(106)	(236)	(234)	(376)	(374)	(234)
	%	%	%	%	%	%		%	%	%	%	%	%
<b>“Any” Purchase/Rental/Lease ...</b>													
Aerial lifts, scaffolding	48 =	45	<b>46 &gt;</b>	28	29	29		10 =	<b>11 &gt;</b>	6	<b>&lt; 10</b>	<b>&lt; 16 =</b>	13
Digging/HDD/boring equipment	30 =	34	<b>28 &gt;</b>	12 =	16	<b>&lt; 27</b>		5 =	<b>9 &gt;</b>	4 =	7 =	9	9
Cranes*	23 =	<b>25 &gt;</b>	<b>17 &gt;</b>	6	NA	NA		2 =	3	1 =	2	NA	NA
Mobile office space (trailers)*	20 =	14	<b>12 &gt;</b>	6	NA	NA		3 =	5	3 =	4	NA	NA
Portable generators*	15 =	13	<b>11 &gt;</b>	4	NA	NA		16 =	19	16 =	19	NA	NA
Trailers (to haul equipment/materials)*	12 =	9	<b>8 &gt;</b>	NA	NA	NA		18 =	17	12 =	9	NA	NA
Temporary job-site lighting	<b>10 &gt;</b>	4.7	4.2	--	--	--		23 =	26	23	--	--	--

\* First included in the 2016 Profile Study

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Aerial Lifts/Scaffolding Rental/Lease and Purchase Behavior

In 2021, 48% of firms obtained Aerial lifts/scaffolding through *rental/lease* and 10% through *purchase*.

- Lease/Rental: The percentage *renting or leasing* Aerial lifts/scaffolding held steady compared with two years earlier.
- Purchase: The percentage making a *purchase* of Aerial lifts/scaffolding also held steady compared with two years earlier.

Aerial Lifts/Scaffolding (2021Trended)											
	In 2021		In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total		Total
	(106)		(236)		(234)		(376)		(374)		(234)
Rental/Lease	48%	=	45%	=	<b>46%</b>	>	28%		29%		29%
Purchase	10%	=	<b>11%</b>	>	6%	<	<b>10%</b>	<	<b>16%</b>	=	13%

Rental/Lease: Larger firms and/or those that work primarily on CII projects are more likely than smaller firms and/or those that work primarily on residential projects to have *rented or leased* Aerial lifts/scaffolding in 2021.

Purchase: There is no difference in terms of purchase levels by number of employees. However, firms that work primarily on CII projects are more likely than firms that work primarily on residential projects to have made a 2021 *purchase* of Aerial lifts/scaffolding.

AERIAL LIFTS/SCAFFOLDING RENTAL/LEASE and PURCHASE (By Firm Size and Primary Work Type) 2021					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Rental/Lease	48	29	< <b>71</b>	31	< <b>60</b>
Purchase	10	7 =	15	2.8	< <b>16</b>

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.



## Trended Results

Consistent with results among the total sample showing no changes in rental/lease or purchase levels...

- Rental/Lease: Compared with two years earlier, there is no statistically significant change by number of employees or primary type of work performed.
- Purchase: Nor has there been a statistically significant increase in the purchase of Aerial lifts/scaffolding compared to two years ago by either number of employees or by primary type of work performed.

AERIAL LIFTS AND SCAFFOLDING (2021 Trended)																
	Number of Employees								Work Primarily In...							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Rental/Lease	29 =	37 =	38 >	23%	71 =	59 =	64 >	40%	31	26 =	28 =	19 =	60	62 =	55 >	37
Purchase	7 =	6 >	1.2	< 9%	15 =	20 =	18 =	13%	2.8	7.1 >	1.1	< 8	16 =	13 =	11 =	12

\* Caution: small base

## Estimates and Projections: Aerial Lifts/Scaffolding

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING AERIAL LIFTS/SCAFFOLDING

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Renting or Buying
<b>Aerial lifts/scaffolding</b>	%	#	#
Rental/Lease	48.1	77,079	<b>37,075</b>
Purchase	10.4	77,079	<b>8,016</b>

## Digging/HDD/Boring Equipment Rental/Lease and Purchase Behavior

In 2021, 30% of the electrical contracting firms surveyed obtained Digging/HDD/boring equipment through *rental/lease* and 4.7% through *purchase*.

- Compared with two years earlier, both rental/lease levels and purchase levels are statistically unchanged.

DIGGING/HDD/BORING EQUIPMENT (2021 Trended)											
	In 2021		In 2019		In 2017		In 2015		In 2013		In 2011
	Total		Total		Total		Total		Total		Total
	(106)		(236)		(234)		(376)		(374)		(234)
Rental/Lease	30%	=	34%	=	<b>28%</b>	>	12%	=	16%	<	<b>27%</b>
Purchase	4.7%	=	<b>8.5%</b>	>	4.2%	=	7%	=	9%	=	9%

Rental/Lease: larger firms are more likely than smaller firms to rent/lease Digging/HDD/boring equipment while there is no subgroup difference by primary type of work performed.

Purchase: There are no subgroup differences by number of employees or by primary type of work performed in the likelihood of purchasing Digging/HDD/boring equipment.

DIGGING/HDD/BORING EQUIPMENT RENTAL/LEASE and PURCHASE (2021 by Subgroups)					
		Number of Employees		Work Primarily In...	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Rental/Lease	30	14	<b>&lt; 50</b>	22=	38
Purchase	4.7	3.4 =	6.3	2.8=	8

\* Caution: small base

Bolded numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

- Although there are no differences compared to two years earlier among the total sample on *rental/lease* or *purchase* levels:
- Rental/lease* of Digging/HDD/boring equipment declined among firms with 1-9 employees compared with two years earlier. There are no other differences by number of employees or by primary type of work performed shown below.
- Purchase* of Digging/HDD/boring equipment declined among firms with 10+ employees compared with two years earlier. There are no other differences by number of employees or by primary type of work performed.

DIGGING/HDD/BORING EQUIPMENT (2021 By Subgroups Trended)																
	Number of Employees								Work Primarily In...							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Rental/Lease	14 <	<b>31 =</b>	<b>25 &gt;</b>	9	50 =	41 =	<b>36 &gt;</b>	20	22=	24 =	<b>23 &gt;</b>	10	38=	<b>46 &gt;</b>	<b>31 &gt;</b>	13
Purchase	3.4 =	3.3 =	2.6 =	6	6 <	<b>18 &gt;</b>	8 =	12	3	2.4 =	1.4 =	6	8	10 =	6	8

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Digging/HDD/Boring Equipment

### ALL INDUSTRY ESTIMATE OF 2021NUMBER OF FIRMS RENTING/LEASING AND PURCHASING DIGGING/HDD/BORING EQUIPMENT

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Renting or Buying
<b>DIGGING/HDD/BORING EQUIPMENT</b>	%	#	#
Rental/Lease	30.2	77,079	<b>23,278</b>
Purchase	4.7	77,079	<b>3,623</b>

## Cranes Rental/Lease and Purchase Behavior

23% of electrical contractors obtained Cranes in 2021 through *rental/lease* and 1.9% through *purchase*.

- The percentage of electrical contractors who obtain Cranes through *rental/lease* is statistically unchanged compared with two years earlier.
- Similarly, the percentage making a *purchase* of Cranes is also statistically unchanged compared with 2019.

CRANES (2021 Trended)					
	In 2021		In 2019		In 2017
	Total		Total		Total
	(106)		(236)		(234)
	%		%		%
Rental/Lease	23	=	<b>25</b>	>	17
Purchase	1.9	=	2.5	=	1.2

Cranes are far more likely to be *rented/leased* by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

In contrast, in 2021 there are no subgroup differences in the purchase of Cranes by number of employees or the primary type of work performed. It is curious that no one purchased Cranes if they worked primarily on residential *or* on CII projects. This was also the case for firms working primarily on residential projects in 2019 who similarly did not purchase Cranes in 2019 (not shown). In 2019, 4.3% of firms working primarily on CII projects made a Cranes *purchase* (not shown).

CRANES (2021 by Subgroups)					
		Number of Employees		Work Primarily In...	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Rental/Lease	23	7	< <b>42</b>	0	< <b>36</b>
Purchase	1.9	1.7	2.1	0	0

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

- Although there are no differences compared to two years earlier among the total sample on *rental/lease* or *purchase* levels of Cranes...
- In 2021, *rental/lease* of Cranes declined among firms with 1-9 employees and among firms working primarily on residential projects compared with two years earlier. There are no other differences by number of employees or by primary type of work performed as shown below.
- In 2021, *purchase* of Cranes declined among firms working primarily on CII projects compared with two years earlier. There are no other differences by number of employees or by primary type of work performed shown below.

CRANES (2021 By Subgroups Trended)																
	Number of Employees								Work Primarily In...							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
		%	%	%		%	%	%	%	%	%	%	%	%	%	%
Rental/Lease	7	<15 >	6.7 >	3.1	42 =	44 =	42 >	15	0	<10 =	4.9 =	1.4	36 =	36 >	28 >	10
Purchase	1.7 =	0.7 =	0.7 =	1	2.1 =	5.9 =	2.6 =	6	0 =	0	0	0	0 <	4.3 =	2.8 =	3

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Cranes

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: CRANES

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Renting or Buying
CRANES	%	#	#
Rental/Lease	22.6	77,079	17,420
Purchase	1.9	77,079	1,465

## Mobile Office Space (Trailers) Rental/Lease and Purchase Behavior

20% of the electrical contractors surveyed obtained Mobile office space (trailers) in 2021 through *rental/lease* and 2.8% through *purchase*. The levels of *rental/lease* and *purchase* are each statistically unchanged compared to two years earlier.

MOBILE OFFICE SPACE (2021 Trended)					
	In 2021		In 2019		In 2017
	Total		Total		Total
	(106)		(236)		(234)
			%		%
Rental/Lease	20	=	14	=	12
Purchase	2.8	=	4.7	=	2.8

Mobile office space (trailers) is more likely to have been obtained by *rental/lease* in 2021 by larger firms and/or firms working primarily on CII projects than by smaller firms and/or firms working primarily on residential projects.

Mobile office space (trailers) is also more likely to have been obtained by *purchase* in 2021 by larger firms compared with smaller firms but there is no difference in purchase levels by primarily type of work performed.

MOBILE OFFICE SPACE (2021 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Rental/Lease	20	3	< 40	0	<34
Purchase	2.8	0	< 6.3	0	2

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

Rental/Lease: There are no significant differences by any of the subgroups shown below compared to two years earlier. This is consistent with the fact that there was no difference among the total sample compared with two years ago.

Purchase: There are no statistically significant changes in Mobile office space (trailers) purchase compared with two years earlier by any of the subgroups shown below. As above, this is consistent with the fact that there was no difference among the total sample compared with two years ago.

MOBILE OFFICE SPACE (2021 By Subgroups Trended)												
	Number of Employees						Work Primarily In...					
	1-9			10+			Residential			CII		
	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017
	(58)	(150)	(162)	(48)	(85)	(71)	(36)*	(84)	(81)	(50)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%	%	%
Rental/Lease	3 =	4 =	4.3	40 =	32 =	31	0=	2.4 =	3.8	34 =	22 =	17
Purchase	0 =	1.3 =	0	6.3 =	10.6 =	9	0=	1.2 =	0	2 =	6.0 =	5.1

\* Caution: small base

## Estimates and Projections: Mobile Office Space (trailers)

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS RENTING/LEASING AND PURCHASING: MOBILE OFFICE SPACE

	Percent of Respondent Firms Renting or Buying	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Renting or Buying
Mobile office space	%	#	#
Rental/Lease	19.8	77,079	15,262
Purchase	2.8	77,079	2,158

## Portable Generators Purchase and Rental/Lease Behavior

In the next two categories -- Portable generators and Trailers (to haul equipment/materials) – the percentages obtaining this equipment through *purchase* and *rental/lease* are more comparable to each other than is the case with other types of job-site equipment.

16% of the electrical contracting firms surveyed *purchased* Portable generators in 2021, statistically unchanged from the 2019 results. 15% obtained Portable generators through *rental/lease*, also statistically unchanged compared to two year earlier.

PORTABLE GENERATORS (2021 Trended)					
	In 2021		In 2019		In 2017
	Total		Total		Total
	(106)		(236)		(234)
	%		%		%
Purchase	16	=	19	=	16
Rental/Lease	15	=	13	=	11

Larger firms are significantly more likely than smaller firms to have made a 2021 *purchase* in this category. However, there is no difference in purchase level by primary type of work performed.

Larger firms and/or those that work primarily on CII projects are significantly more likely than smaller firms and/or those that work primarily on residential projects to have made a *rental/lease* in this category.

PORTABLE GENERATORS (2021 by Subgroups)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(103)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	16	7	< 27	8=	20
Rental/Lease	15	1.7	< 31	0	<22

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.



## Trended Results

Purchase: There are no differences among the total sample, by number of employees or by primary type of work in the *purchase* of Portable generators compared with two years earlier.

Rental/lease: *Rental/lease* of Portable generators declined compared to two years ago among smaller firms and among firms that work primarily on residential project.

PORTABLE GENERATORS (2021 Trended)															
	Number of Employees									Work Primarily In...					
	Total			1-9			10+			Residential			CII		
	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017
	(106)	(236)	(234)	(58)	(150)	(162)	(48)	(85)	(71)	(36)*	(84)	(81)	(50)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Purchase	16 =	19 =	16	7 =	11 =	10	27 =	33 =	31	8	6 =	9	20=	28 =	20
Rental/Lease	15 =	13 =	11	2	< 6 =	7	31 =	26 =	20	0	< 3.6 =	3.5	22=	21 =	16

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Portable Generators

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: PORTABLE GENERATORS

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Portable generators</b>	%	#	#
Purchase	16.0	77,079	<b>12,333</b>
Rental/Lease	15.1	77,079	<b>11,639</b>

## Trailers (To Haul Equipment/Materials) Purchase and Rental Behavior

This is the second of the two categories where the level of purchase is more comparable to the level of rental/lease.

18% of electrical contracting firms *purchased* Trailers (to haul equipment/materials) in 2021. This is statistically unchanged from the level observed in 2019.

12% *rented or leased* Trailers (to haul equipment/materials) in 2021, also statistically unchanged compared with 2019 results.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2021)					
	In 2021		In 2019		In 2017
	Total		Total		Total
	(106)		(236)		(234)
Purchase	18%	=	17%	=	12%
Rental/Lease	12%	=	9%	=	8%

*Purchase* levels are higher among firms with 10+ employees while there is no difference by primary type of work performed.

*Rental/lease* levels of Trailers to haul equipment/materials are higher among firms with 10+ employees compared with smaller firms while there is no difference by primary type of work performed.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2021)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	18	7	< 31	14	=24
Rental/Lease	12	7	<19	8	= 14

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

Purchase: There are no statistically significant differences among the total sample, by number of employees or by primary type of work in the *purchase* of Trailers (to haul equipment/materials) compared with two years earlier.

Rental/lease: The same holds true for *rental/lease* where there are no statistically significant differences among the total sample, by number of employees or by the primary type of work performed in the rental/lease of Trailers (to haul equipment/materials) compared with two years earlier.

TRAILERS (TO HAUL EQUIPMENT/MATERIALS) (2021 Trended – By Subgroup)															
	Total			Number of Employees						Work Primarily In...					
				1-9			10+			Residential			CII		
	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017
	(106)	(236)	(234)	(58)	(150)	(162)	(48)	(85)	(71)	(36)*	(84)	(81)	(50)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Purchase	18 =	17 =	12	7 =	10 =	7	31 =	28 =	24	14=	6 =	4	24=	22 =	20
Rental/Lease	12 =	9 =	8	7 =	7 =	6	19 =	13 =	12	8=	4.8 =	4.6	14=	11 =	14

## Estimates and Projections: Trailers (to Haul Equipment/Materials)

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: TRAILERS (TO HAUL EQUIPMENT/MATERIALS)

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Trailers (to haul equipment/materials)</b>	%	#	#
Purchase	17.9	77,079	<b>13,797</b>
Rental/Lease	12.3	77,079	<b>9,481</b>

## Personal Protective Equipment, Including Apparel and Accessories: Purchase and Rental Behavior

In the remaining sections – Personal protective equipment, Job-site safety equipment, and Temporary job-site lighting -- purchase plays a much more dominant role than does rental/lease.

44% of electrical contracting firms reported a 2021 *purchase* of Personal protective equipment, including apparel and accessories, statistically unchanged compared with 2019.

Only 1.9% of electrical contracting firms *rented/leased* in this category; also statistically unchanged from the levels observed in 2019.

PERSONAL PROTECTIVE EQUIPMENT/APPAREL and ACCESSORIES									
	In 2021		In 2019		In 2017		In 2015		In 2013
	Total		Total		Total		Total		Total
	(106)		(236)		(234)		(376)		(374)
Purchase	44%	=	43%	=	<b>42%</b>	>	31%	<	<b>44%</b>
Rental/Lease	1.9%	=	3.4%	=	2%	=	0.6%		--

Purchase levels are higher among larger companies and/or firms that work primarily on CII construction rather than for smaller firms and/or those that primarily work on residential construction.

Rental/lease levels are a fraction of the purchase levels and in the case of *rental/lease*, there are no statistically significant differences by either number of employees or by primary type of work performed.

PERSONAL PROTECTIVE EQUIPMENT/ APPAREL and ACCESSORIES (2021)					
	Total	Number of Employees		Work Primarily In	
		1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	44	28	< <b>65</b>	28	< <b>54</b>
Rental/Lease	1.9	1.7	=2.1	2.8=	2

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Trended Results

Purchase: Compared to two years ago, there are no statistically significant differences among the total sample, as shown on the previous page or, as shown below, by number of employees or by primary type of work in the *purchase* of Personal protective equipment, including apparel and accessories.

Rental/lease: The same holds true for *rental/lease*: compared to two years ago, there are no statistically significant differences among the total sample, as shown on the previous page or, as shown below, by number of employees or by the primary type of work performed in the *rental/lease* of Personal protective equipment, including apparel and accessories.

PERSONAL PROTECTIVE EQUIPMENT/ APPAREL and ACCESSORIES (2021 Trended)																
	Number of Employees								Work Primarily In.							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50))	(116)	(107)	(172)
Purchase	28% =	34% =	31% =	27%	65% =	59% =	68% >	41%	28=	27% =	27% =	26%	54=	53% =	54% >	35%
Rental/Lease	1.7% =	1.3% =	0.7%	NA	2.1% =	7% =	5%	NA	2.8=	0 =	1.4%	NA	2=	6% =	3.4%	NA

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow.

## Estimates and Projections: Personal Protective Equipment/ Apparel and Accessories

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: PERSONAL PROTECTIVE EQUIPMENT/ APPAREL AND ACCESSORIES

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
Personal protective equipment, including apparel and accessories	%	#	#
Purchase	44.3	77,079	<b>34,146</b>
Rental/Lease	1.9	77,079	<b>1,465</b>

## Job-Site Safety Equipment Purchase and Rental/Lease Behavior

35% of the electrical contracting firms surveyed reported a 2021 *purchase* of Job-site safety equipment. 4% obtained Job-site safety equipment through *rental/lease*. Both *purchase* levels and levels of *rental/lease* are statistically unchanged compared with two years earlier.

JOB-SITE SAFETY EQUIPMENT										
	In 2021		In 2019		In 2017		In 2015		In 2013	In 2011
	Total		Total		Total		Total		Total	Total
	(106)		(236)		(234)		(376)		(374)	(234)
Purchase	35%	=	34%	=	28%	=	26%	<	<b>32%</b>	= 29%
Rental/Lease	4%	=	7%	=	<b>6%</b>	>	1.4		--	--

In 2021, *purchase* levels of Job-site safety equipment were higher among larger companies and/or companies that work primarily on CII projects compared with companies that have 1-9 employees and/or that work primarily on residential projects.

In 2021, companies that work primarily on CII projects were more likely than companies that work primarily on residential projects to have *rented or leased* Job-site safety equipment. However, there was no difference in the 2021 *rental/lease* of Job-site safety equipment by number of employees.

JOB-SITE SAFETY EQUIPMENT (2021 by Subgroups)					
		Number of Employees		Work Primarily In...	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	35	12	<b>&lt;63</b>	11	<b>&lt;48</b>
Rental/Lease	4	1.7=	6	0	<b>&lt; 6</b>

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

## Trended Results

As shown on the preceding page, *purchase* levels are statistically unchanged among the total sample. Nevertheless, purchase levels of Job-site safety equipment posted a significant *decline* among firms with 1-9 employees (after increasing between 2017 and 2019) but were unchanged among firms with 10+ employees and/or among those that work primarily on CII projects or residential projects.

- In contrast, there are no statistically significant differences in purchase of Job-site safety equipment by primary type of work performed compared with two years earlier.

As shown on the preceding page, there was no statistically significant change in *rental/lease* behavior among the total sample. As shown below, nor are there changes in rental/lease by number of employees compared with two years earlier. However, rental/lease of Job-site safety equipment declined compared to two years earlier among firms working primarily on residential projects, while there was no change among firms working primarily on CII projects.

JOB-SITE SAFETY EQUIPMENT (2021 Trended by Subgroup)																
	Number of Employees								Work Primarily In							
	1-9				10+				Residential				CII			
	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015	2021	2019	2017	2015
	(58)	(150)	(162)	(278)	(48)	(85)	(71)	(98)	(36)*	(84)	(81)	(146)	(50)	(116)	(107)	(172)
Purchase	12% <	<b>23% &gt;</b>	14% =	18%	63%	53% =	<b>60% &gt;</b>	46%	11%=	17%=	9% =	16%	48%=	44% =	<b>45% &gt;</b>	35%
Rental/Lease	1.7% =	4.7% =	3%	1.2%	6% =	12% =	<b>14% &gt;</b>	2.1%	0%	<b>&lt;6% =</b>	<b>4.6%&gt;</b>	.6%	6%=	9% =	<b>7.3% &gt;</b>	2.6%

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

## Estimates and Projections: Job-site Safety Equipment

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING:

#### JOB-SITE SAFETY EQUIPMENT

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Job-site safety equipment</b>	%	#	#
Purchase	34.9	77,079	<b>26,901</b>
Rental/Lease	3.8	77,079	<b>2,929</b>

## Temporary Job-site Lighting Purchase and Rental/Lease Behavior

23% of electrical contracting firms *purchased* Temporary job-site lighting in 2021, statistically unchanged from the 26% which was measured two years earlier. Ten percent (10%) *rented or leased* in this category in 2021, which is a statistically significant increase compared with two years earlier.

TEMPORARY JOB-SITE LIGHTING					
	In 2021		In 2019		In 2017
	Total		Total		Total
	(106)		(236)		(234)
	%		%		%
Purchase	23	=	26	=	23
Rental/Lease	<b>10</b>	>	4.7	=	4.2

Both *purchase* levels and *rental/lease* levels are significantly higher among larger electrical contracting firms and/or among those that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

TEMPORARY JOB-SITE LIGHTING (2021)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	23	10	< <b>38</b>	8	< <b>34</b>
Rental/Lease	10	1.7	< <b>21</b>	0	< <b>12</b>

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow



## Trended Results

Compared with two years earlier, *purchase* levels are statistically unchanged among the total sample and as shown below, by number of employees and by primary type of work performed.

*Although rental/leasing* of Temporary job site lighting posted a statistically significant increase among the total sample in 2021, there are no statistically significant changes by number of employees or by primary type of work performed compared with two years earlier. The subgroup differences are consistently higher in three of the four cases, however, because of the size of the subgroups, the individual differences do not, by themselves, rise to statistical significance.

TEMPORARY JOB-SITE LIGHTING (2021 Trended – By Subgroup)															
	Total			Number of Employees						Work Primarily In...					
				1-9			10+			Residential			CII		
	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017	2021	2019	2017
	(106)	(236)	(234)	(58)	(150)	(162)	(48)	(85)	(71)	(36)*	(84)	(81)	(50)	(116)	(107)
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Purchase	23 =	26 =	23	10 =	14 =	14	38 =	47 =	46	8 =	12 =	9	34 =	38 =	33
Rental/Lease	<b>10 &gt;</b>	5 =	4	1.7 =	1.3 =	3	21 =	11 =	7	0 =	0 <	<b>4.9</b>	12 =	7 =	2.8

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: TEMPORARY JOB-SITE LIGHTING

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Temporary job-site lighting</b>	%	#	#
Purchase	22.6	77,079	<b>17,420</b>
Rental/Lease	10.4	77,079	<b>8,016</b>

## Temporary Power Purchase and Rental/Lease Behavior

In 2021, 26% of electrical contractors purchased Temporary power and 8% rented or leased in this category.

Purchase levels of Temporary power are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

Rental/lease: There is no statistically significant difference in rental/lease of Temporary power either by number of employees or by primary type of work performed.

This category cannot be trended because it was first included in the 2022 Profile Study.

<b>TEMPORARY POWER 2021</b>					
<b>(By Firm Size and Primary Work Type)</b>					
	<b>In 2021</b>				
		<b>Number of Employees</b>		<b>Work Primarily In</b>	
	<b>Total</b>	<b>1-9</b>	<b>10+</b>	<b>Residential</b>	<b>CII</b>
	(106)	(58)	(48)	(36)*	(50)
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
Purchase Level	26	9	< 48	11	< 38
Rental/Lease	8	5	10	6	6

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING:

#### TEMPORARY POWER

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Temporary Power</b>	<b>%</b>	<b>#</b>	<b>#</b>
Purchase	26.4	77,079	<b>20,349</b>
Rental/Lease	7.5	77,079	<b>5,781</b>

## Surveying Tools and Equipment Purchase and Rental/Lease Behavior

In 2021, 14% of electrical contracting firms obtained Surveying tools and equipment by purchase and 7% by rental/lease.

Both *purchase* and *rental/lease* of Surveying tools and equipment are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

This category cannot be trended since it was first asked about in the most recent Profile study.

SURVEYING TOOLS AND EQUIPMENT 2021 (By Firm Size and Primary Work Type)					
	In 2021				
	Number of Employees			Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase Level	14	3	< 27	3	< 20
Rental/Lease	7	2	< 13	0	< 8

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING:

SURVEYING TOOLS AND EQUIPMENT			
	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
Surveying Tools and Equipment	%	#	#
Purchase	14.2	77,079	<b>10,945</b>
Rental/Lease	6.6	77,079	<b>5,087</b>

## Wearable Technology Purchase and Rental/Lease Behavior

In 2021, 14% of the electrical contractors surveyed made a *purchase* of wearable technology (defined in the survey as smart watches or heated outerwear) and 1.9% *rented/leased* in this category.

There is no statistically significant difference in *purchase* or in *rental/lease* levels by number of employees or by the primary type of work performed.

This category cannot be trended since it was first asked about in the most recent Profile study.

WEARABLE TECHNOLOGY (2021)					
	Total	Number of Employees		Work Primarily In	
		1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
Purchase	14	12=	17	6 =	16
Rental/Lease	1.9	0=	4.2	0	2

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING: WEARABLE TECHNOLOGY

	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
Wearable technology	%	#	#
Purchase	14.2	77,079	<b>10,945</b>
Rental/Lease	1.9	77,079	<b>1,465</b>

## Robots Purchase and Rental/Lease Behavior (This section also appears in the second volume of this report)

Both 2021 *purchase* and *rental/lease* is low in this category:

- 2.8% reported purchasing a Robot in 2021.
- 1.9% reported rental/lease of a Robot in 2021.

Purchase levels are significantly higher among firms with 10+ employees and/or among firms that work primarily on CII projects compared with smaller firms and/or those that work primarily on residential projects.

Rental/lease levels: There are no statistically significant differences by any of the subgroups shown below.

This category cannot be trended since it was first asked about in the most recent Profile study.

ROBOTS (2021)					
		Number of Employees		Work Primarily In	
	Total	1-9	10+	Residential	CII
	(106)	(58)	(48)	(36)*	(50)
	%	%	%	%	%
<u>Purchase</u>	2.8	0	< 6	0	<6
<u>Rental/Lease</u>	1.9	1.7	2.1	0	0

\* Caution: small base

**Bolded** numbers denote significant differences at the 90% level of confidence in the direction of the arrow

### ALL INDUSTRY ESTIMATE OF 2021 NUMBER OF FIRMS PURCHASING AND RENTING/LEASING:

ROBOTS			
	Percent of Respondent Firms Buying or Renting	Number of EC Firms (Source: 2020 CBP)	Projected Number Firms Buying or Renting
<b>Robots</b>	%	#	#
Purchase	2.8	77,079	<b>2,158</b>
Rental/Lease	1.9	77,079	<b>1,465</b>