

**VECTIS**  
AUTOMATION

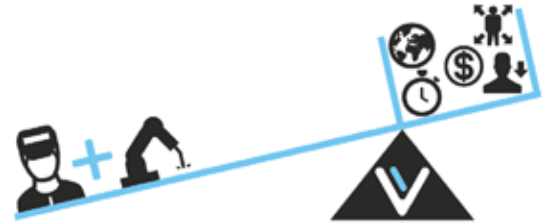
LET'S WELD  
TOGETHER



# BOOST PRODUCTIVITY

WITH THE AFFORDABLE, VERSATILE, AND EASY-TO-USE  
VECTIS COBOT WELDING TOOL

“Vec·tis” / 'vek(t)əs / Latin:  
**A lever, leverage**



With the American Welding Society estimating a shortage of 400,000 welders by 2025...

***We know you need more leverage!***

Vectis Automation empowers you with a fully integrated, **ready-to-weld** Cobot Welding Tool featuring **DIY programming and setup** that gives you **leverage** to boost productivity in your weld shop.

It's weld automation for less cost, less risk, and less setup time than ever before.



With **100+ years** of combined experience in the robotic welding industry, the **VECTIS** team is known for its delivery of **substance** and **results**.

*But don't just take our word for it. Here's what our customers have to say:*

"How likely are you to **recommend** Vectis to a friend or colleague?"

**9.38/10**



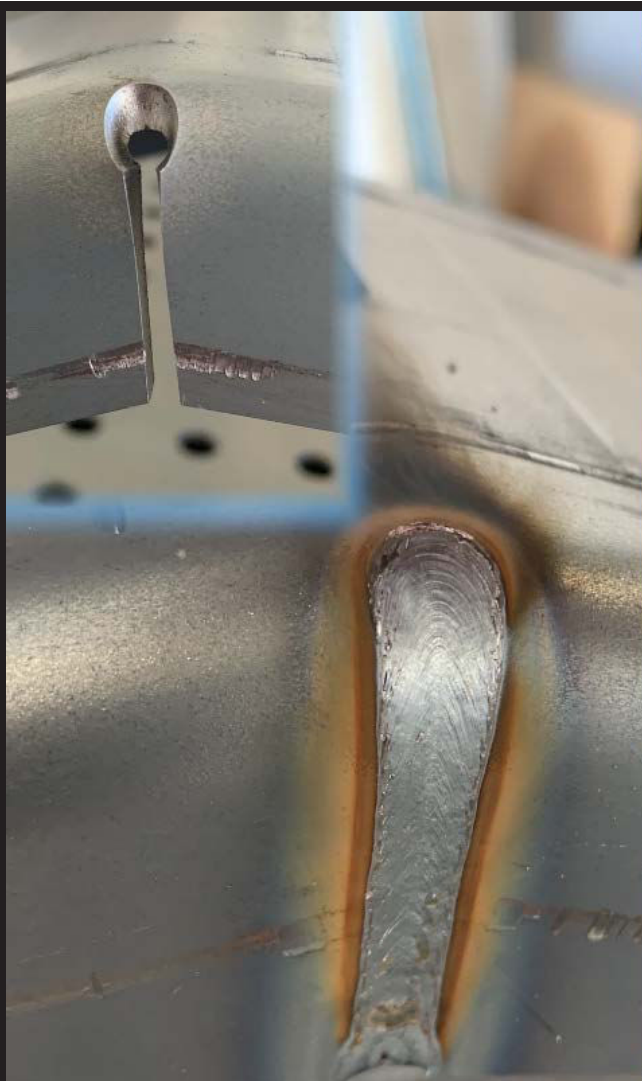
"How would you rate Vectis during the **upfront sales/application process?**"

**9.88/10**



"How would you rate Vectis' **post-sales support & responsiveness?**"

**9.88/10**



# THE VECTIS COBOT WELDING TOOL

## Industry-Leading Universal Robots UR10e

Six-Axis Collaborative Robot with 51" of reach

## Intuitive Programming on 12" Touchscreen Pendant

No programming experience needed. Make your first weld within 10 minutes

## Freedrive Jog Enable Button

Allows the programmer to teach the robot by physically moving the robot to program points

## Welding Torch

- Standard: Air Cooled
- Heavy Duty: Water Cooled
- Push-Pull for aluminum

## Rhino Cart® by Strong Hand Tools

Includes 66pcs of modular fixturing. Mobile worktable measures 30" x 48"  
Weld on the cart, or butt it up to an existing fixture or large part

## Fully Integrated and Ready-To-Weld package from Vectis

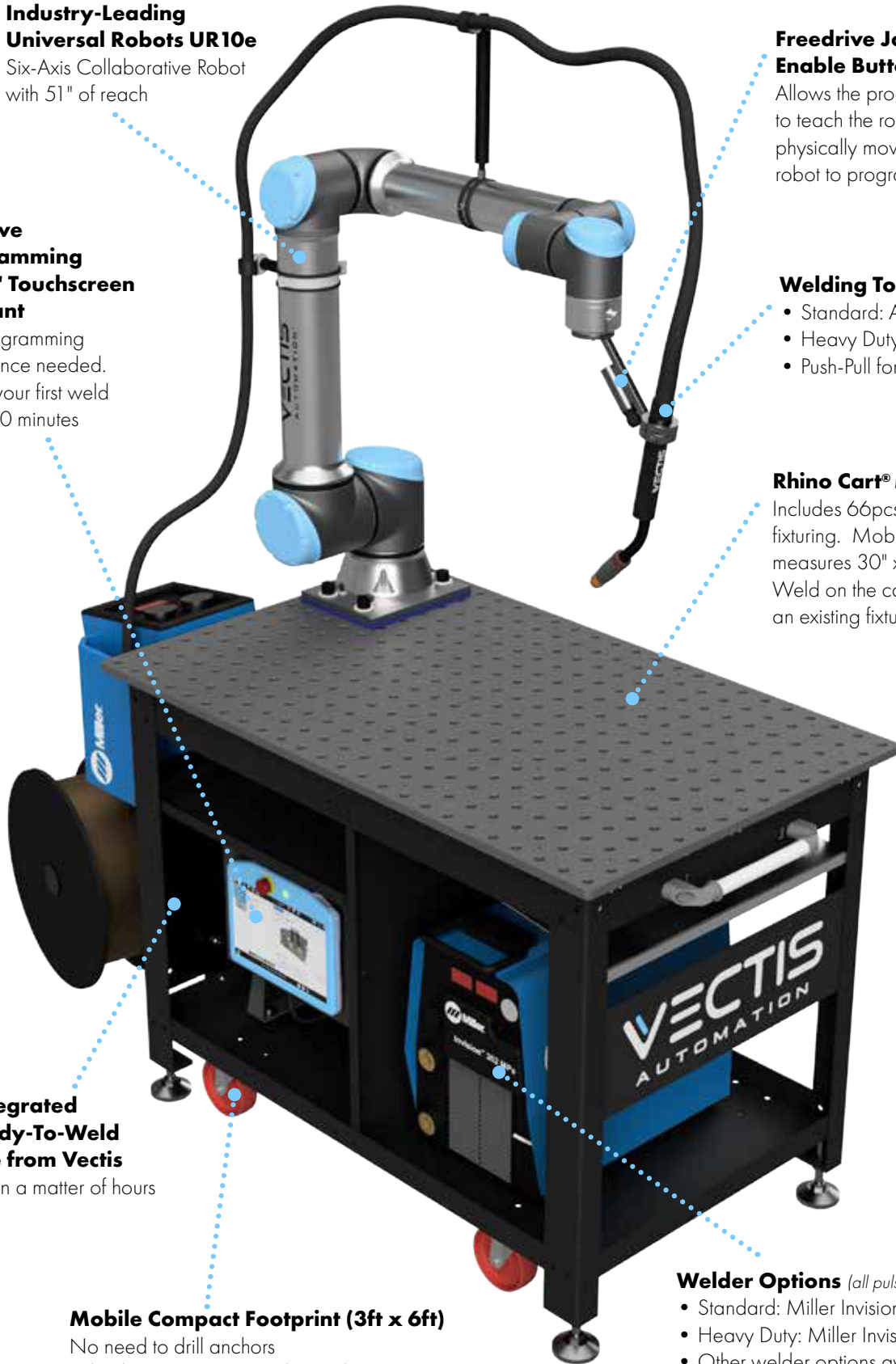
DIY setup in a matter of hours

## Mobile Compact Footprint (3ft x 6ft)

No need to drill anchors  
Wheel your system up to the work

## Welder Options (all pulse capable)

- Standard: Miller Invision 352 MPa
- Heavy Duty: Miller Invision 450 MPa
- Other welder options available
- Weld parameter control on pendant



# KEY BENEFITS AND FEATURES



## Peace-of-Mind:

- **"Safety Net" 30-day Return Program:** Return within 30 days for a full refund, no questions asked.
- **"Try Before You Buy"** rental and **rent-to-own** programs.
- Honest and upfront **Application Evaluations** at no cost to you.
- **Lifetime** Technical Support. Quick response times enabled by remote video chat (FaceTime, GoToMeeting, etc).



## Lower Cost:

- Our Cobot Welding Tool is often **25-40% less than the all-in cost** of a traditional robot cell.
- DIY installation, setup, and training – **no need to fly to our facility nor pay a tech to come on-site.**
- **Shipping is included** in our price. Most traditional systems require a costly dedicated air-ride semi.



## Extreme Ease-Of-Use *plus* handy Software Features for welding:

- No programming experience needed: **Make your first weld within 10 minutes** after plug-in.
- **Weld Template Library** provides you with parameter starting points for common weld sizes.
- Handy software features include **Weaving, Pattern, Stitch, Tack, Touch Sensing, MultiPass.**
- More features are continually being developed by Vectis' in-house Welding Software Team.



## Get into production faster:

- Our solution ships to you in a **few short weeks.**
- Most customers are setup and in production within hours or days of system arrival.
- DIY commissioning – no need to fly to weeklong training classes nor pay to have our tech on-site.
- **"I made my first part program in just an hour"** – Scott Yach, Cobot Champion, Ludlow Mfg.



## Collaborative Robot (Cobot) Technology:

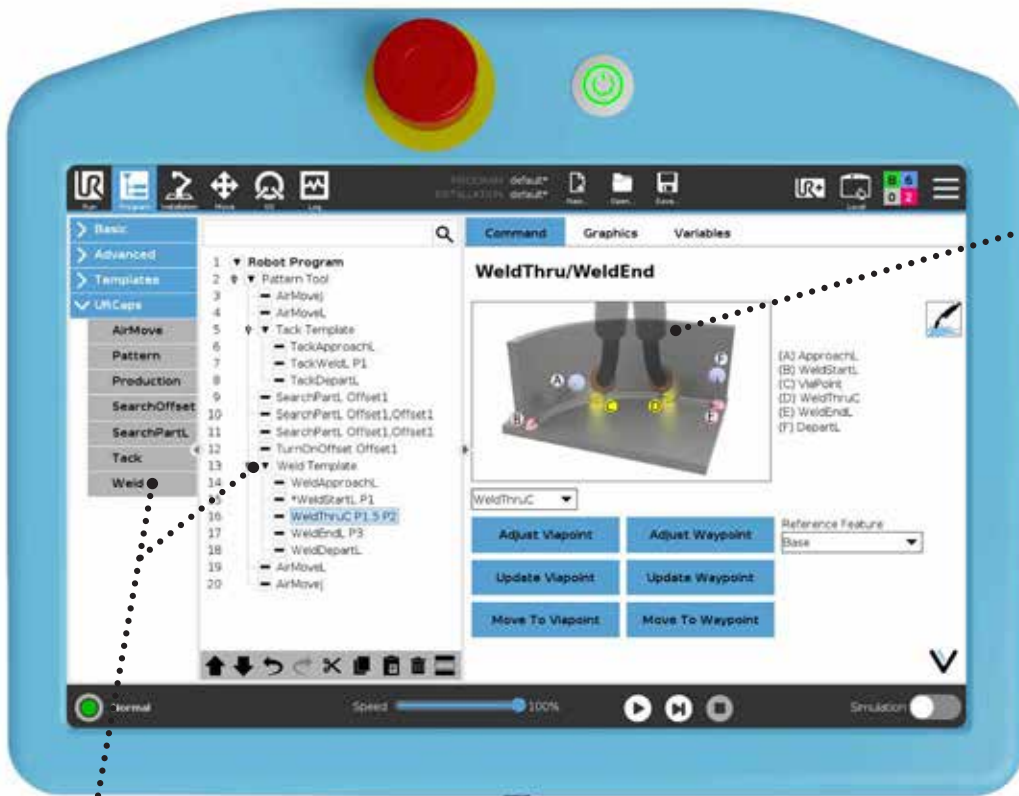
- **Freedrive Jog** allows the programmer to teach by physically moving the cobot to program locations.
- Built-in safety allows the cobot to **safely work alongside humans**, without permanent barriers.
- During production gaps in the weld shop, the cobot arm can even be repurposed to other tasks.



## Portable, Compact, and Versatile:

- Mobile and compact footprint – only 3ft x 6ft
- **Bring the Cobot Welding Tool to the work** – no need for a dedicated footprint or work envelope.
- Use the Rhino Cart surface to weld smaller parts; or wheel it up to a stationary part or existing fixture.
- Versatile utility setup: system can interchangeably run on single-phase or three-phase power.

# FAST & INTUITIVE PROGRAMMING



**Visual Context**  
Graphics provide the programmer with valuable context **right on the pendant**. No need to program with an instruction manual in hand!

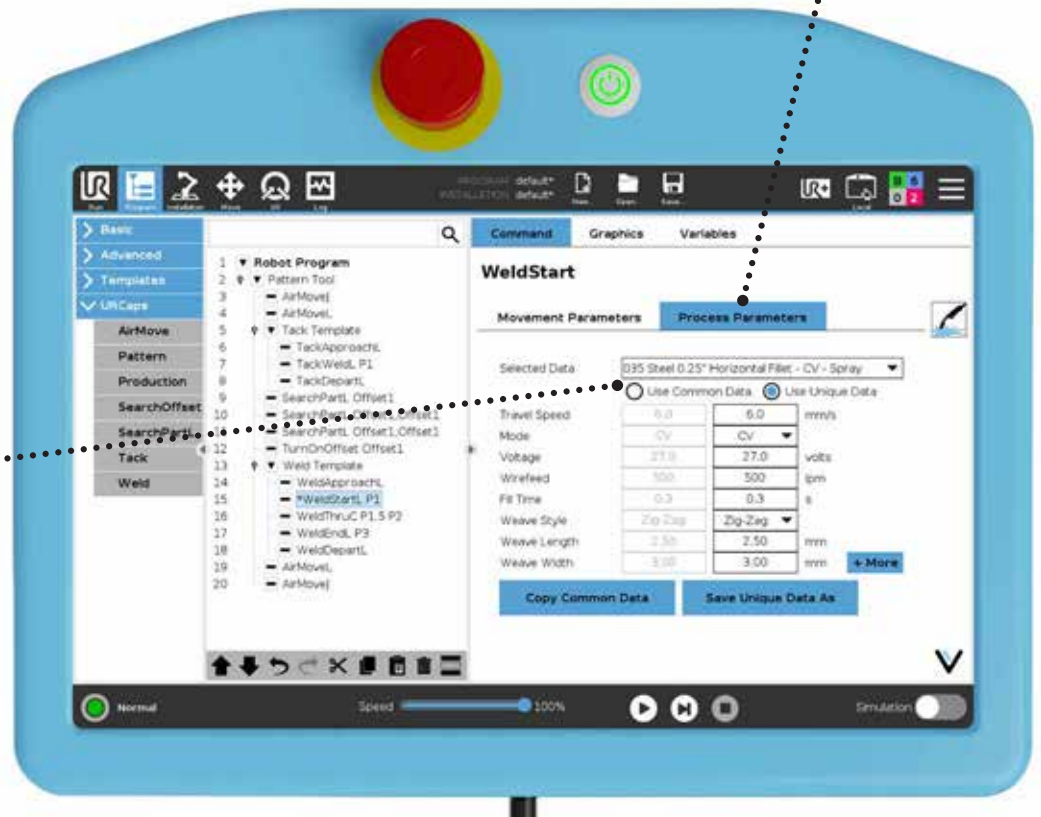
## Simple Program Creation

Create your program by simply chaining easy-to-read instructions together.

## Control Weld & Weave Parameters

## Utilize Baseline Weld Templates

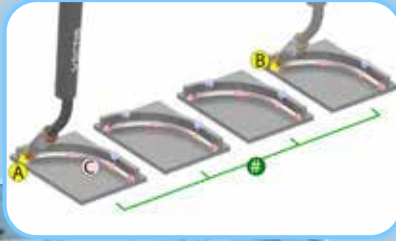
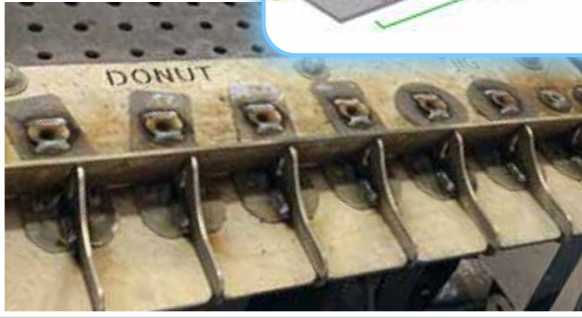
Save time by using these templates as a starting point, then refining to the requirements of your application.



# TIME-SAVING SOFTWARE FEATURES

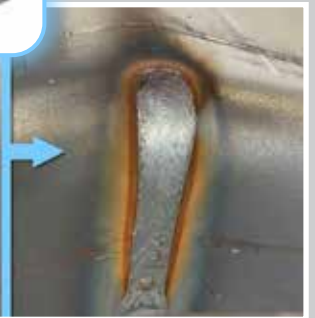
*Developed by software engineers that actually weld!*

## PATTERN

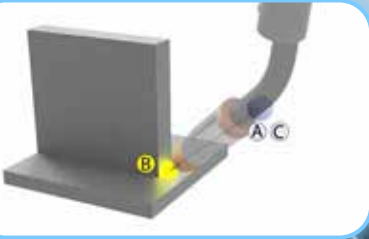


## WEAVING

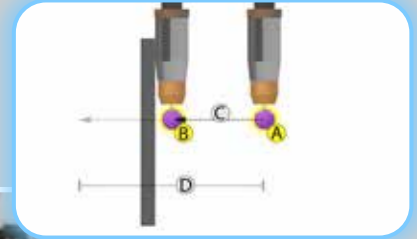
*Zig-Zag,  
In-Line Whip*



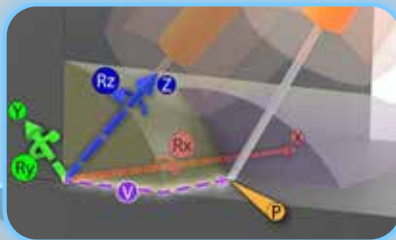
## TACK



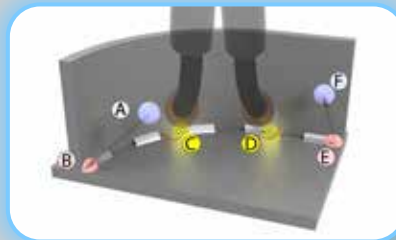
## TOUCH SENSE



## MULTIPASS

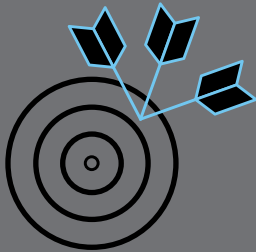


## STITCH



# "Yeah, you're preaching to the choir here about headwinds and the need to increase productivity. But how do I know if automation will actually work for my applications and business?"

We're here to help you answer this because we want to **empower your success**. Below are some general themes, but every part is unique – contact us for a free in-depth Application Evaluation.



## 1. CONSISTENCY IS KING

Automation **thrives on consistency**: of parts, fixturing, joint cross-section, material condition, consumables condition, etc. Repeatability is more important than accuracy because automation is programmed on a "master part" and then simply **repeated** by the arm in production. If the part location or weld conditions change, the arm does not inherently know – which may cause a degradation in quality.

Some adapting technologies exist, but their use is limited to certain scenarios. They also tend to add cycle time, cost, and complexity.

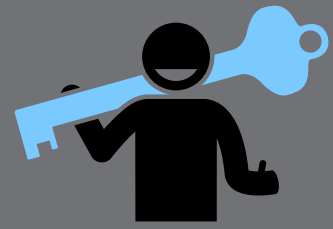
**The best way to manage inconsistencies is to improve upstream processes!**



## 2. THE LOW HANGING FRUIT

While the temptation may be to automate the large, complex parts that create a significant labor drain whenever they go through the shop, we've seen the **most efficient deployment of automation to be on the smaller, simpler parts**. Let automation take care of the repetitive parts, which allows your skilled welders to shift their focus to the skilled weldments. We've also seen success in larger parts being broken up into subassemblies. Here are a few common aspects of low-hanging weldments:

- GMAW (MIG) fillets and bevels
- Steel or Stainless Steel
- A relatively "open" design for torch access
- Parts that don't require repositioning
- High arc time relative to # of welds



## 3. THE RIGHT CHAMPION

An integrator can provide all the ingredients for success – even go so far as to provide a turnkey solution. But without the right "Automation Champion", your potential for long-term success is limited.

From our experience, the best Champions have a **high sense of ownership** and are **eager to make it work**. We've found these "soft" attributes to be more critical than the "hard" technical aspects. The technical aspects can be easily taught to an eager Champion with accountability. We've seen successful Champions from all backgrounds: owners, owners' children, engineers, welders, machine operators, foremen, apprentices.

REDUCE YOUR LEAD TIMES

LOWER YOUR COSTS

HELP GROW SALES

INCREASE CAPACITY

With the right application,  
solution, and champion,  
**AUTOMATION CAN:**

INCREASE QUALITY

SOFTEN THE BLOW OF THE  
SKILLED LABOR SHORTAGE

REDUCE POST-OPS

IMPROVE SAFETY AND  
REDUCE OPERATOR FATIGUE



# THE VECTIS PROCESS

With over 100 years of combined experience in the welding automation industry, we've learned the recipe for success. We're here to help guide you through the process of evaluating and implementing automation.

1

## START

Let's start a conversation to see if the Cobot Welding Tool can lend a hand in your business?  
**Contact the Hil Bax Technical Center: 314.644.3500 or [info@ceekay.com](mailto:info@ceekay.com)**

2

## EVALUATE

Share application information with us (pictures, drawings, etc), and together we'll evaluate your application's fitness-for-automation and its fit for the Vectis system in particular. If there are potential snags or hurdles in automating your weldments, we'll be upfront with you about that – and then talk about ways to overcome them.

We can also support on the commercial evaluation – cycle time estimates, ROI, and capacity planning.

3

## DECIDE

**Our mission is to provide you with a practical solution to increase your welding capacity, quality, and stability.** This may come in the form of our Cobot Welding Tool, or it may not. It might be some other form of automation, just as it might be process recommendations in manual welding and/or upstream. We will never recommend our product if it is not a sensible fit for both your technical and your commercial needs.

4

## PREPARE

Our system ships to you in just a few weeks. In that short timespan, you'll go through our Prep Guide and start familiarizing yourself with the system via our User Manual

5

## SETUP

Be welding within hours thanks to the quick & easy setup of the Vectis system. Roll the system off the pallet, mount the cobot with four bolts, connect utilities and power on, check tool calibration, and then run your first weld!

6

## PRODUCE

Your Cobot Champion will teach part programs using our intuitive interface and weld templates. Programs can be created, saved, and later recalled in order to handle the many part numbers that go through your shop. Once the part program is created and saved, the Vectis Cobot Welding Tool simply repeats the program in production mode.

**And remember Vectis is here to support your Cobot Welding Tool for life:**

**[Support@VectisAutomation.com](mailto:Support@VectisAutomation.com)**

**970-852-5200**



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AUTOMATION | TOGETHER



**Cee Kay Supply**  
314.644.3500  
5835 Manchester Ave  
St. Louis, MO 63110

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