

HARDINGE WORKHOLDING

Flex C Quick Change Collet Chucks



800-843-8801
WWW.HARDINGE.COM



WHY BUY A HARDINGE FLEXC QUICK CHANGE COLLET SYSTEM?

- 10X THE GRIP RANGE OF STANDARD COLLETS +/- .020"
- 2X AS ACCURATE (.0004 TIR)
- UP TO 19X FASTER CHANGEOVER COMPARED TO STANDARD COLLETS OR 3 JAW CHUCKS
- LIFETIME GUARANTEE ON COLLET VULCANIZATION
- FULLY INTERCHANGEABLE WITH COMPETITOR MODELS (42MM & 65MM)
- TRUE PARALLEL GRIPPING





AMERICAN
— QUALITY —

STYLE D – PULL-BACK WITH THRU-HOLE

42mm* Style D Spindle Mount:

Pull-back style with thru-hole

| Spindle Style | Part Number | D' - Diameter | D - Diameter | L' - Length | L - Length | Price |
|---------------|---------------|---------------|--------------|--------------|-------------|--------|
| A2-5 | V42 5D00300 | 4.016" (102) | 5.512" (140) | .846" (21.5) | 3.543" (90) | \$2000 |
| A2-6 | V42 6D00400 | 4.016" (102) | 6.496" (165) | .846" (21.5) | 3.543" (90) | \$2000 |
| I40mm | V42 I40D01700 | 4.016" (102) | 5.906" (150) | .846" (21.5) | 3.543" (90) | \$2000 |

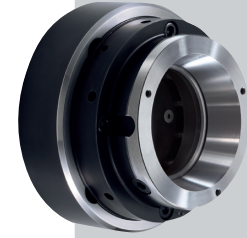
* Limited to machine capacity. (millimeters in parentheses)

65mm* Style D Spindle Mount

Pull-back style with thru-hole

| Spindle Style | Part Number | D' - Diameter | D - Diameter | L' - Length | L - Length | Price |
|---------------|---------------|----------------|--------------|---------------|--------------|--------|
| A2-5 | V65 5D00500 | 4.736" (120.3) | 6.102" (155) | 1.043" (26.5) | 3.740" (95) | \$2300 |
| A2-6 | V65 6D00600 | 4.736" (120.3) | 6.496" (165) | 1.043" (26.5) | 3.740" (95) | \$2300 |
| A2-8 | V65 8D00700 | 4.736" (120.3) | 8.268" (210) | 1.043" (26.5) | 3.858" (98) | \$2300 |
| I40mm | V65 I40D01900 | 4.736" (120.3) | 6.299" (160) | 1.043" (26.5) | 3.937" (100) | \$2300 |

* Limited to machine capacity. Additional lengths available. (millimeters in parentheses)



WHY YOU SHOULD CHOOSE FLEXC® PULL BACK CHUCKS

MAIN SPINDLE APPLICATIONS

- Used on main spindle applications where the collet is pulled into the chuck sleeve to close on your part.

ULTIMATE FLEXIBILITY

- Capable of accepting Hardinge Quick Change Adapters. (see page 8)

COMPACT DESIGN

- Compact design allows for optimal tool clearances and maximum machining workspace.

BETTER PART FINISH

- Collet chucks allow for higher RPMs than traditional 3-jaw chucks.

QUALITY ASSURANCE

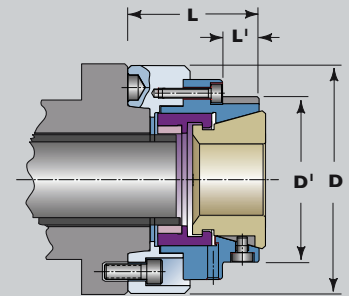
- Manufactured and assembled in the USA with top grade materials and inspection processes.

ACCURACY IMPROVEMENTS

- .0002" TIR on the closing angle of the chuck.

10X THE GRIP RANGE

- Grip range of +/- .020" allowing for part size variation.



42 and 65mm systems

BAR WORK



STYLE A — PULL-BACK DESIGN WITH A DEAD-LENGTH® WORKSTOP



42mm* Style A Spindle Mount:
Pull-back style with removable dead-length work stop

| Spindle Style | Part Number | D ¹ - Diameter | D - Diameter | L ¹ - Length | L - Length | Price |
|---------------|---------------|---------------------------|--------------|-------------------------|--------------|--------|
| A2-5 | V42 5A01000 | 4.016" (102) | 5.512" (140) | .610" (15.5) | 4.764" (121) | \$3100 |
| A2-6 | V42 6A01100 | 4.016" (102) | 6.496" (165) | .610" (15.5) | 4.764" (121) | \$3100 |
| 140mm | V42 140A01600 | 4.016" (102) | 5.906" (150) | .610" (15.5) | 4.961" (126) | \$3100 |

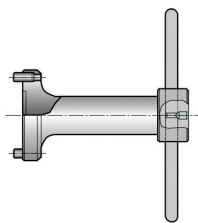
* Limited to machine capacity. (millimeters in parentheses)



65mm* Style A Spindle Mount:
Pull-back style with removable dead-length work stop

| Spindle Style | Part Number | D ¹ - Diameter | D - Diameter | L ¹ - Length | L - Length | Price |
|---------------|---------------|---------------------------|--------------|-------------------------|--------------|--------|
| A2-5 | V65 5A01200 | 4.736" (120.3) | 6.102" (155) | .728" (18.5) | 5.118" (130) | \$3600 |
| A2-6 | V65 6A01300 | 4.736" (120.3) | 6.496" (165) | .728" (18.5) | 5.118" (130) | \$3600 |
| A2-8 | V65 8A01400 | 4.736" (120.3) | 8.268" (210) | .728" (18.5) | 5.315" (135) | \$3600 |
| 140mm | V65 140A02300 | 4.736" (120.3) | 6.299" (160) | .728" (18.5) | 5.248" (133) | \$3600 |
| 170mm | V65 170A01800 | 4.736" (120.3) | 6.299" (160) | .728" (18.5) | 5.118" (130) | \$3600 |

* Limited to machine capacity. Additional lengths available. (millimeters in parentheses)



Work stop wrench V65-6DL05810 (65mm) is included with the 80mm spindle mount assembly to remove or install the work stop.



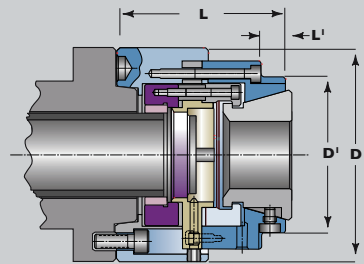
80mm* Style A Spindle Mount:
Pull-back style with removable dead-length work stop

| Spindle Style | Part Number | D ¹ - Diameter | D - Diameter | L ¹ - Length | L - Length | Price |
|---------------|-------------|---------------------------|----------------|-------------------------|----------------|--------|
| A2-5 | V80 5A06600 | 5.750" (146.1) | 7.700" (195.6) | 2.000" (50.8) | 5.174" (131.4) | \$3800 |
| A2-6 | V80 6A06400 | 5.750" (146.1) | 7.700" (195.6) | 2.000" (50.8) | 5.174" (131.4) | \$3800 |
| A2-8 | V80 8A06500 | 5.750" (146.1) | 8.000" (203.2) | 2.000" (50.8) | 5.174" (131.4) | \$3800 |

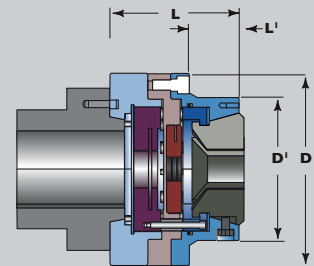
* Limited to machine capacity. (millimeters in parentheses)

BAR SLUG WORK

| | |
|--------------------|-----------------------------|
| Dead Stop Included | V42 5A01006 (M12 X 1.75) |
| | V65 6A01206 (M12 X 1.75) |
| | V80 6A06407 (1" - 20) |



42 and 65mm systems



80mm systems

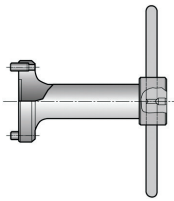
STYLE DL – PUSH-TO-CLOSE DESIGN WITH A DEAD-LENGTH® WORKSTOP



42mm* Style DL Spindle Mount: Push-to-Close with work stop

| Spindle Style | Part Number | D' - Dia. | D - Dia. | L' - Length | L - Length | Price |
|---------------|----------------|--------------|--------------|-------------|--------------|--------|
| A2-5 (1) | V42 5DL05400 | — | 5.315" (135) | — | 4.724" (120) | \$3400 |
| A2-6 (2) | V42 6DL05500 | 5.315" (135) | 6.299" (160) | 2.953" (75) | 4.724" (120) | \$3400 |
| I40mm (2) | V42 I40DL04400 | 5.315" (135) | 5.906 (150) | 3.944 (100) | 4.724" (120) | \$3400 |

* Limited to machine capacity. (millimeters in parentheses)



Work stop wrench V42-5DL05410 (42mm) is included with the spindle mount assembly to remove or install the work stop.



65mm* Style DL Low Profile Spindle Mount: Push-to-Close with work stop

| Spindle Style | Part Number | D' - Dia. | D - Dia. | L' - Length | L - Length | Price |
|---------------|----------------|----------------|--------------|---------------|----------------|--------|
| A2-5 | V65 5DL05740 | 5.404" (137.3) | 6.299" (160) | 1.448" (36.8) | 4.845" (123) | \$3800 |
| A2-6 | V65 6DL05940 | 5.404" (137.3) | 6.299" (160) | 1.448" (36.8) | 4.845" (123) | \$3800 |
| A2-8 | V65 8DL06040 | 5.404" (137.3) | 8.268" (210) | 1.448" (36.8) | 5.345" (135.8) | \$3800 |
| I40mm | V65 I40DL02440 | 5.404" (137.3) | 6.299" (160) | 1.448" (36.8) | 4.908" (124.6) | \$3800 |

* Limited to machine capacity. (millimeters in parentheses)



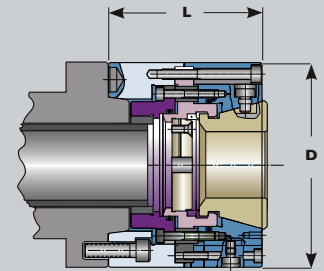
80mm* Style DL Spindle Mount: Push-to-Close with work stop

| Spindle Style | Part Number | D' - Dia. | D - Dia. | L' - Length | L - Length | Price |
|---------------|----------------|----------------|----------------|---------------|----------------|--------|
| A2-5 | V80 5DL06100 | 5.950" (151.2) | 7.700" (195.6) | 1.354" (34.4) | 4.957" (125.9) | \$4400 |
| A2-6 | V80 6DL06200 | 5.950" (151.2) | 7.700" (195.6) | 1.354" (34.4) | 4.957" (125.9) | \$4400 |
| A2-8 | V80 8DL06300 | 5.950" (151.2) | 8.250" (209.6) | 1.354" (34.4) | 5.207" (132.3) | \$4400 |
| I40mm | V80 I40DL06400 | 5.950" (151.2) | 7.700" (195.6) | 1.354" (34.4) | 5.357" (136.1) | \$4400 |

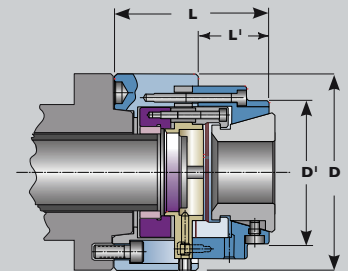
* Limited to machine capacity. (millimeters in parentheses)

BAR SLUG WORK

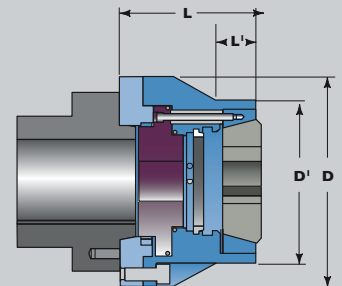
| | |
|--------------------|------------------------------------|
| Dead Stop Included | V42 5DL05406 (M12 X 1.75) |
| | V65 6DL05836 (1" - 20 assembly) |
| | V80 6DL06213 (1" - 20 assembly) |



Spindle Style 1



Spindle Style 2



65/80mm systems

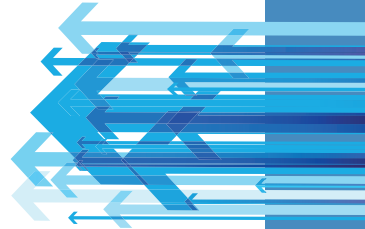
QUALITY

Hardinge guarantees a collet head concentricity of .0002" (.005mm) TIR for round sizes after the segments are joined in the vulcanization process. Hardinge test results from repeated cycles of collet actuation assure long life of the Hardinge vulcanization process.

| FlexC Capacity | Changing Wrench | Price |
|----------------|-----------------|-------|
| 42mm | C 4200000-WREN | \$495 |
| 65mm | C 65000-00-WREN | \$495 |
| 80mm | C 80000-00-WREN | \$550 |



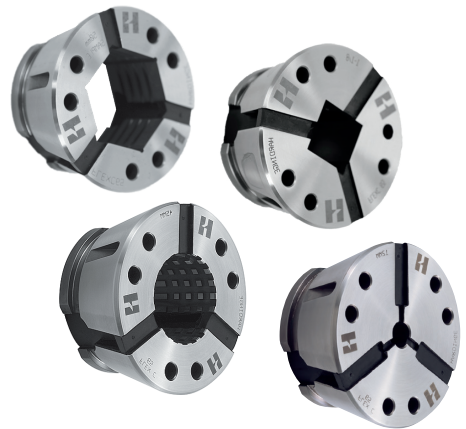
**LIFETIME
GUARANTEE
ON COLLET
VULCANIZATION**



FAST DELIVERY

Hardinge stocks an extensive inventory of finished collets for all common sizes. Semi-Finished inventory is also available allowing for decimal sized collets to be delivered in 5 days or less.

| | Rated Capacity | Round Smooth/Serrated | Price | Hexagon Smooth/Serrated | Price | Square Smooth | Price |
|------|----------------|-----------------------|----------|-------------------------|-------|------------------|-------|
| 42mm | fractional | 7/32 to 1 5/8" | \$242.25 | 5/16 to 1 3/8" | \$350 | 5/16 to 1 9/64" | \$350 |
| | metric | 5 to 42mm | | 8 to 36 | | 8 to 29 | |
| 65mm | fractional | 1/4 to 2 7/16" | \$297 | 5/16 to 2 1/8" | \$425 | 5/16 to 1 13/16" | \$425 |
| | metric | 5 to 65mm | | 8 to 56 | | 8 to 46 | |
| 80mm | fractional | 15/32 to 3 1/4" | \$414 | 15/32 to 2 3/4" | \$545 | 15/32 to 2 1/4" | \$545 |
| | metric | 12 to 82.5mm | | 12 to 69.9 | | 12 to 57.2 | |



CUSTOM MANUFACTURING

Hardinge's custom engineering department can design and manufacture special FlexC collets for any application. Sample applications include stepped holes, special shapes, off-center and more.



EMERGENCY COLLETS

| | Size / Pilot Hole | Part Number | Price | Boring Ring | Price |
|------|-------------------|-----------------|-------|----------------|-------|
| 42mm | 5mm Pilot | C0420000000005 | \$231 | C042000000RING | \$100 |
| | 15mm Pilot | C0420000000015 | | | |
| | 30mm Pilot | C0420000000030 | | | |
| 65mm | 8mm Pilot | C06500000000008 | \$287 | C065000000RING | \$150 |
| | 20mm Pilot | C0650000000020 | | | |
| | 40mm Pilot | C0650000000040 | | | |
| 80mm | 12mm Pilot | C0800000000012 | \$400 | C080000000RING | \$200 |
| | 25mm Pilot | C0800000000025 | | | |
| | 40mm Pilot | C0800000000040 | | | |



C080000000RING

NEW ULTIMATE QUICK CHANGE FLEXIBILITY

FlexC 65 Adapters are ideal for shops looking for ultimate flexibility! Now in one setup a customer can use multiple workholding options, eliminating costly and time consuming changeovers!

In one setup you can use:

- FlexC Quick Change Collets
- 5C Collets
- Sure-Grip Expanding Collets
- 5C Step Chucks & Closers

SINGLE SETUP

FOR CNC LATHES



MANUAL COLLET BLOCK




FLEXC® COLLETS



When accuracy, grip range and grip strength is needed, FlexC collets are a perfect option. FlexC collets have .0002" TIR and +/- .020" grip range.

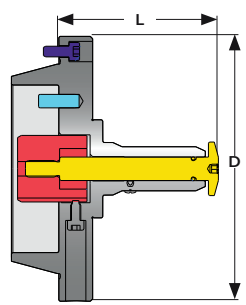
| Capacity | Price |
|----------|-------|
| 42mm | \$242 |
| 65mm | \$297 |
| 80mm | \$414 |

STANDARD SURE-GRIP EXPANDING ADAPTERS



You can now utilize Hardinge's Sure-Grip expanding system in our FlexC 65 products! Hardinge® Sure-Grip® Expanding Collet Systems offer solutions to difficult machining problems where ID gripping is required. Sure-Grip collets have .015" expansion range and .0002" TIR.

| Part Number* | Grip Range | D - Diameter | L - Length | Price |
|--------------|------------------|-----------------|-----------------|-------|
| V65 2001000 | 1/2" to 3/4" | 4.891" (124.23) | 2.087" (53.01) | \$600 |
| V65 2501000 | 3/4" to 1" | 4.891" (124.23) | 2.483" (63.07) | \$625 |
| V65 3001000 | 1" to 1 1/2" | 4.891" (124.23) | 2.947" (74.85) | \$650 |
| V65 4001000 | 1 1/2" to 2 1/4" | 5.25" (133.35) | 3.536" (89.81) | \$675 |
| V65 5001000 | 2 1/4" to 3" | 5.25" (133.35) | 4.274" (108.56) | \$700 |
| V65 6001000 | 3" to 4" | 5.25" (133.35) | 4.337" (110.16) | \$725 |



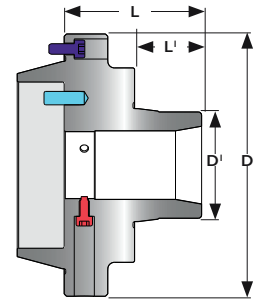
Sure-Grip Expanding Collet

* requires part number V65 5C01000 for use.

5C COLLET ADAPTER



Hardinge's 5C Spindle tooling has been an industry standard for over 100 years. Customers can now utilize their 5C spindle tooling in our FlexC 65 system for applications that are ideally suited for these style collets. Ideal applications include extended nose, small hole, special shapes, Internal Gripping and more!

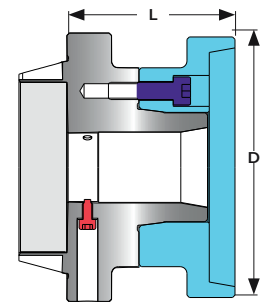
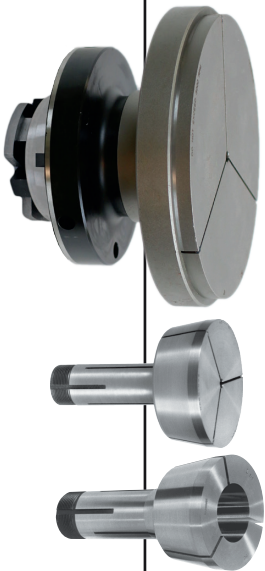


V65 5C01010

| Item | Part Number | D' Diameter | D Diameter | L' Length | L Length | Price |
|-------------------|--------------|-------------------|--------------------|------------------|--------------------|--------|
| 5C Collet Adapter | V65 5C01010S | 1.984" (50.39) | 4.891" (124.23) | 1.25" (31.75) | 2.5625" (65.09) | \$1600 |

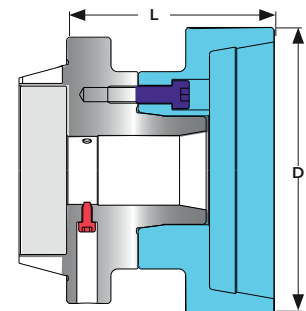
STANDARD 5C STEP CHUCKS & A2-3 CLOSERS

Don't limit your machine setup to the capacity of the FlexC 65. With our 5C adapter, customers can now use Hardinge's Step Chucks and Closers allowing for part sizes of up to 6". Castings, moldings, stampings and machined parts are held rigidly and accurately. Tubing can be held without crushing or distorting. Accurate gripping, the same as with collets, is yours when you use regular and extra depth capacity step chucks for holding larger diameters.



A2-3 5C Adapter with 4 Closer

| Item | Part Number | Step Chuck Size | D - Diameter | L - Length | Price |
|---------------|-------------|-----------------|-----------------|-----------------|-------|
| Regular Depth | V65 235C2RD | 2" | 3.0625" (77.79) | 3.0625" (77.79) | \$260 |
| | V65 235C3RD | 3" | 3.75" (95.25) | 3.0625" (77.79) | \$280 |
| | V65 235C4RD | 4" | 4.75" (120.65) | 3.0625" (77.79) | \$300 |
| | V65 235C5RD | 5" | 5.75" (146.05) | 3.0625" (77.79) | \$350 |
| | V65 235C6RD | 6" | 6.75" (171.45) | 3.0625" (77.79) | \$390 |



A2-3 5C Adapter with 4 ED Closer

| Item | Part Number | A2-3 Closer Size | D - Diameter | L - Length | Price |
|-------------|-------------|------------------|----------------|-----------------|-------|
| Extra Depth | V65 235C2ED | 2" | 3.625" (92.08) | 3.8125" (96.84) | \$290 |
| | V65 235C3ED | 3" | 4.25" (107.95) | 3.8125" (96.84) | \$310 |
| | V65 235C4ED | 4" | 5.25" (133.35) | 3.8125" (96.84) | \$330 |
| | V65 235C5ED | 5" | 6.25" (158.75) | 3.8125" (96.84) | \$380 |
| | V65 235C6ED | 6" | 7.25" (184.15) | 3.8125" (96.84) | \$420 |

MASTER COLLET & PADS

| FlexC Style-S Master Collets | Part Number | Price | "S" Pad* | Round Smooth | Round Serrated | Hexagon Smooth | Square | Emergency | Semi-Hard |
|------------------------------|----------------|-------|----------|--------------|----------------|----------------|----------|-----------|-----------|
| 65mm | C0650S16MASTER | \$275 | S16 | \$59.50 | \$63 | \$73.50 | \$73.50 | \$53.50 | \$56.50 |
| | C0650S20MASTER | \$297 | S20 | \$79 | \$83 | \$102.50 | \$102.50 | \$74 | \$76 |
| | C0650S22MASTER | \$320 | S22 | \$87 | \$91.50 | \$118 | \$118 | \$81 | \$84 |
| 80mm | C0800S26MASTER | \$414 | S26 | \$97.50 | \$102 | \$130 | \$130 | \$90.50 | \$94.50 |
| | C0800S30MASTER | \$437 | S30 | \$131.50 | \$144.50 | \$163 | \$163 | \$125 | \$128 |



| | Part Number | Price |
|-------------------------|-------------|--------|
| S16, S20 and S26 | | |
| B Clamp assy | 7619 | \$7.20 |
| B wrench | 7637 | \$1.35 |
| S22 and S30 | | |
| C Clamp assy | 7627 | \$7.60 |
| C wrench | 7639 | \$2.30 |

EJECTORS

Hardinge Spring Part Ejectors

Hardinge's standard spring ejectors are used to push a part into the parts catcher or conveyor when finished. These standard spring ejectors have a limited amount of stroke and apply consistent force, regardless of part size.



| Part Number | Chuck Model | Price |
|----------------|-------------|-------|
| 105700000042A | 42A | \$250 |
| 105700000042DL | 42DL | \$250 |
| 105700000065A | 65A | \$300 |
| 327300000065DL | 65DL | \$300 |
| 327300000080A | 80A | \$350 |
| 327300000080DL | 80DL | \$350 |

A= Pull back w/stop; DL= Dead length

Long Stroke, Variable Speed Part Ejector

The Hardinge JL-Series Variable Speed Part Ejector is used when maximum stroke and flexibility is needed. This part ejector has 4.4" of stroke and allows users to adjust the rate of speed at which the ejection rod will push the part out, making sure the part is ejected exactly how you want every time!



| Part Number | Chuck Model | Price |
|------------------------------------|-------------|--------|
| Long Stroke, Variable Speed | | |
| JL 000100065A | 65A | \$1200 |
| JL 000100065DL | 65DL | \$1200 |
| JL 000100080A | 80A | \$1200 |
| JL 000100080DL | 80DL | \$1200 |

A= Pull back w/stop; DL= Dead length

Patent Pending

FlexC Part Stops

A part stop is used to accurately locate z-axis positioning of slug work within a collet. These easy to install stops are adjustable for desired part length. The rigid design of these part stops allows peace of mind knowing that your part length will remain consistent part to part.



| Part Number | Chuck Model | Price |
|--------------------|-------------|-------|
| Solid Stops | | |
| V42 5A01011 | 42A | \$150 |
| V42 5DL05411 | 42DL | \$150 |
| V65 6A01211 | 65A | \$175 |
| V65 6DL05836 | 65DL | \$175 |
| V80 6A06408 | 80A | \$200 |
| V80 6DL06213 | 80DL | \$200 |

A= Pull back w/stop; DL= Dead length

SAME-DAY SHIPPING

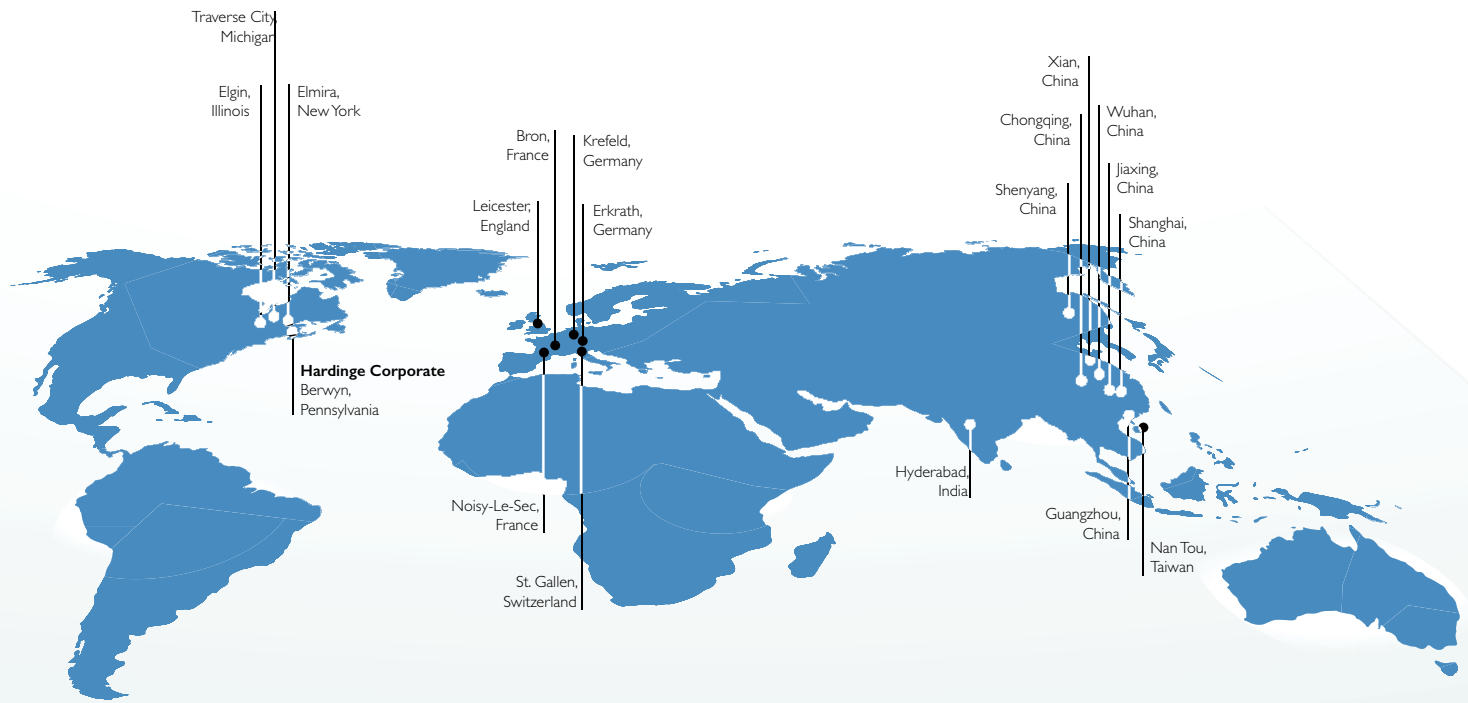
- Hardinge holds to a strict 95% same day ship rate for all standard Workholding products. Serving our customer requests quickly is our goal.
 - Hardinge stocks more than 15,000 Workholding SKUs in our in-house inventory. We ship every day, all day, to serve our customers.
-

CUSTOMER SUPPORT

- Our fully staffed team of experienced customer service representatives will help you from product identification to shipment.
- Accomplished Engineers, averaging over 20 years of service to the industry, making that special application easy for you.

SHOPHARDINGE.COM





HARDINGE COMPANIES WORLDWIDE

Hardinge is a leading international provider of advanced metal-cutting solutions. We provide a full spectrum of highly reliable CNC turning, milling, and grinding machines as well as technologically advanced workholding accessories.

The diverse products we offer enable us to support a variety of market applications in industries including aerospace, agricultural, automotive, construction, consumer products, defense, energy, medical, technology, transportation and more.

We've developed a strong global presence with manufacturing operations in North America, Europe, and Asia. Hardinge applies its engineering and applications expertise to provide your company with the right machine tool solution and support every time.

AMERICAS

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