

ENGINEERED DIAMOND PRODUCTS

Crystallume

Graphite Electrode Machining

4 Flute ThunderBolt Series End Mills Page 3

Tool Number Coated	Price Coated
P47-100001-1	\$47.25
P47-100006-1	\$47.25
P47-100002-1	\$47.25
P47-100007-1	\$47.25
P47-100003-1	\$52.50
P47-100008-1	\$52.50
P47-100009-1	\$52.50
P47-100010-1	\$52.50
P47-100004-1	\$56.70
P47-100011-1	\$56.70
P47-100012-1	\$56.70
P47-100005-1	\$57.75
P47-100013-1	\$57.75
P47-100014-1	\$57.75
P47-100015-1	\$57.75
P47-100016-1	\$57.75
P47-100017-1	\$31.50
P47-100018-1	\$31.50
P47-100019-1*	\$36.75
P47-100020-1*	\$36.75
P47-100021-1*	\$36.75
P47-100022-1*	\$36.75
P47-100023-1*	\$42.00
P47-100024-1*	\$42.00
P47-100025-1*	\$47.25
P47-100026-1*	\$47.25
P47-100027-1*	\$52.50
P47-100028-1*	\$52.50

*Tools coated 1x Diameter

4 Flute Lightning Series Extended Shank End Mills P.4

Tool Number Coated	Price Coated
P38-005155-1	\$63.00
P38-005156-1	\$63.00
P38-005157-1	\$63.00
P38-005158-1	\$63.00
P38-005159-1	\$68.25
P38-005160-1	\$68.25

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Tool Number Coated	Price Coated
P38-005161-1	\$68.25
P38-005162-1	\$68.25
P38-005163-1	\$73.50
P38-005164-1	\$73.50
P38-005165-1	\$73.50
P38-005166-1	\$89.25
P38-005167-1	\$89.25
P38-005168-1	\$89.25
P38-005169-1	\$89.25
P38-005170-1	\$89.25

4 Flute Lightning Series General Purpose End Mills P.4

Tool Number Coated	Price Coated
P38-200202-1	\$47.25
P38-200219-1	\$42.00
P38-200175-1	\$52.50
P38-200477-1	\$47.25
P38-200004-1	\$52.50
P38-200002-1	\$47.25
P38-200008-1	\$57.75
P38-200006-1	\$52.50
P38-200012-1	\$73.50
P38-200010-1	\$68.25
P38-200016-1	\$73.50
P38-200014-1	\$57.75
P38-200024-1	\$68.25
P38-200022-1	\$63.00
P38-200028-1	\$99.75
P38-200026-1	\$94.50
P38-200040-1	\$99.75
P38-200038-1	\$94.50
P38-200056-1	\$120.75
P38-200054-1	\$115.50
P38-200060-1	\$157.50
P38-200058-1	\$147.00

2 Flute Lightning Series Long Reach End Mills Page 5

Tool Number Coated	Price Coated
P38-005101-1	\$73.50
P38-005102-1	\$73.50
P38-005103-1	\$78.75
P38-005104-1	\$78.75
P38-005105-1	\$78.75
P38-005106-1	\$78.75

4 Flute Lightning Series Long Reach End Mills Page 5

Tool Number Coated	Price Coated
P38-005107-1	\$68.25
P38-005108-1	\$68.25
P38-005109-1	\$68.25
P38-005110-1	\$73.50
P38-005111-1	\$73.50
P38-005112-1	\$73.50
P38-005113-1	\$73.50
P38-005114-1	\$73.50
P38-005115-1	\$73.50
P38-005116-1	\$78.75
P38-005117-1	\$78.75
P38-005118-1	\$78.75
P38-005119-1	\$68.25
P38-005120-1	\$68.25
P38-005121-1	\$68.25
P38-005122-1	\$73.50
P38-005123-1	\$73.50
P38-005124-1	\$73.50
P38-005125-1	\$78.75
P38-005126-1	\$78.75
P38-005127-1	\$78.75
P38-005128-1	\$68.25
P38-005129-1	\$68.25
P38-005130-1	\$68.25
P38-005131-1	\$73.50
P38-005132-1	\$73.50
P38-005133-1	\$73.50
P38-005134-1	\$78.75
P38-005135-1	\$78.75
P38-005136-1	\$78.75
P38-005137-1	\$68.25
P38-005138-1	\$68.25
P38-005139-1	\$68.25
P38-005140-1	\$73.50
P38-005141-1	\$73.50
P38-005142-1	\$73.50
P38-005143-1	\$78.75
P38-005144-1	\$78.75
P38-005145-1	\$78.75
P38-005146-1	\$73.50
P38-005147-1	\$73.50
P38-005148-1	\$73.50
P38-005149-1	\$78.75
P38-005150-1	\$78.75
P38-005151-1	\$78.75
P38-005152-1	\$84.00
P38-005153-1	\$84.00
P38-005154-1	\$84.00

2 Flute Mold Maker End Mills (WITH REACH) Page 6

Tool Number Coated	Price Coated
P820-200404-1	\$175.10
P820-200403-1	\$164.80

4 Flute Mold Maker End Mills (WITH REACH) Page 6

Tool Number Coated	Price Coated
P820-200406-1	\$175.10
P820-200405-1	\$164.80
P820-200407-1	\$175.10
P820-200409-1	\$164.80
P820-200408-1	\$154.50
P820-200410-1	\$164.80
P820-200412-1	\$164.80
P820-200411-1	\$154.50
P820-200413-1	\$164.80
P820-200415-1	\$164.80
P820-200414-1	\$154.50
P820-200416-1	\$164.80
P820-200417-1	\$164.80
P820-200419-1	\$175.10
P820-200418-1	\$164.80
P820-200420-1	\$175.10
P820-200421-1	\$175.10
P820-200422-1	\$175.10
P820-200424-1	\$195.70
P820-200423-1	\$185.40
P820-200425-1	\$195.70
P820-200427-1	\$216.30
P820-200426-1	\$195.70
P820-200428-1	\$216.30
P820-200429-1	\$216.30
P820-200430-1	\$216.30
P820-200431-1	\$216.30

2 Flute Mold Maker End Mills (WITH REACH) METRIC Page 6

Tool Number Coated	Price Coated
P820-200338-1	\$175.10
P820-200337-1	\$164.80

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NOTE: PAGE NUMBERS THAT CORRESPOND TO THE 2011 CRYSTALLUME CATALOG ARE REFERENCED AT THE TOP OF EACH COLUMN.

4 Flute Mold Maker End Mills (WITH REACH) METRIC Page 6

Tool Number Coated	Price Coated
P820-200340-1	\$175.10
P820-200339-1	\$164.80
P820-200342-1	\$164.80
P820-200341-1	\$154.50
P820-200344-1	\$164.80
P820-200343-1	\$154.50
P820-200346-1	\$164.80
P820-200345-1	\$154.50
P820-200348-1	\$175.10
P820-200347-1	\$164.80
P820-200350-1	\$206.00
P820-200349-1	\$195.70

2 Flute Mold Maker End Mills (W/O REACH) Page 7

Tool Number Coated	Price Coated
P820-200684-1	\$175.10
P820-200683-1	\$164.80

4 Flute Mold Maker End Mills (W/O REACH) Page 7

Tool Number Coated	Price Coated
P820-200686-1	\$175.10
P820-200685-1	\$164.80
P820-200687-1	\$175.10
P820-200689-1	\$164.80
P820-200688-1	\$154.50
P820-200690-1	\$164.80
P820-200692-1	\$164.80
P820-200691-1	\$154.50
P820-200693-1	\$164.80
P820-200695-1	\$164.80
P820-200694-1	\$154.50
P820-200696-1	\$164.80
P820-200697-1	\$164.80
P820-200699-1	\$175.10
P820-200698-1	\$164.80
P820-200700-1	\$175.10
P820-200701-1	\$175.10
P820-200702-1	\$175.10
P820-200704-1	\$195.70
P820-200703-1	\$185.40
P820-200705-1	\$195.70
P820-200707-1	\$216.30
P820-200706-1	\$195.70
P820-200708-1	\$216.30
P820-200709-1	\$216.30
P820-200710-1	\$216.30
P820-200711-1	\$216.30
P820-200713-1	\$288.40
P820-200712-1	\$267.80
P820-200714-1	\$288.40
P820-200715-1	\$288.40
P820-200716-1	\$288.40
P820-200718-1	\$350.20
P820-200717-1	\$339.90
P820-200719-1	\$350.20
P820-200720-1	\$350.20
P820-200721-1	\$350.20

2 Flute Mold Maker End Mills (W/O REACH) METRIC Page 7

Tool Number Coated	Price Coated
P820-200670-1	\$175.10
P820-200669-1	\$164.80

4 Flute Mold Maker End Mills (W/O REACH) METRIC Page 7

Tool Number Coated	Price Coated
P820-200672-1	\$175.10
P820-200671-1	\$164.80
P820-200674-1	\$164.80
P820-200673-1	\$154.50
P820-200676-1	\$164.80
P820-200675-1	\$154.50
P820-200678-1	\$164.80
P820-200677-1	\$154.50
P820-200680-1	\$175.10
P820-200679-1	\$164.80
P820-200682-1	\$206.00
P820-200681-1	\$195.70

4 Flute Extended Shank End Mills Page 8

Tool Number Coated	Price Coated
P820-200105-1	\$82.40
P820-200209-1	\$82.40
P820-200106-1	\$87.55
P820-200582-1	\$87.55
P820-200107-1	\$92.70
P820-200210-1	\$92.70
P820-200241-1	\$92.70
P820-200628-1	\$92.70
P820-200108-1	\$103.00
P820-200237-1	\$103.00
P820-200627-1	\$103.00
P820-200109-1	\$118.45
P820-200211-1	\$118.45
P820-200242-1	\$118.45
P820-200279-1	\$118.45
P820-200626-1	\$118.45
P820-200110-1	\$133.90
P820-200581-1	\$133.90
P820-200111-1	\$144.20
P820-200512-1	\$144.20
P820-200309-1	\$144.20
P820-200602-1	\$226.60
P820-200603-1	\$226.60
P820-200310-1	\$226.60

2 Flute Big Shank Tools METRIC Page 9

Tool Number Coated	Price Coated
P820-200745-1	\$195.70
P820-200744-1	\$185.40
P820-200733-1	\$195.70
P820-200746-1	\$185.40
P820-200784-1	\$195.70
P820-200785-1	\$185.40

4 Flute Big Shank Tools METRIC Page 9

Tool Number Coated	Price Coated
P820-200734-1	\$195.70
P820-200783-1	\$185.40
P820-200768-1	\$195.70
P820-200747-1	\$185.40
P820-200749-1	\$185.40
P820-200748-1	\$175.10
P820-200769-1	\$185.40
P820-200770-1	\$175.10
P820-200737-1	\$195.70
P820-200771-1	\$185.40
P820-200772-1	\$226.60
P820-200773-1	\$216.30
P820-200574-1	\$206.00
P820-200573-1	\$195.70
P820-200786-1	\$226.60
P820-200575-1	\$216.30

4 & 6 Flute 1/2" Replaceable Tip End Mill (WITH 1/4" SHANK) Page 10

Tool Number Coated	Price Coated
P820-201143-1	\$149.35
P820-201142-1	\$149.35
P820-201206-1	\$149.35
P820-201145-1	\$149.35

4 Flute Threaded Tip End Mill Page 10

Tool Number Coated	Price Coated
P820-201324-1	\$198.00
P820-201325-1	\$198.00
P820-201326-1	\$270.00
P820-201327-1	\$270.00
P820-201328-1	\$423.00
P820-201329-1	\$423.00
P820-201330-1	\$637.00
P820-201331-1	\$637.00

Compatible with Ingersoll Tool Holders.

2 Flute Deep Cavity Mold Maker End Mills Page 11

Tool Number Coated	Price Coated
P820-200919-1	\$169.95
P820-200920-1	\$180.25

2 Flute Deep Cavity Mold Maker End Mills METRIC Page 11

Tool Number Coated	Price Coated
P820-200921-1	\$169.95
P820-200922-1	\$180.25

NOTE: PAGE NUMBERS THAT CORRESPOND TO THE 2011 CRYSTALLUME CATALOG ARE REFERENCED AT THE TOP OF EACH COLUMN.

4 Flute Deep Cavity Mold Maker End Mills Page 11

Tool Number Coated	Price Coated
P820-200923-1	\$169.95
P820-200924-1	\$180.25
P820-200925-1	\$169.95
P820-200926-1	\$180.25
P820-200929-1	\$159.65
P820-200930-1	\$169.95

4 Flute Deep Cavity Mold Maker End Mills METRIC Page 11

Tool Number Coated	Price Coated
P820-200927-1	\$169.95
P820-200928-1	\$180.25

General Purpose Tools

2 Flute Standard End Mills METRIC Page 12

Tool Number Coated	Price Coated
P820-200659-1	\$113.30
P820-200723-1	\$103.00
P820-200661-1	\$144.20
P820-200660-1	\$133.90
P820-200663-1	\$149.35
P820-200662-1	\$139.05
P820-200665-1	\$159.65
P820-200664-1	\$149.35
P820-200239-1	\$169.95
P820-200666-1	\$159.65
P820-200667-1	\$185.40
P820-200522-1	\$175.10
P820-200526-1	\$200.85
P820-200668-1	\$190.55
P820-200525-1	\$278.10
P820-200523-1	\$267.80

4 Flute Standard End Mills Page 12

Tool Number Coated	Price Coated
P820-200219-1	\$92.70
P820-200202-1	\$103.00
P820-200492-1	\$97.85
P820-200646-1	\$108.15
P820-200002-1	\$97.85
P820-200004-1	\$108.15
P820-200006-1	\$113.30
P820-200008-1	\$128.75
P820-200014-1	\$139.05
P820-200016-1	\$154.50
P820-200022-1	\$149.35
P820-200024-1	\$164.80

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Tool Number Coated	Price Coated
P820-200030-1	\$164.80
P820-200032-1	\$175.10
P820-200038-1	\$180.25
P820-200040-1	\$195.70
P820-200046-1	\$216.30
P820-200048-1	\$231.75
P820-200054-1	\$231.75
P820-200056-1	\$247.20

4 Flute Long Standard End Mills Page 13

Tool Number Coated	Price Coated
P820-200010-1	\$149.35
P820-200012-1	\$169.95
P820-200018-1	\$159.65
P820-200020-1	\$175.10
P820-200026-1	\$190.55
P820-200028-1	\$206.00
P820-200034-1	\$195.70
P820-200036-1	\$211.15
P820-200722-1	\$221.45
P820-200094-1	\$231.75
P820-200058-1	\$288.40
P820-200060-1	\$319.30

4 Flute Extra Long Standard End Mills Page 13

Tool Number Coated	Price Coated
P820-200539-1	\$221.45
P820-200277-1	\$206.00
P820-200205-1	\$339.90
P820-200195-1	\$324.45

Inserts Page 14

Tool Number Coated	Price Coated
P830-100551-1	\$56.65
P830-100690-1	\$103.00
P830-100699-1	\$175.10
P830-100547-1	\$56.65
P830-100523-1	\$51.50
P830-100309-1	\$46.35
P830-100310-1	\$46.35
P830-100006-1	\$46.35
P830-100007-1	\$46.35
P830-100009-1	\$61.80
P830-100491-1	\$66.95
P830-100012-1	\$66.95
P830-100013-1	\$66.95
P830-100017-1	\$66.95
P830-100018-1	\$66.95
P830-100091-1	\$61.80
P830-100170-1	\$61.80
P830-100722-1	\$82.40
P830-100211-1	\$72.10
P830-100279-1	\$72.10
P830-100347-1	\$51.50
P830-100628-1	\$61.80
P830-100605-1	\$46.35

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Tool Number Coated	Price Coated
P830-100597-1	\$56.65
P830-100596-1	\$56.65
P830-100595-1	\$56.65
P830-100436-1	\$56.65
P830-100031-1	\$56.65
P830-100438-1	\$61.80
P830-100505-1	\$61.80
P830-100588-1	\$72.10
P830-100598-1	\$92.70
P830-100607-1	\$51.50
P830-100224-1	\$56.65
P830-100040-1	\$66.95
P830-100153-1	\$82.40
P830-100196-1	\$113.30
P830-100399-1	\$51.50
P830-100063-1	\$56.65
P830-100064-1	\$66.95
P830-100065-1	\$66.95
P830-100162-1	\$66.95
P830-100343-1	\$92.70
P830-100175-1	\$92.70
P830-100583-1	\$123.60
P830-100385-1	\$72.10
P830-100244-1	\$72.10
P830-100072-1	\$56.65
P830-100327-1	\$51.50
P830-100602-1	\$61.80
P830-100269-1	\$61.80
P830-100076-1	\$46.35
P830-100078-1	\$61.80
P830-100080-1	\$61.80
P830-100081-1	\$72.10
P830-100083-1	\$46.35
P830-100084-1	\$46.35
P830-100454-1	\$61.80
P830-100360-1	\$46.35
P830-100101-1	\$46.35
P830-100102-1	\$46.35
P830-100252-1	\$56.65
P830-100104-1	\$56.65
P830-100105-1	\$56.65
P830-100107-1	\$56.65
P830-100109-1	\$66.95
P830-100110-1	\$66.95
P830-100111-1	\$66.95
P830-100227-1	\$56.65
P830-100373-1	\$56.65
P830-100023-1	\$56.65
P830-100127-1	\$51.50
P830-100217-1	\$61.80
P830-100165-1	\$61.80
P830-100524-1	\$51.50
P830-100531-1	\$72.10
P830-100395-1	\$61.80
P830-100498-1	\$61.80
P830-100615-1	\$61.80
P830-100575-1	\$61.80
P830-100485-1	\$61.80
P830-100136-1	\$61.80
P830-100314-1	\$66.95
P830-100209-1	\$66.95

Center Drills (ONLY ONE END COATED) P.15

Tool Number Coated	Price Coated
P810-100200-1	\$123.60
P810-100071-1	\$123.60
P810-100072-1	\$123.60
P810-100073-1	\$144.20
P810-100074-1	\$154.50
P810-100075-1	\$164.80
P810-100240-1	\$190.55

General Purpose Jobber Drills (118° 4 FACET POINT) Page 15

Tool Number Coated	Price Coated
P810-100180-1	\$103.00
P810-100023-1	\$103.00
P810-100016-1	\$103.00
P810-100024-1	\$103.00
P810-100027-1	\$113.30
P810-100002-1	\$123.60
P810-100142-1	\$139.05
P810-100004-1	\$257.50

Aircraft Tools

118° Tip Standard Length Drills (4 FACET) P.16

Tool Number Coated	Price Coated
P810-100345-1	\$103.00
P810-100334-1	\$103.00
P810-100402-1	\$113.30
P810-100409-1	\$113.30
P810-100335-1	\$113.30
P810-100404-1	\$113.30
P810-100400-1	\$123.60
P810-100336-1	\$123.60
P810-100411-1	\$123.60
P810-100405-1	\$123.60
P810-100346-1	\$123.60
P810-100337-1	\$123.60
P810-100406-1	\$139.05
P810-100407-1	\$149.35
P810-100412-1	\$149.35
P810-100408-1	\$164.80
P810-100410-1	\$164.80
P810-100338-1	\$195.70
P810-100341-1	\$216.30

Elliptical Tip Standard Length Drills Page 16

Tool Number Coated	Price Coated
F104-100001-1	\$113.30
F104-100003-1	\$113.30
F104-100005-1	\$124.63
F104-100006-1	\$124.63

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Tool Number Coated	Price Coated
F104-100007-1	\$124.63
F104-100008-1	\$135.96
F104-100009-1	\$135.96
F104-100010-1	\$135.96
F104-100011-1	\$135.96
F104-100012-1	\$135.96
F104-100004-1	\$135.96
F104-100002-1	\$135.96
F104-100013-1	\$152.96
F104-100014-1	\$164.29
F104-100015-1	\$164.29
F104-100016-1	\$181.28
F104-100017-1	\$181.28
F104-100018-1	\$215.27
F104-100019-1	\$237.93

Countersink Inserts Page 17

Part Number Coated	Price Coated
CSKIC-6IC025-1	\$51.50
CSKIC-7IC025-1	\$51.50
CSKIC-6IR020-1	\$51.50
CSKIC-7IR035-1	\$51.50

Countersink Bodies Page 17

Part Number* Coated	Price Coated
CSKB1T-6 XXXX1-1	To Be Quoted
CSKB1T-7 XXXX1-1	To Be Quoted
CSKB1T-8 XXXX1-1	To Be Quoted
CSKB1T-9 XXXX1-1	To Be Quoted

*For the tool holder body specify the pilot diameter XXXX (e.g. 0.2515" is 2515).

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Terms & Conditions, General Information

TERMS

1% 10 Days. Net 30 Days. Minimum Invoice \$75.00

SHIPPING

F.O.B. Santa Clara, California. All shipments via UPS Orange unless otherwise specified. Actual shipping rates will be invoiced.

CLAIMS

Although goods are considered sold and our responsibility ceases when delivery is made to the transportation company, in the event of goods being lost in transit, we will make every effort on behalf of customers to have lost goods found or to have the transportation company make proper restitution for loss.

Damage claims must be made against carrier.

SPECIALS

Orders for special tools, non-catalog or modified tools are accepted on a no-cancellation basis and tools are not returnable. A confirming purchase order is required before any work begins on special tools.

A 10% over and under shipment on a special is acceptable based on industry practices unless no overshipment is stated on the order when placed.

RETURN POLICY

No merchandise may be returned without prior authorization from the factory. Credit will not be issued for merchandise returned without a return authorization number.

All merchandise returned for credit will be subject to a 15% restocking fee.

ERRORS

Crystallume Corporation can not be held responsible for incorrect parts made with our products due to mislabeling or defects. We assume all tools used by our customers are inspected before use and that a first part inspection in customer's plant is the rule. We will replace or credit tools in those situations.

PRICES

Prices subject to change without notice.



3397 De La Cruz Boulevard
Santa Clara, CA 95054
Toll Free: 800 789-4322
Phone: 408 653-1700
Fax: 408 653-1710
www.crystallume.com

Crystallume is a division of RobbJack Corporation, manufacturer of premium rotary cutting tools and experts in application technology.



3300 Nicolaus Road
Lincoln, CA 95648
Toll Free: (800) 527-8883
Phone: (916) 645-6045
Fax: (916) 645-0146
www.robjack.com



3300 Nicolaus Road
Lincoln, CA 95648
Toll Free: (866) 783-9700
Phone: (916) 645-3560
Fax: (916) 645-0146
www.crystallumepvd.com