

## **The recycled rollerball pen story**

Penloop is the creation of two innovative Australian companies, Close the Loop (CtL) and Auspen. It is the result of a combined effort to resolve a CtL problem. CtL collects and recycles millions of inkjet cartridges every year via programs like 'Cartridges 4 Planet Ark'.

The problem was how to turn plastic and ink from recycled inkjet cartridges into a product of value and of benefit to society. Further, how do we do that to reflect the environmental objectives of our customers, the inkjet cartridge manufacturers including Lexmark, Canon, Epson, Brother and HP?

As the name suggests, Close the Loop is about closing product and material loops, aimed at recovering resources that would otherwise go to waste. It recently developed and patented a way of modifying waste ink from inkjet cartridges for use in writing instruments. This is where Auspen came in.

Auspen, a specialist in writing instruments with strong environmental values, has provided the knowhow and industry contacts to make a rollerball pen that utilises this exciting new invention.

The inkjet cartridge recycling process starts with sorting the cartridges by predominant plastic type and ink chemistry. The cartridges are fed into a large 'green machine' which shreds and crushes them and then spins the resultant material in a large high speed centrifuge to separate the ink. The solid materials progress through a series of materials separation stages to produce a relatively clean plastic stream.

The ink and plastic are further refined to exacting specifications for reuse in the rollerball pen manufacturing process. Considerable engineering effort has been put into matching the ink with the nib. The nib is manufactured by a specialist German company, expert in their craft. The nib housing is stainless steel and the ball is highly polished tungsten carbide which provides a very smooth flowing action.




The recycled rollerball pen is over 90% recycled content by weight. The only components not made from post consumer recycled materials are the nib, nib feeder, and ink cartridge. Over time, Penloop will develop these components made from recycled materials too. One day soon, this product will be made from 100% post consumer 'waste'.



## **Technical specs and information**

- Weight – 12 grams
- Colour – Black
- %age post consumer recycled content - >90%
- %age post consumer inkjet cartridge 'waste' - >90%
- Ink – water based black. Recycled from post consumer inkjet cartridges
- Nib – stainless steel housing, tungsten carbide ball
- Recyclable – go to <http://penloop.com/pens.html> to find out where you can recycle your empty cartridges and your pen at the end of its life, after countless refills

**Price list effective until 31 December 2010**

Quantity	Unit price AU\$
<b>Recycled roller ball pen 0.7 mm with 1 universal cartridge containing recycled ink</b> Code PNL0001	
	
10 to 1,000	AU\$ 2.70
1,001 to 2,000	AU\$ 2.30
2,001 to 5,000	AU\$ 2.20
5,001 to 10,000	AU\$ 2.10
10,001 and over	AU\$ 1.90
<b>"2 UP" Set of 2 recycled roller ball pens and 6 recycled ink cartridges</b> Code PNL0002	
	
1 to 100	AU\$ 8.20
101 to 1,000	AU\$ 7.50
1,001 to 2,500	AU\$ 6.50
2,501 to 5,000	AU\$ 6.00
5,001 and over	AU\$ 5.75
<b>Universal refill ink cartridges with recycled ink</b> Code PNL0006	
	
<b>Box of 6</b>	
1 to 100	AU\$ 3.00
101 to 1,000	AU\$ 2.50
1,001 to 5,000	AU\$ 2.20
5,001 to 10,000	AU\$ 1.95
10,001 and over	AU\$ 1.65



**Conditions of purchase:**

- Prices do not include GST and do not include freight
- Delivery: 4 weeks
- Custom printing: 1 colour on barrel
  - Minimum quantity: 250 pens
  - Artwork to be provided by customer
  - Printing set up cost: AU\$100.00
  - Printing costs:
    - 250+ pens AU\$0.25 each
    - 500+ pens AU\$0.23 each
    - 1,000+ pens AU\$0.17 each
    - 5,000+ pens AU\$0.15 each
    - 10,000+ pens AU\$0.13 each

**To order:**

Please fill the form below.

Quantity	Code	Description	Unit price (escl. GST)	Total price (escl. GST)
	PNL0001	Recycled roller ball pen (0.7mm) with one recycled ink cartridge		
	PNL0100	Printing - Set up cost		
	PNL0200	Printing - 1 colour on barrel		
	PNL0002	"2 UP" Set of 2 Recycled roller ball pens and 6 recycled ink cartridges		
	PNL0006	Universal refill ink cartridges with recycled ink - Box of 6		

- Every pen contains 1 universal cartridge with recycled ink.
- For prices please refer to the above price list.
- Payment to be discussed with the person who handed you this document.

Customer: \_\_\_\_\_

Order No: \_\_\_\_\_

Address: \_\_\_\_\_

Suburb: \_\_\_\_\_ Post Code: \_\_\_\_\_

Phone: (    ) \_\_\_\_\_ Fax: (    ) \_\_\_\_\_

Email: \_\_\_\_\_

Name: \_\_\_\_\_

Department: \_\_\_\_\_ Position: \_\_\_\_\_

***Make sure you photocopy this form for multiple use***