





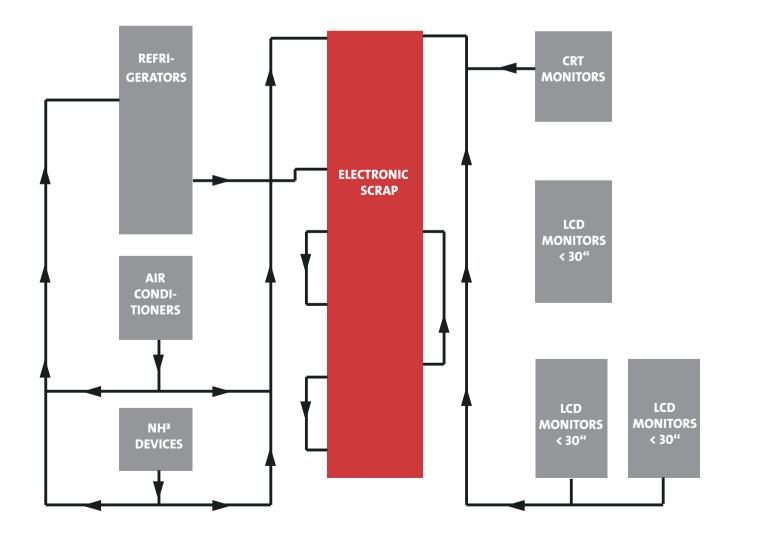
# **ERDWICH IN HONGKONG**

The world's first combination plant for processing the entire range of materials arising from the area of electronic waste.









## **Further applications areas:**

- **Electronic waste**
- Refrigeration plant
- Substitute fuels
- Cardboard
- Special waste
- and many more

# Innovation is our standard!

As a highly specialised engineering and production company ERDWICH offers exceptional services in recycling and shredder technology, backed up by over 30 years of experience. Shredding machinery, special solutions, complete recycling systems and global services are our core competencies, to which our team dedicates itself enthusiastically every day.

Owner-managed, with personal, intensive support, short reaction times and comprehensive service, we offer our customers first-class quality made in Bavaria. Get to know us.

### Welcome!

## **Core competencies:**

- Shredding machinery
- Plant engineering
- Service

# ERDWICH ZERKLEINERUNGS-SYSTEME GMBH Gewerbestraße 6 D-86859 Igling Tel.: +49 (0)8191 - 96 52 - 0 Fax: +49 (0)8191 - 96 52 - 16 E-Mail: infoline@erdwich.de

# **ELECTRONIC WASTE RECYCLING PARK IN HONG KONG**









EIGHT RECYCLING PLANTS FROM ERDWICH FORM THE CORE OF THE NEW RECYCLING PARK IN HONG KONG

www.erdwich.com





# ERDWICH'S EIGHT PLANTS FOR THE NEW ECO PARK IN HONG KONG









## ERDWICH'S EIGHT RECYCLING PLANTS FOR THE NEW ECO PARK IN HONG KONG

- 1x ELECTRONIC SCRAP
- 2X LCD MONITORS OVER 30"
- 1X LCD MONITORS UNDER 30"
- 2X CRT-SCREENS/TUBES
- 1x REFRIGERATORS
- 1x AIR CONDITIONERS

# From the first request to the local recycling hotspot

The leaders of this project, the ALBA Group, commissioned us to deliver eight recycling plants for the processing of the entirety of the materials arising from Hong Kong´s electronic scrap, and to assemble the plants there on site. Split into three deliveries, (freight, lines) the processing lines were despatched on their 18,544 km journey to Hong Kong in 75 containers with a combined weight of over 730 tons.

After the first containers arrived we were present on site with several of our employees, in order to carry out the assembly and commissioning of the plants.



As further deliveries arrived, our personnel contingent on site was increased to 24 fitters for a time, in order to guarantee a smooth process.

The technical installations were completed, the recycling line put into operation and shortly thereafter ceremoniously opened. These events concluded the processing of the largest order ever received in the history of our firm.



# Eight recycling plant lines for reprocessing and environmental technology

In Hong Kong's Tuen Mun quarter a giant industrial recycling park has been created for reprocessing and for environmental technology, using a total of eight plant lines from the company Erdwich.

This 200,000 m<sup>2</sup> Eco Park is intended to strengthen the local management of valuable materials. Erdwich built the world's first combination plant for the processing of the entire range of materials arising from the electronic waste area, taking into account all the latest legal requirements, such as recovery rates, conformity with exhaust air rules and compliance with the regulations from **WEEE**, **WEEELABEX** and **CENELEC**.

The total of eight plant processing lines can be operated in such a flexible manner that by using a variety of by-pass solutions almost all materials can be optimally processed and separated into their individual fractions.

Whether this is the optimal separation of the various types of plastic, or the separation of non-ferrous alloys into aluminium, copper, etc.

There is also the possibility, via several feed stations, to re-feed materials which have already been processed back into particular processing cycles to achieve an improved output.

This means that individual customers have the possibility of improving the quality of recovered valuable materials and thus achieve better returns from their resale.

## Processing of electronic scrap

A large-scale shredder, capable of reducing some 5 tons of material per hour, processes electronic scrap of all kinds (washing machines, copiers, server stations) with individual weights of up to 450 kg, thus preparing it for further processing. After the automatic separation of the ferrous elements, the material is further sorted by manual removal of other valuable materials from a conveyer belt.

The remaining material is then subjected to further processes to remove fine dust and subsequently plastic and non-ferrous metals are separated in an optical sorting plant. The next step makes it possible to further process these materials to enable non-ferrous metals to be graded and separated according to size and quality. The entire plastic fraction is processed again during a second pass cycle

# Adaption of the shredder technology for this task

## **Processing of refrigerators and air conditioners**

In the area of air-conditioning and refrigeration unit recycling, a total of three systems are used, two of which achieve a maximum throughput of 60 units per hour, while the more complex system for units with ammonia in the cooling system handles up to 30 units per hour.

The material from the processing of air conditioning units is also further processed, after the removal of the refrigerant, over the entire line for e-scrap processing.

## **Processing of LCD monitors and CRTs**

Two systems have been specifically designed to recycle LCD monitors over 30 inches in size, capable of disassembling 40 devices per hour. LCD monitors under 30 inches and CRTs each have a separate plant that can handle up to 80 devices per hour.

After removal of the pollutants, material from the CRTs can also be transferred to the plant of the e-scrap line. There it is broken down and separated into its various individual fractions.

A solution that allows us, by means of a variety of processing option, to obtain material qualities from all the different processing lines, which then command a higher market price.

The operator is thus able to react to the current market prices for recovered materials and to operate the plant accordingly.

Erdwich's solution, which satisfies the wishes of all concerned.

 Input capacity of up to 5 tons, depending on the plant.

