PNEUMATIC CONVEYING SYSTEMS
THE METALS INDUSTRY
METAL INDUSTRY SYSTEMS

APPLICATIONS
Quickdraft pneumatic conveying systems are used with virtually all metals including: cast iron, steel, galvanized steel, copper, brass and aluminum. Material applications include trim, skeletons, offal, chips, dust, slag, borings, recycled and waste or scrap products.

Quickdraft engineered systems are the preferred choice in the metals industry because they assure effective performance and yield major benefits. However, Quickdraft is most often selected because of its engineering excellence. Most projects in the metals industry require adapting to special... and frequently confidential... conditions. Quickdraft has been doing that for more than 40 years.

TRIM
Many manufacturing processes require that the product being produced be trimmed. This can be a noisy, dangerous and very expensive operation if the Quickdraft principles of pneumatic conveying are not employed. Quickdraft systems capture the trim, reduce it to a manageable form, convey it to an appropriate location and deliver it to a disposal facility. In some cases the trim may not have to be transformed at all and can be transported in a continuous ribbon. Quickdraft systems are totally enclosed to provide a high degree of safety while drastically reducing dust and noise. Installations range from galvanized steel sheet to aluminum foil.

WASTE
Cut outs, punch outs, matrix skeleton and other waste material can be conveyed surely and efficiently with a Quickdraft system, sometimes the very same Quickdraft system which is providing other pneumatic conveying functions. The waste material can be delivered to a receiver in the form most suitable for disposal or recycling.
SLAG, DUST AND REFUSE
Slag, dust and refuse from manufacturing processes can cause serious problems. Pipe and tubing production, for example, generates a slag which must be extracted from the finished product but not be allowed to accumulate inside the plant. Quickdraft systems capture the slag and safely convey it to a location designated for disposal or recycling. At the same time, other dust or refuse is collected to provide a clean and healthful environment.

RECYCLING
Quickdraft systems accept products which are to be recycled and convey them to processing apparatus safely, economically and efficiently. Importantly, Quickdraft systems can handle materials at high temperatures such as aluminum chips leaving a de-lacquering oven. Since the conveying lines are completely enclosed, the material is transported without endangering people or equipment... and within acceptable sound levels.

CLEANLINESS
Quickdraft systems improve environmental conditions by capturing the material to be conveyed and transporting it inside specially constructed ducts. Dust, slag and refuse associated with the process is also captured specifically or as an incidental benefit. The result is a much cleaner atmosphere than can be achieved with any other approach.

SAFETY
Trim, skeleton and other waste and slag can be dangerous when conveyed openly and without adequate controls. Quickdraft systems automatically enhance safety by totally enclosing the conveying operation and providing engineered safeguards throughout the system.

FLEXIBILITY
Plant operations should not be hampered by the constraints of a waste handling system... and with Quickdraft, they are not. Quickdraft designers engineer the system to conform to actual plant conditions. Ducts are routed in an optimum configuration, power units are placed in the most practical location while capture and delivery mechanisms are specifically designed for maximum performance in that environment.

ABRASION RESISTANCE
Quickdraft engineers select components so that each system can achieve long lasting performance. Wear plates at points of stress such as elbows are routinely installed. Special provisions are incorporated for highly abrasive materials. In some cases, plasma coating or other techniques are used to handle specific situations.

The system depicted here is taking trim from each edge of a roll of aluminum. The trim capture design includes a clamping mechanism to assure the integrity of the sitting operation. A Quickdraft turbo powered eductor provides the motive force for conveying the trim, fines and dust. The continuous ribbon trim goes directly to a baller while the fines and dust are directed to a cyclone.
NOISE CONTROL
Quickdraft designers are able to include noise suppression capabilities in virtually all applications so as to at least comply with government regulations.

Importantly, these engineering achievements are tested to the users' criteria to assure compliance with the customer's needs and desires.

APPLICATION INTEGRITY
Many of the processes and methods used in the metal industry are proprietary. Quickdraft is dedicated to preserving the application integrity pertinent to each customer. Quickdraft experience in the art of pneumatic conveying is made available to all customers, but any customer's proprietary processes, procedures or methods are held strictly confidential.

EDUCTORS
Quickdraft pioneered the eductor concept to provide a clear through (unimpeded) flow path for trim and waste products... and continues to set the standard for quality and performance.

Several types of blowers are available to inject air and induce flow through the educors. Among the most popular are the Sirocco and the Quickdraft turbo.

Intake and exhaust silencers are available for all applications and complete sound enclosures may be furnished whenever desired.
This drawing depicts an aluminum recycling system. Mechanical conveyors at three locations deliver scrap to Quickdraft designed intake devices. These are hoppers with integral Quickdraft ejectors which induce the scrap into the conveying ducts.

A turbo powered Quickdraft eductor downstream from the intakes provides the motive force to transfer the material to storage silos. Automatic, compressed air gate valves control each of the intakes. Diverter mechanisms assure a clear through flow path with no decrease in power.

In addition to the air/material separators depicted in the illustrations, Quickdraft provides other units engineered to system requirements including cyclones and perforated elbows specifically designed for metals industry applications.

The conveying ducts in Quickdraft systems are produced by Quickdraft from materials selected for the application. Special ducting and all accessories are provided as dictated by the needs of the system.

ENGINEERING EVALUATIONS
Quickdraft engineers are available for engineering evaluations at your plant to determine the feasibility of providing a Quickdraft pneumatic conveying system for your operation. Call, fax or write; Sales Manager, Quickdraft.
ENGINEERED SYSTEMS
Quickdraft design engineers develop complete systems including capture devices, power units, air/material separators and all necessary components and accessories. The total project may include balers, ballers, shredders and control packages.

SERVICES
System designs are implemented by a task force under the direction of an experienced project manager, who coordinates all elements of the project to deliver the desired performance.

After the installation is completed, Quickdraft service is on call to keep the system functioning as designed and to provide parts and accessories whenever required.

For More Information:
Division of C.A. Litzler Co., Inc.
1525 Perry Dr. S.W.
Canton, Ohio 44710-1098
Telephone (330) 477-4574
Fax (330) 477-3314

info@quickdraft.com