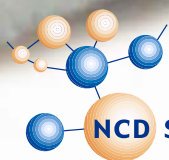
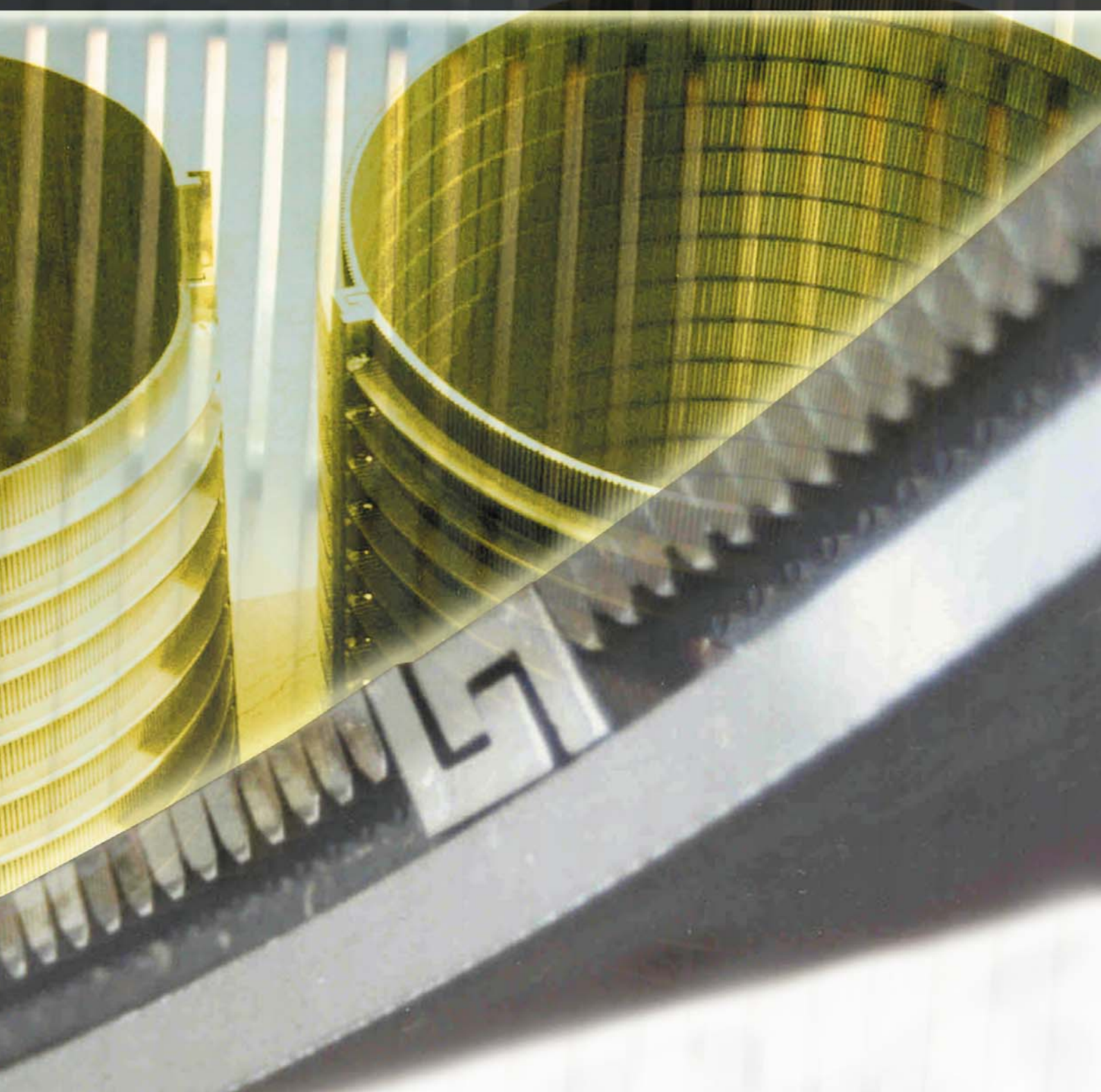


# Profile Wire Screens & Filter Media for Industrial Centrifuges



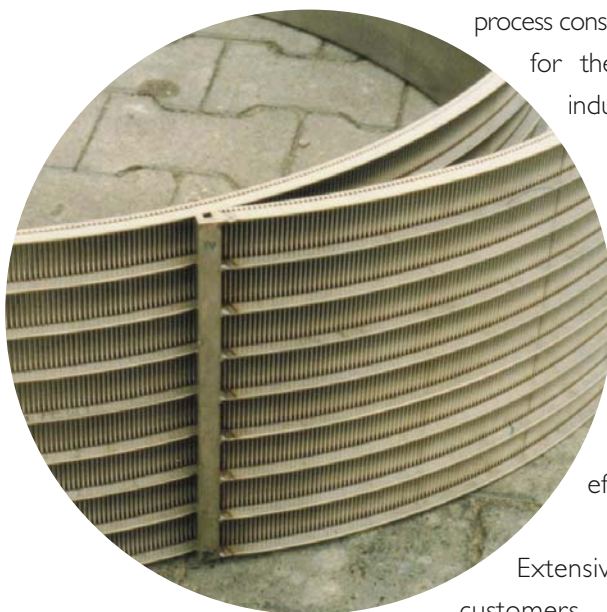
**NCD SEPARATION SOLUTIONS LTD**

**carbis**  
filtration   
SCREENING & PROCESS FILTRATION



**con-slot**  
PROFILE WEDGE WIRE SCREENS

# An exceptional alliance...



Carbis Filtration, renowned manufacturers of profile wire screens and other filter media, have joined forces with NCD Separation Solutions Ltd, process consultants who provide a specialist service for the evaluation and optimisation of industrial centrifuges.

With more than 50 years combined experience, this exceptional alliance has the required level of knowledge and expertise to offer users of industrial centrifuges a range of products and services to enhance performance and efficiency.

Extensive test work with selected customers and the commitment to producing the optimum filter media makes Carbis Filtration Ltd and NCD Separation Solutions Ltd the ideal supplier for your industrial centrifuge filtration needs. Carbis Filtration Ltd and NCD Separation Solutions Ltd recognise the needs of this very specialised field and have developed a range of uniquely designed centrifuge screens, liners and other filter media.



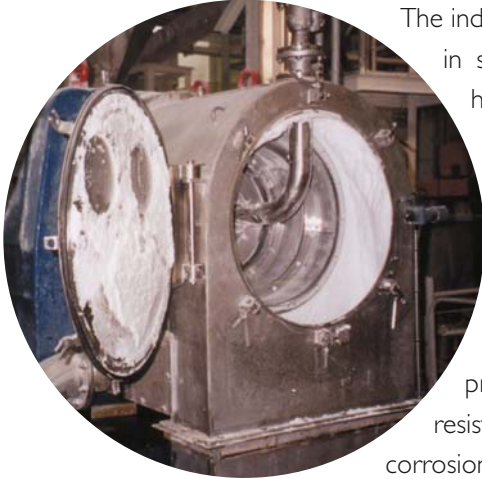
Carbis Filtration Ltd manufacture quality equipment and spares for screening, sieving and filtration applications. The products are primarily used for solid/liquid separation in the pharmaceutical, fine-chemical, petro-chemical, water, food, pulp paper and general process industries



NCD Separation Solutions Ltd core business is primarily centred around the optimisation of industrial centrifuges. This includes areas such as de-bottlenecking, throughput, yield, quality and waste stream reductions.



# The Background...



The industrial centrifuge has been around in some shape or form for several hundred years, but it is really only in the last 50 years that they have been regarded as a precise piece of separation equipment. Developments mainly with materials of construction have much improved mechanical properties resulting in superior resistance to, abrasion, erosion and corrosion as well as being stronger and tougher when subject to the ever increasing levels of g-force.

Those who work around industrial centrifuges on a regular basis will appreciate, filtration type industrial centrifuges are extremely versatile pieces of separation equipment. However, when relying upon efficient filtration it is imperative that the correct, most appropriate filter media is selected.

## Structure and Mechanical properties of Carbis screens



Carbis screens and sieves are manufactured from profile wire with an all welded structure and are used in a wide range of applications in the field of process engineering such as ground water exploration, crude oil and natural gas production and vessel internals solving problems of solid / liquid and solid / gas separation.

The structure of Carbis screens is a combination of surface profiles and supporting profiles, fusion welded under water at each crossing. Carefully selected parameters guarantee that the mechanical structure of the screen remains practically unchanged. Fusion welding and the correct selection of profile combination prevents stress cracks and detaching of surface profiles from their supports.

## The only choice: Carbis Screens

There are several types of industrial centrifuges currently available in the market place that rely upon correct employment of a filter media.

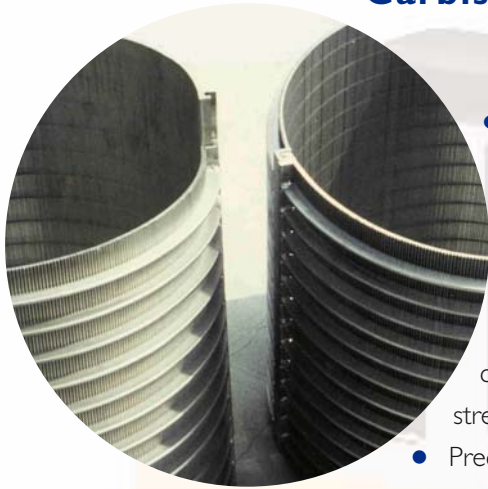
- Pusher
- Worm Screen or Scroll Screen
- Screen Bowl Decanter
- Cascading
- Vibratory
- Vertical Batch Basket
- Horizontal Peeler

## Carbis Filtration have experience with various applications including:

- Potash.
- Adipic Acid.
- Fine Chemicals.
- Coal.
- Pharmaceuticals.
- Fertilisers.
- Copperas.
- Phosphates

The unique features of our product result in substantial cost savings, due to the following advantages...

## Mechanical Advantages of Carbis screens



- Fully welded rigid construction, which is maintained throughout operating life.
- Lightweight construction, without compromising overall strength.
- Precision fabrication ensures concentricity.
- Superior bedding in resulting in even cake distribution.
- Short lead times for replacement screens.
- Reduced down time.
- Increased centrifuge life due to smoother operation and performance.
- Carbis screens, unlike other screens do not promote wear in their design, thus contributing to overall screen life.

## Process Advantages of Carbis Screens

- Reduced coefficient of friction, leading to reduced motor power requirements and conveyance torque.
- Even wear of screen apertures.
- Longer operating life – wear zone.
- Ensures even balance operation i.e reduced vibration from rotating assembly.
- Increased % open area.
- Improved de-watering – reducing final solid surface moisture.
- Reduction in possible down stream energy drying costs.
- Increased throughput.

As many granular de-watering applications are abrasive, we manufacture in a wide range of materials such as stainless steel AISI321, 304Mn, 316Ti, 316Mn, 904L, Monel, Hastelloy, Duplex, Super Duplex and Inconel.

The patented Carbis 'Easy Fit' system allows for installation of two half shells opposed to the many segments chosen by most O.E.M's. This system allows quick and easy installation without the need for long shut downs and any re-engineering of machine internals.

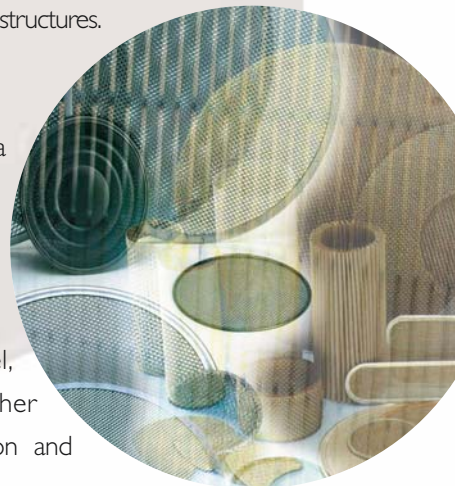


## Other filter media

Carbis Filtration Ltd also supply other critical filter media such as woven wire cloth, sintered metal fibre, sintered metal mesh and synthetic cloths.

An extensive variety of structures can be obtained by different weaving and sintering methods, thus offering a wide range of medias differing in characteristics from silk like material to rigid support structures.

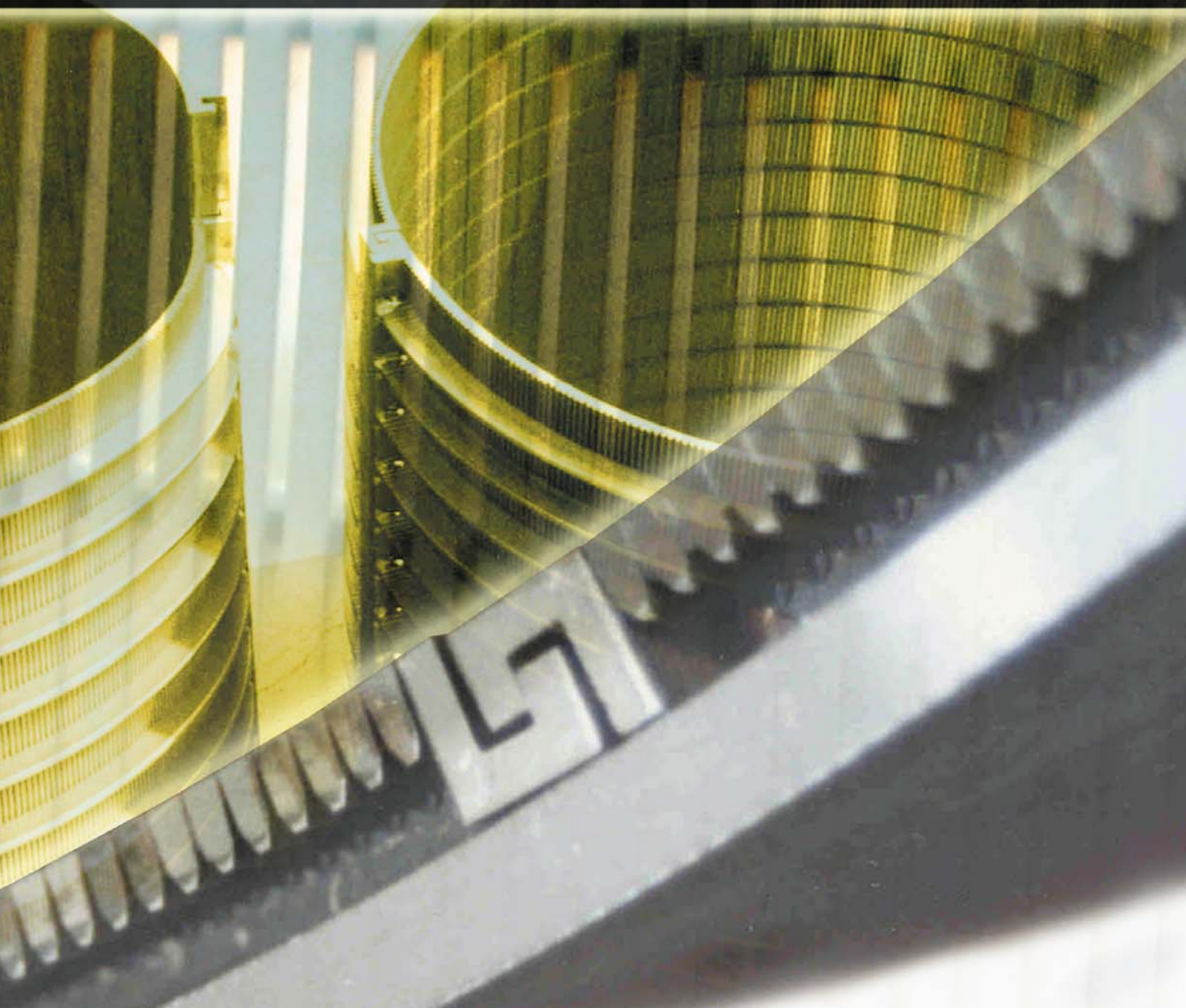
Carbis Filtration Ltd can produce these medias in a wide range of materials, such materials include: stainless steel AISI304, 316, 321, 310, 347 and 430, Brass, Copper, Phosphor Bronze, Monel, Inconel, Hastelloy and other special alloys, Polyester, Nylon and Polypropylene.



*'Together we can enhance your centrifuge performance'*



Certificate No: 5766



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