

TRI DIM
FILTER CORPORATION

TRI-CELL IV-S

MEDIUM AND HIGH EFFICIENCY
SYNTHETIC FIBER MINI PLEAT

**UL CLASS 1
AVAILABLE**



WHEN CLEAN AIR IS CRITICAL

Innovation in Air Filtration

INTRODUCING THE NEXT GENERATION IN MINIPLEAT TECHNOLOGY

- ▲ REVOLUTIONARY MINIPLEAT DESIGN
- ▲ 100% SYNTHETIC MEDIA
- ▲ CERTIFIED INCINERABLE
- ▲ VIRTUALLY INDESTRUCTIBLE
- ▲ REDUCTION IN STORAGE & SHIPPING COSTS
- ▲ LOWER OPERATION COSTS
- ▲ TRUE 50-60-80-90-95+ EFFICIENCIES

REVOLUTIONARY NEW MEDIA DESIGN

The TRI-CELL IV-S is constructed of a non-shedding, gradient density media. It is manufactured by building up progressively smaller continuous filament non-shedding fibers in a single thermally bonded web. Media fiber size varies from a 40 plus diameter fiber on the air entering side to a sub micron range fiber on the air leaving side. This engineered media concept brings into play all of the fundamental mechanical principles of particle capture. Larger particles of dust are caught by larger fibers on the air entering side and progressively smaller fibers through the depth of the media. The capture principles of straining, impingement, impaction, interception and diffusion are all utilized in harmony.

The result of this process is media that has exceptional strength, efficiency, dust holding capacity, service life as well as low resistance to air flow. A revolutionary single-web media designed and engineered for exceptional performance and durability.

NEW CONCEPT IN MINIPLEAT TECHNOLOGY

The pleat pack is fabricated from 100% synthetic materials incorporating specially designed radial pleats, shaped and spaced on pre-determined centers. This controlled spacing allows the



TRI-CELL IV-S to operate on the strainer principle of filtration, promoting diffusion of air pressures over the entire pleated surface. Due to velocity and inertial forces, larger contaminants in the air stream are unable to change direction as the airflow moves up the sidewalls of the pleat and lodge in the bottom of the pleat, while finer microscopic particles are trapped in the sidewalls. Increased media loft (created by particulate build up) is achieved as dirty air angles through the pleat sides. The result is increased efficiency.

Each pleat contains continuous synthetic spacer beads that are thermally bonded to both sides of the media. Pleats are thermally formed and the spacer beads run continuous through the full depth of the pack providing superior spacing and support.

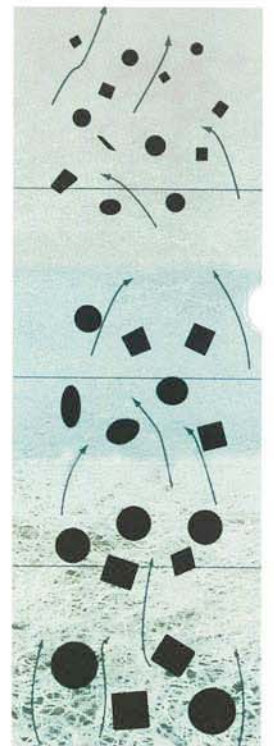
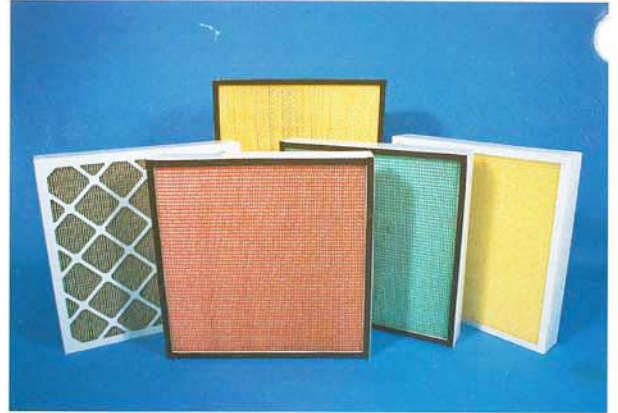
The result of this process is an exceptionally strong pleat pack with consistent pleat spacing and low resistance to airflow.

REDUCTION IN SHIPPING AND STORAGE COSTS

This minipleat technology allows us to maximize the surface area of each filter while minimizing the depth of the filter.

The TRI-CELL IV-S utilizes only one third of the storage space of other competitive filters within the same efficiency range. Each shipping carton holds three IV-S filters where as other ASHRAE range products are packaged one per case.

This allows substantial freight and warehousing savings.



DISPOSABILITY

The TRI-CELL IV-S has been tested and certified incinerable by GTS DURATEK, the nations leading facility for testing and incineration of low level hazardous waste.

Tri-Dim Filter Corporation strives to lead the industry in a direction of producing products that are friendly to our environment. The IV-S was originally engineered for industries where disposal has become a serious issue. Each year our landfills become smaller and the costs become higher, the IV-S is the solution for reducing your landfill and disposal costs.

DURABILITY

This uniquely designed product line has been engineered to stand up to the most rigorous environments. This extremely durable, light-weight and rigid media pack stands up to today's toughest working conditions. The IV-S will cut down on freight claims due to shipping damages and the time spent returning and rescheduling filter change outs due to damaged product replacements.

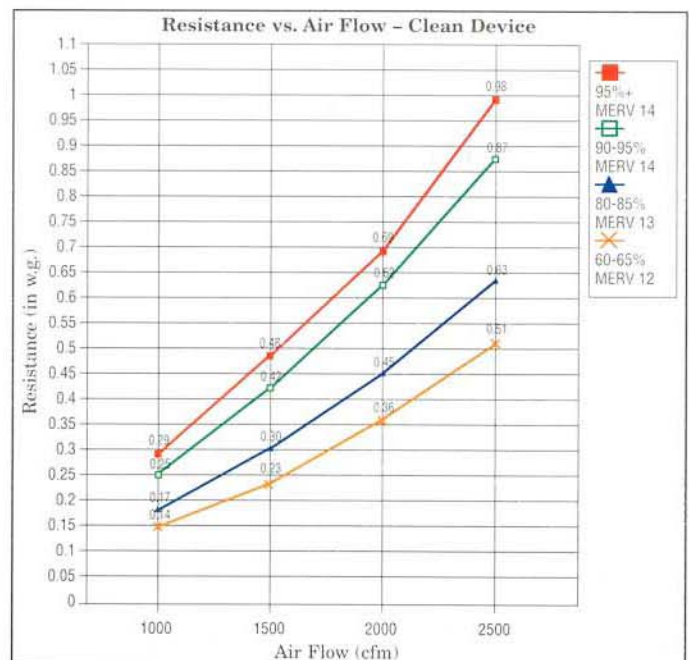
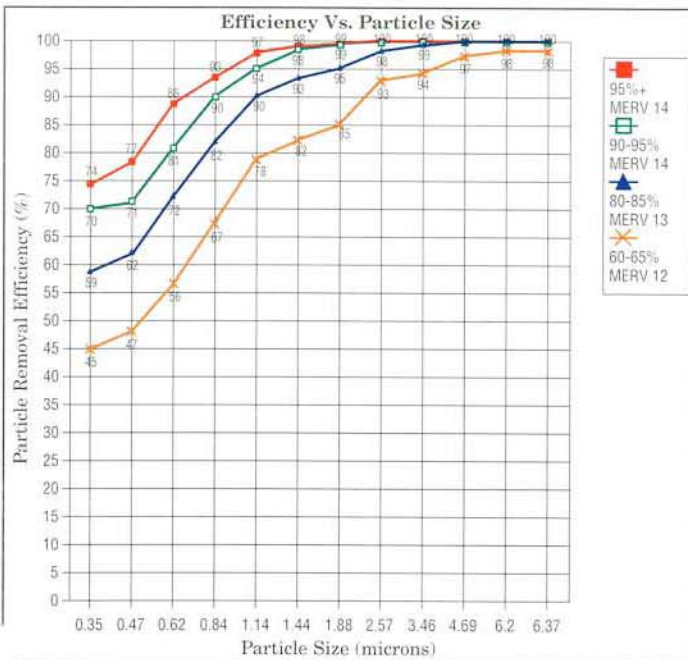
As illustrated the rigid media pack design can withstand several hundred pounds of pressure without affecting the pleat pack integrity. Competitive, bulky and more costly products are comprised of extremely fragile materials making them highly susceptible to damage.



TYPICAL APPLICATIONS

- ▲ Hospitals
- ▲ Nursing Homes
- ▲ Healthcare Facilities
- ▲ Educational Institutions
- ▲ Industrial
- ▲ Pharmaceutical
- ▲ Microprocessing
- ▲ Food Processing
- ▲ Automotive
- ▲ Commercial Buildings

THE TRI-CELL IV-S PERFORMANCE DATA TABLE



- Filters are rated up to 125% of manufactures rated airflow.
- Operating temperatures not to exceed 150°F (66°C).
- Underwriters Laboratories Classification: UL Class II per standard 900.
- Tri-Cell IV-S filters packaged three per shipping carton.

Tri-Dim's distributor network and factory direct sales staff work hard to provide solutions to some of today's toughest problems; how to protect people, product and process from the multitude of airborne contaminants that we come into contact with daily.

We are committed to provide state-of-the-art air filter products supported with research and development and a highly trained national sales team providing prompt service to all.

TRI-DIM'S FACTORY ASHRAE TEST EQUIPMENT

Tri-Dim's comprehensive testing programs and rigorous factory standards provide assurance that all products produced meet industry standards. Our testing laboratories are key to our continual research and development programs.



IN-HOUSE EDUCATION SEMINARS

Designed to assist in training maintenance personnel and to update staff on regulations and development in an ever changing industry, Tri-Dim provides an ongoing program of technical seminars.

IN-HOUSE AIR QUALITY SURVEYS

To assure proper air filtration standards are met and to point out potential problems, Tri-Dim provides no-cost in-house air filtration surveys & evaluations.



QUALITY CONTROL

Tri-Dim's quality control procedures insure consistent product quality. Tri-Dim's goal is **Total Customer Satisfaction**.



TRI-DIM™ Filter Corporation
93 Industrial Drive, Louisa, VA 23093
(540) 967-2600, Fax: (540) 967-2835