# **SPI Die-Cut Carbon Conductive Double Sided Adhesive Discs**

## Introduction

## A few words about the SPI Large Carbon Adhesive Discs

Ever since SPI introduced the now widely used SPI Double Sided <u>Conductive Carbon Sheets</u> in 1986 to the SEM user community, we have been asked to produce for customers sheets of both odd shapes and sizes and also some very large discs and sheets.

We have been very surprised at the resourcefulness and inventiveness of some of our current and previous customers. We are impressed with the wide range of reasons why one might have wanted sheets or discs that were giant in size in comparison to the much smaller sizes used for SEM applications. We explain a few of the "giant" size applications below:

## • Settled dust studies in clean rooms and other low particulate environments

Settled dust studies have been conducted almost from the time of the first clean room. There is no end to the number of reasons why operators of clean rooms and other environments requiring low particulates have a need to not only to measure, but to document for future failure analysis studies just what was the state of the atmosphere on a particular date and time. The larger size of the "giant" discs allows the engineer to sample a much larger area and then, those regions showing important suspect particles can be cut out of the larger disc or sheet and directly mounted for SEM examination and EDS analysis for composition.

The larger area covered by a "giant sheet" or "giant disc" enables one to have greater certainty that a truly representative sampling of particulates has been done.

## • Envirionmental air pollution studies

Very often it is necessary to document the "fall out" from around the vicinity of a suspect generator of particulates, such as the fly ash particles from around a coal fired power plant. However, as is the case for the clean room application, there is also the need for a large enough area to be covered so that one could be certain that an area representative of the total was in fact included in the study.

#### • Pollen counts

Several customers have recently told us that they are using the SPI carbon sheets and discs in "giant" form for research in new technique development for the counting, monitoring, and analyzing air borne pollen.

## • Forensic studies

For those situations where one must collect settled particulates from reasonably flat surfaces, quickly and without the passing of too much time, these "giant" products can be literally pressed into the surface in question and then removed, taking with the adhesive, attached particulates from the surface being controlled and studied. For example, in a case where settled pollutant particles were causing damage to automotive surfaces, these large sheets were helpful in collecting representative samples quickly and efficiently.

#### • Electronics industry

For those applications whereby one is in need of a conductive adhesive surface on which to temporarily hold devices for intermediate operations and procedures, yet have confidence that there will be no transferal of adhesive to the device when removed, these giant disc and sheet products can be ideal.