

# 862AZ

## Reticle Design Description

### General Description:

The 862AZ is a single level reticle, Planarization Distance Mask. It is a dark field reticle featuring very large and small open structures. The small features are contained in a 5 x 4 mm area. Details of the structures will follow in the next section.

This reticle was designed for a 4X Micrascan III scanner. Since it is a single level device, there is no overlay capability.

The die size is 25mm (X) x 25mm (Y).

The percent open area is 27.23%.

The reticle was manufactured to target the 1.0um trench.

The barcode reads 700A1862AZ.

The floor plan and the actual layout of this test mask are shown in **Figure 1** and **2** respectively.

### List of structures:

The structures featured in this reticle are listed below. A close-up view of these structures can be found in **Figures 3** through **5**.

	<u>Cell Name</u>	<u>Content Description</u>
1.	Block_8000	8000um open area
2.	Block_6000	6000um open area
3.	Block_5000	5000um open area
4.	Block_4000	4000um open area
5.	Block_3000	3000um open area
6.	Block_2500	2500um open area
7.	Block_2000	2000um open area
8.	Block_SetA	Contains blocks of open area ranging in size from 1500um down to 125um.
9.	Small_Block	An area that contains trenches at various sizes with varying spaces. A set of small open area blocks ranging in size from 100um down to 1um is also found in this cell.

# 862AZ Floorplan

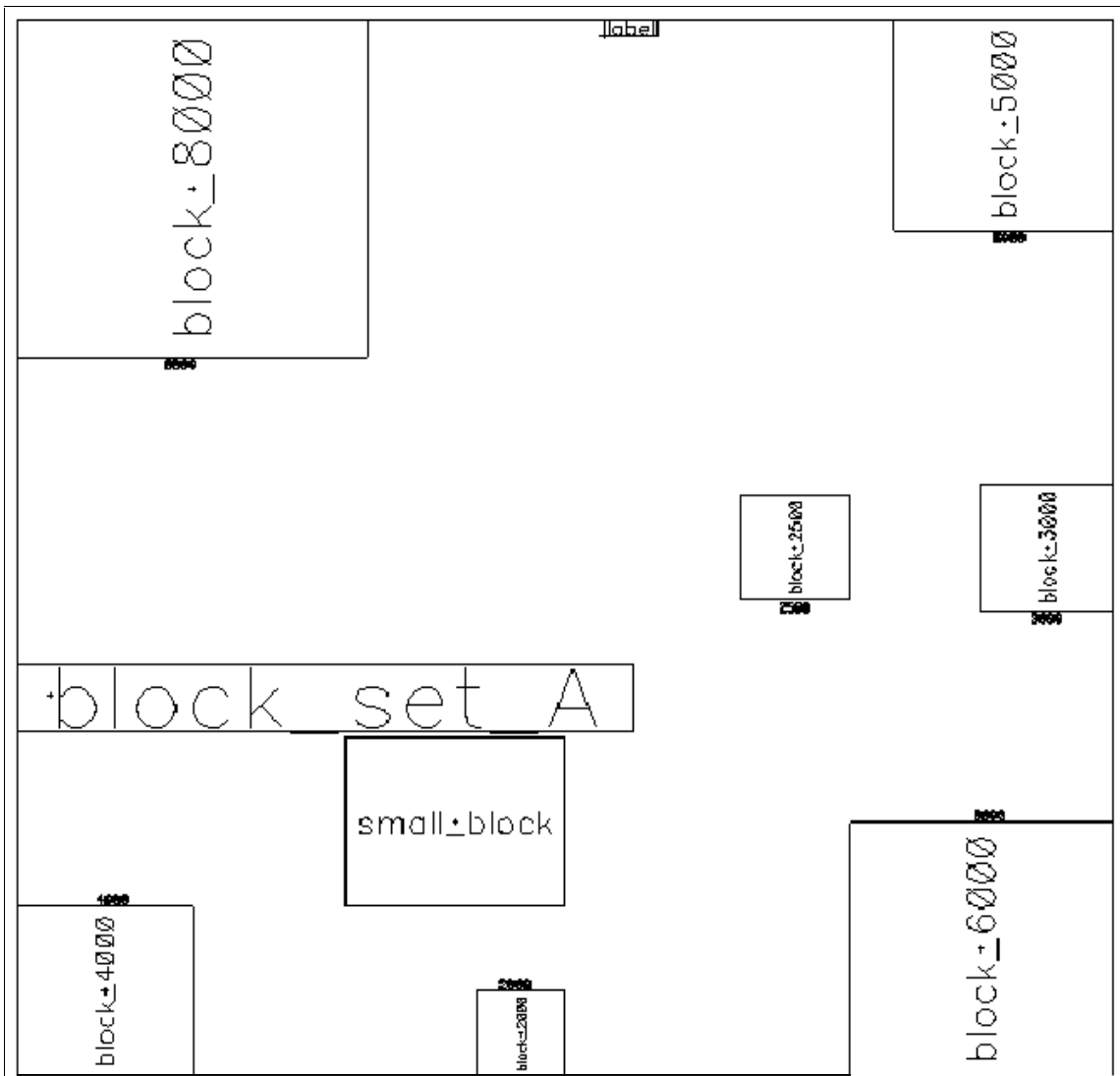


Figure 1

# 862AZ Field Layout

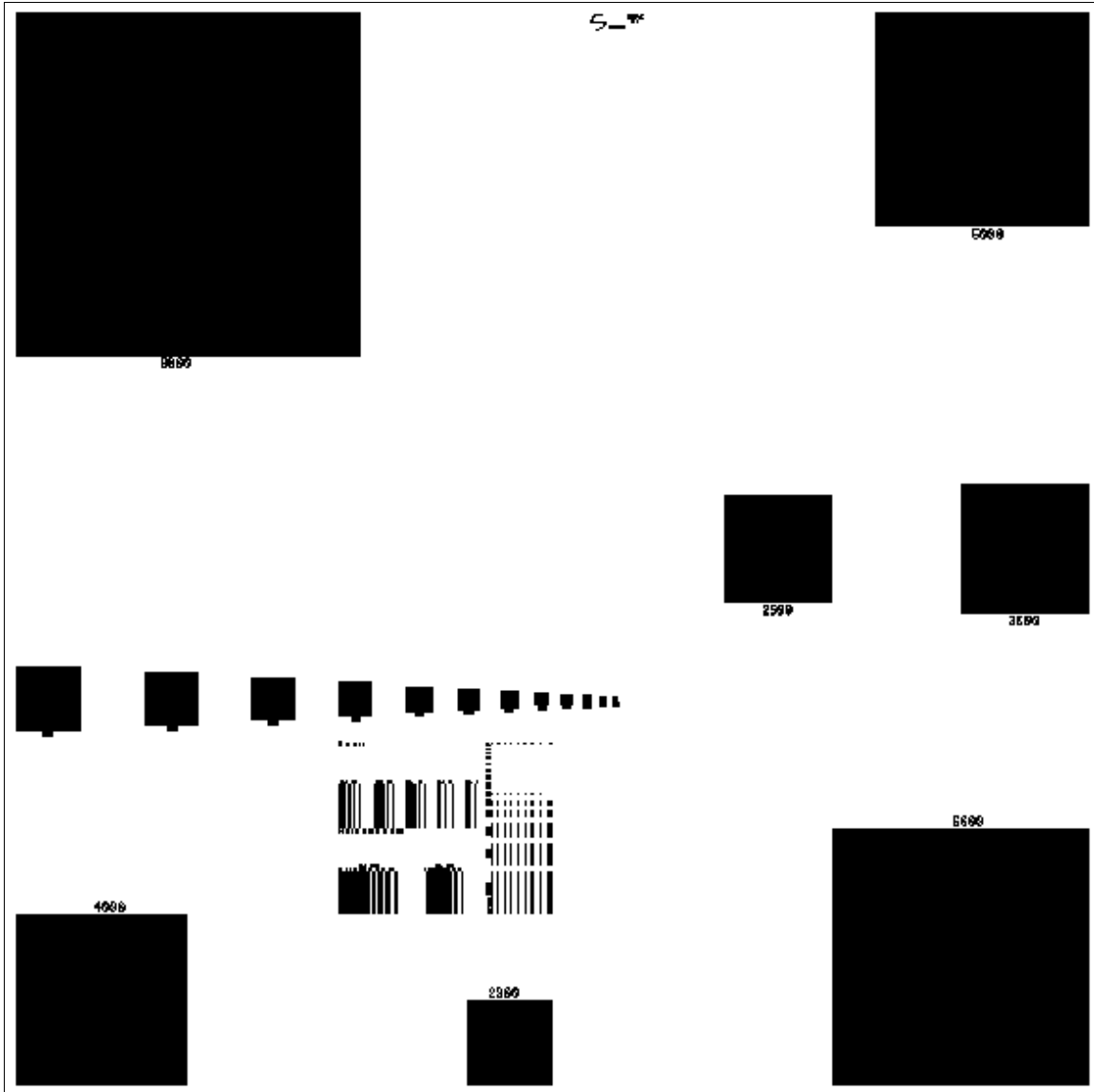


Figure 2

## Close -up Views of 862AZ Structures

Block\_Set\_A:

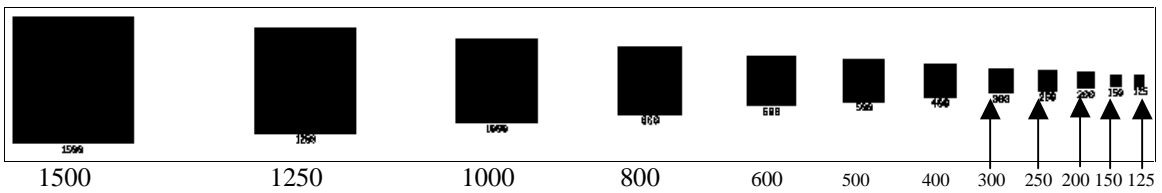


Figure 3

Block\_Set\_B:

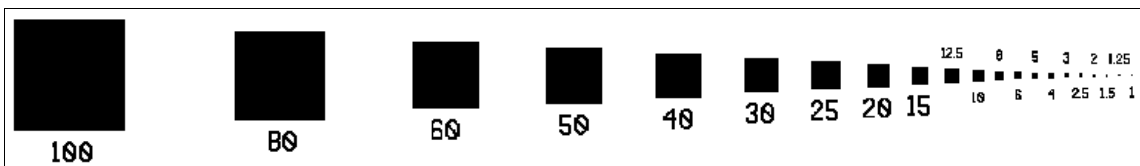
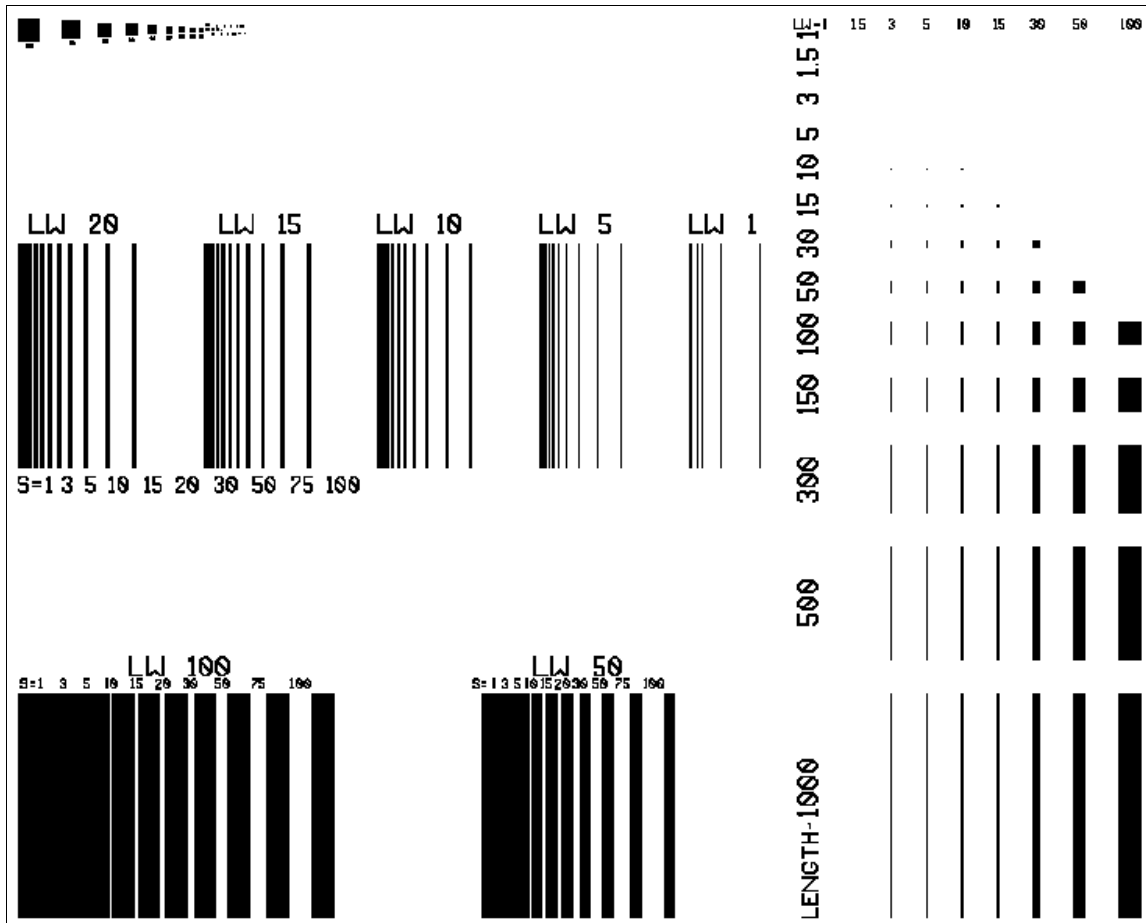


Figure 4

**Small Feature Area:**



**Figure 5**