

- **The Challenge**

- A major foundry's current capacity model contained outdated and unreliable information with regards to wafer processing time per recipe per tool. In an effort to gain a better understanding of their fab's true capacity they partnered with Tefen to create speed models for tools in all areas of production (except photo).

- **Approach & Methodology**

- Tefen created speed models for 109 tools across 40 platforms
- These models were created by utilizing detailed time study analysis of each tool's operation and interviews with the process and equipment engineers
- Each speed model's calculated Units Per Hour (UPH) was verified against the tool's actual production rate

- **Results:**

- The highly detailed speed models created by Tefen were utilized in the fab's capacity model
- During the exercise Tefen also identified multiple additional opportunities for improvement in batching, tool hardware, and process inefficiencies.