



Purion M

Industry Leading Energy Efficiency

Purion M: Redefining Medium Current Purity, Precision, and Productivity

■ Industry Leading Purity

- Axcelis proprietary Angular Energy Filter removes all forms of contamination

■ Industry Leading Precision

- Advanced angle control featuring in-situ X & Y measurement and control
- Constant Focal Length Scanning for superior dopant placement repeatability

■ Industry Leading Productivity

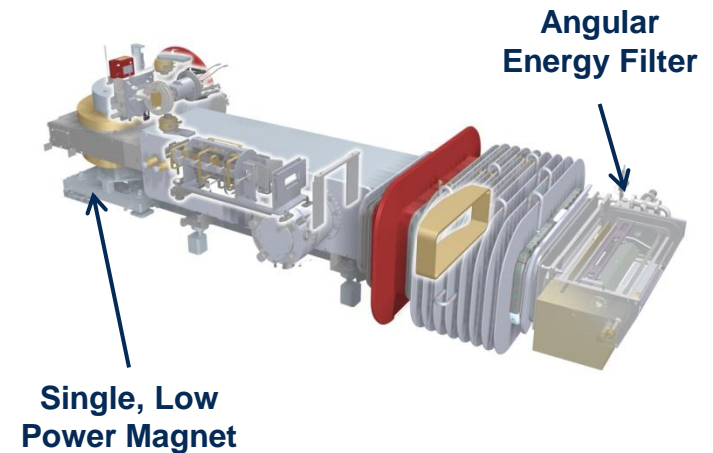
- High Mechanical Throughput > 500wph
- Industry leading beam currents
- Broadest energy range (2keV – 1MeV)



Purion M

Reduced Power Consumption Through Beamline Design

- Top power draw on medium current systems are the high power magnets
 - More magnets = Higher power requirements
- Purion M beam line design utilizing patented Angular Energy Filter reduces number of magnets required
 - AEF utilizes biased plate design → Lower power than magnetic bend, better filter for contamination
- Competitor requires multiple magnetic bends to maintain beam purity and position



Purion M

Reduction of >50% in Power Consumed

- Complete Memory Process Flow run, utilizing a full FOUP of wafers for each implant
- Each recipe designed with maximum useable beam current (achieve AT and beam stability) for each system
- Total power measured to complete process flow

