

Advanced Magnetics

Our magnetics are designed to provide high quality, uniform coatings for your application.

ADVANCED MAGNET SYSTEM FEATURES:

- Multiple designs to fit your application requirements
- Advanced magnetics designed using 3D finite element analysis software
- High-strength magnets that are categorized in-house according to gauss level
- Fully encapsulated magnets and robust construction for many years of trouble-free operation
- Long-life, multi-roller system for sputter up, sputter down, or off-angle sputtering
- Simple magnetic uniformity tuning
- Easily installed in any possible orientation

BENEFITS:

- Industry leading coating uniformity up to +/- 1%
- Superior target utilization and reduced cross corner effects
- High deposition rates
- Lengthen campaign - decrease downtime and increase productivity
- Adjustable sputter angle



Advanced Magnet Bars

NEW SYSTEM INSTALLATIONS:

- Most versatile rotary magnet systems available
- Use in any orientation
- Custom length magnet bars to ensure the perfect match for your system

UPGRADE OLD MAGNET BARS:

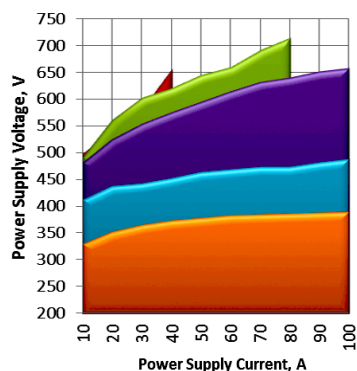
- Designed to adapt to other end block styles
- Reduce maintenance costs due to magnet, roller, and bushing replacement
- Increase process yields by reducing process drift
- Increase target utilization and save on target costs
- Fully encapsulated arrays eliminates corroded magnets



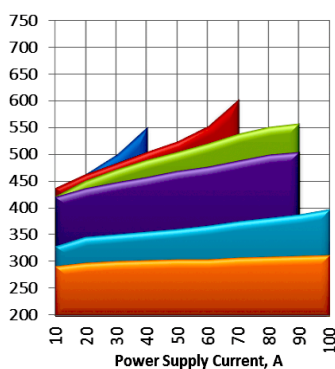
SCI patented QRM high strength magnet assembly with 90% utilization of a 152mm diameter target.

MAGNETICS FEATURES AND APPLICATIONS

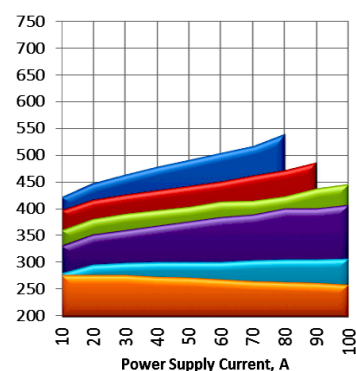
TRM-Bar™



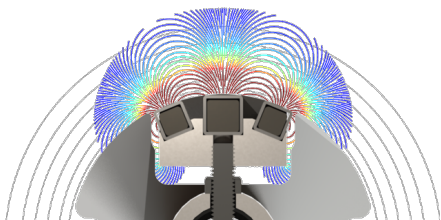
mQRM-Bar™



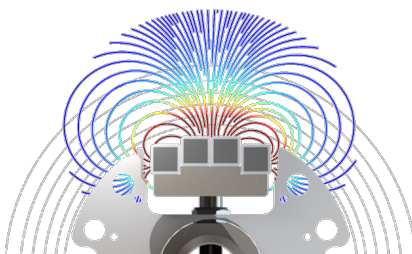
QRM-Bar™



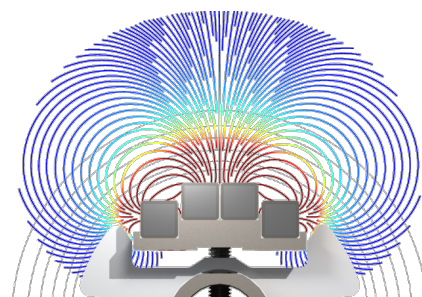
■ 175mm OD ■ 165mm OD ■ 160mm OD ■ 155mm OD ■ 145mm OD ■ 135mm OD



- Small magnet, 3-row design
- Narrowest deposition profile minimizes coating loss to shields
- Multiple turn-around design options specific to your application
- Easy change turn-arounds
- Target diameters up to 160mm OD



- Small magnet, 4-row design
- Patented staggered turn-around design
- Improved performance and reduced impedance
- Stable plasma impedance over the life of the target
- Increased target diameter up to 170mm OD



- Large magnet, 4-row design
- Patented staggered turn-around design
- Improved performance
- Best plasma impedance stability over the life of the target
- Largest target diameter up to 180mm OD

Model	Max Target Diameter	Sputter Angle	Target Material Utilization	Application
TRM	160 mm	$\pm 12^\circ$	>70% >80%*	Thin Targets Acceptable for most material
mQRM	170 mm	$\pm 15^\circ$	>85%	Thicker Targets, High Utilization
QRM	180 mm	$\pm 21^\circ$	>85%	Thickest Targets ITO, Electrical Grade Films

All specifications are for 152mm OD targets

*SCI tapered target required for >80% utilization with the TRM