SCI Advanced Magnetics

SCI advanced magnet bars give you the flexibility you need. Designed to provide high quality, uniform coatings to your application.

ADVANCED MAGNET SYSTEM FEATURES:

- Multiple magnetic designs to fit your application requirements
- Advanced magnetics designed using 3D finite element analysis software
- Carefully matched, hi-strength magnets that are factory calibrated using an automated magnet bar measurement tool
- 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
- Magnetic unformity adjustment can be done easily in the field
- Simple installation procedure with solutions for vertical installations

SCI Advanced Magnet Bars

NEW SYSTEM INSTALLATIONS:

- Most versatile rotary magnet systems available
- Horizontal and vertical installation solutions are available
- Custom length magnet bar to ensure the perfect match for your application
- Designed specifically for use with other SCI products

BENEFITS:

- Industry leading coating uniformity +/- 2%
- Superior target utilization and reduced cross corner effects
- Higher deposition rates
- Lengthen campaign - increase uptime with better target utilization
- Sputter up or sputter down

UPGRADE OLD MAGNET BARS:

- Interchangeable with other major manufacturers
- Can adapt to any end block system
- Eliminate the need to replace magnet bars due to corroded magnets
- Increase production yields by reducing process drift and increasing target utilization

SCI QRM high strength magnet assembly with 90% utlization on a 152mm diameter target.

Sputtering Components, Inc 375 Alexander Drive, Owatonna, Minnesota 55060 USA

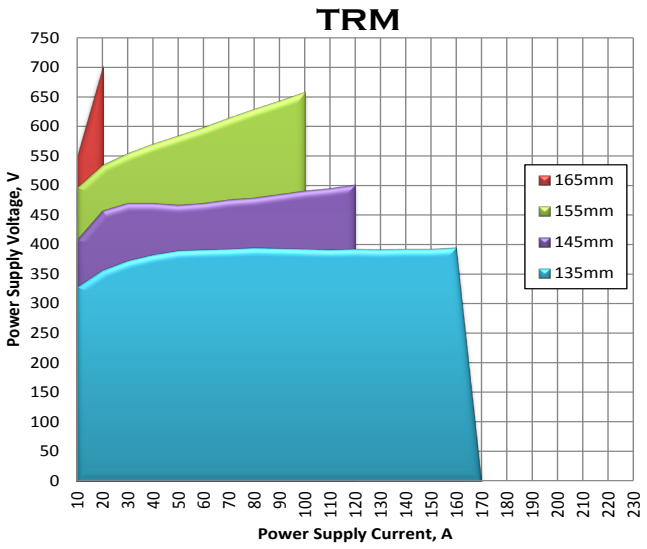
TRM-Bar™ Magnetics
FEATURES AND BENEFITS

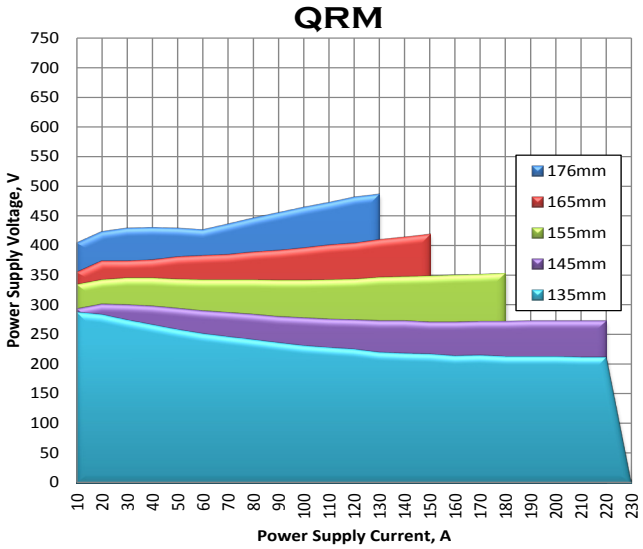
- Industry-proven design with thousands of bars currently in operation
- High rate reactive mode or metal mode sputtering of optical grade films
- Narrow deposition profile minimizes coating losses to waste shields
- Multiple turn-around designs for different application requirements. The turn-arounds can be easily changed

QRM-Bar™ Magnetics
FEATURES AND BENEFITS

- Stronger "patent pending" magnetics for low impedance sputtering of TCOs and other electrical grade films.
- Lower impedance plasma enable higher-power densities and higher achievable sputter rates for most materials
- Increased sputtering efficiencies reduce power consumption and operating costs
- Increased process stability over the lifetime of the target material

650mm long aluminum target impedance comparison for 135mm to 175mm O.D.





Test Condition: 650mm long aluminum target tube, 60kW advanced energy AEPN power supply, 3mTorr of Argon in metal mode

Model	Utilization	Uniformity	Max Target O.D.
TRM TRM - Dogboned Target	>70% >80%	+/- 2% +/- 2%	165mm 165mm
TRM - High Utilization	Up to 90%	+/- 2%	165mm
QRM	>85% >75%	+/- 2% +/- 2%	155mm 165mm