

## External-Mount End Block SM-Series

The SM is our largest external-mount end block.

External end blocks have a wider substrate coverage than internal models.

It has a simple, singled-ended, belt-driven design with brushless power transfer and an outboard support (if needed) for quick target changes, high reliability and easy, do-it-yourself maintenance.

To match any system, drive shaft length is customizable, and drive motors can be mounted inward or outward and at any angle around the main housing.

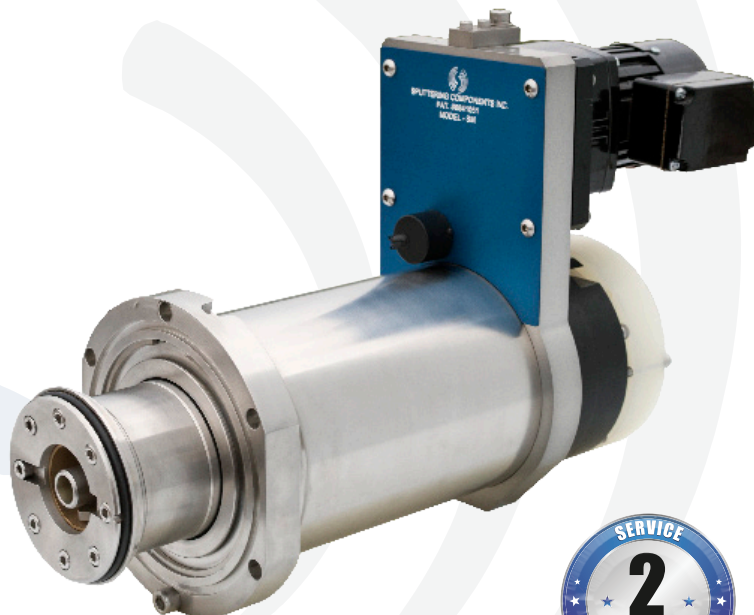
Magnet bar adjustments—to any angle—are made externally. All utilities are external and remain attached during target changes. The water seal cartridge is easily accessed for quick replacement.

Use in new systems or upgrade from planar systems.

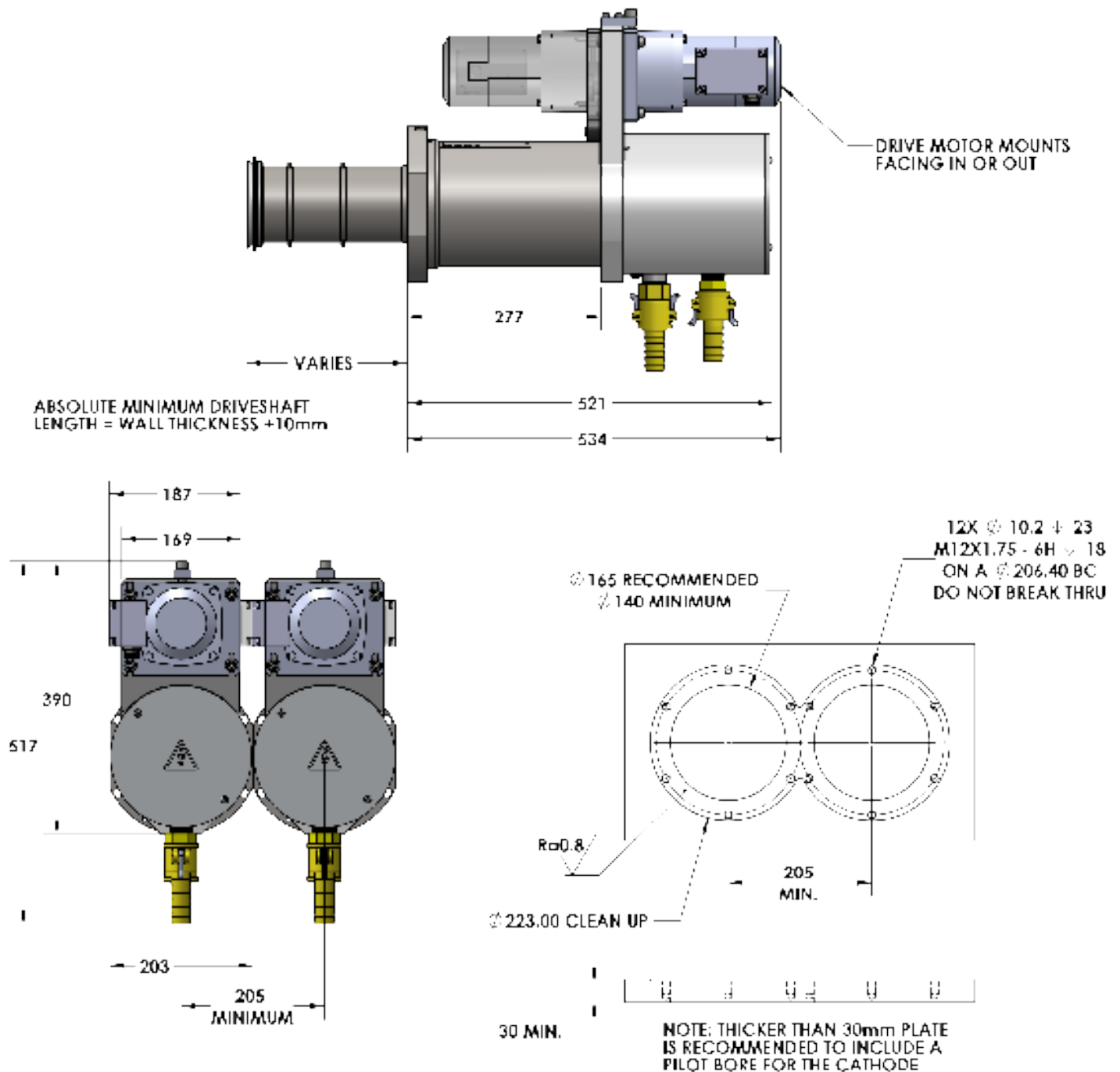
SCI can provide coater integration support.

### TECHNICAL SPECIFICATIONS

Electrical rating	▶ 200 kW 1500 V / 450 A (DC or 80 kHz AC)
Mounting	▶ Any orientation
Target	▶ 125 mm ID 4000 mm max. length
Maximum load	▶ 2000 kg horizontal 400 kg vertical
Vacuum seal leak rate	▶ $<3 \times 10^{-7}$ mbar·L/s
Maintenance (typical)	▶ Seal kit and bushings every 2 years (1 hr); Static seals



**SPUTTERING**  
COMPONENTS®



### Cantilever capability

Dimensions in mm

Metric:  $XY/2 + 16X^2 \leq 138$

Imperial:  $XY/2 + 0.90X^2 \leq 12,000$

X = Total of backing tube length plus drive shaft length (meters or inches)

Y = Weight of target (kg or lb only)

Notes: The formula assumes a stainless steel backing tube; other materials may not qualify. The formula must be adjusted for long drive shafts or when a RAM-Bar™ is used.