RMG Turntables for Wire and Rod

RMG turntables are offered in two different styles: Standard-Duty and Heavy-Duty.

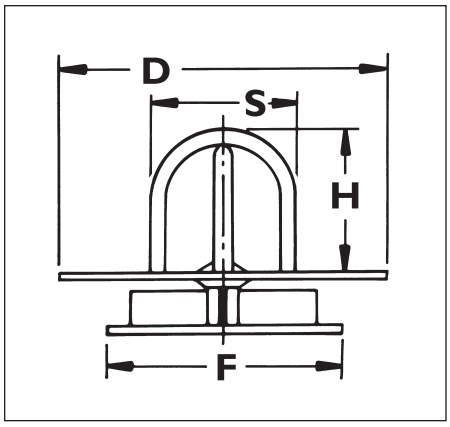
RMG turntables are offered in two different capacities to match your wire and rod specifications:

Standard-Duty Turntables

Typical coil weight capacities up to 4000 lbs. (1814 kg), standard plate diameters of 30” (762 mm), 40” (1016 mm) and 50” (1270 mm), and with many optional arrangements.

Heavy-Duty Turntables

Heavy-Duty turntables should be used whenever the use of very heavy coil weights (in excess of 4000 lbs./1814 kg) is anticipated, or there is a requirement for 60” (1524 mm) or 70” (1778 mm) plates, or whenever loose coil loading is required.



Turntable Dimensions

RMG turntables are equipped with the industry’s most rugged spindle and bearing assembly, with an exclusive gusseted design which resists damage. The bearing assembly is accessible from above the top plate for inspection, servicing and adjustment without removing the top plate.

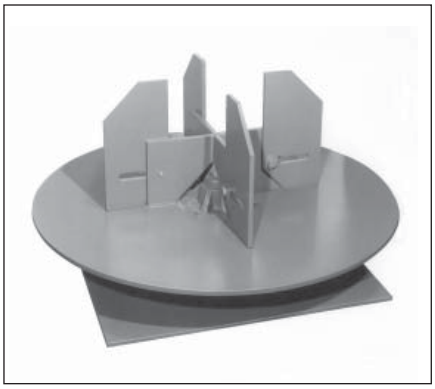
Tubular Coil Loading Systems

Turntables for tubular carriers (high hats) represent one of the most practical methods for paying-off wire and rod into wire drawing machines or directly into the cold header or other wire production machine.

Tubular carrier (exploded view)

Tubular carriers for accommodating wire or hot rolled rod provide a safe and economical means for storing, handling and shipping the material. After loading the wire on the tubular carriers, the package is set on the turntable and the wire or rod pays-off with a greater measure of safety and with less possibility of tangling.

Coils of wire or rod in the 2000-4000 lb. (907-1814 kg) range can be accommodated due to the turntable’s very high weight capacity and low center of gravity. This permits longer, uninterrupted production runs often with significant improvement in operating efficiency.



Optional adjustable spider

Standard-Duty Turntables Specifications

Model	Maximum Coil Weight	Standard TCL Dimensions			
		“D”	“F”	“H”	“S”
8630	6000 lbs. (2722 kg)	30 [762]	24 [610]	18 [457]	18 [457]
8540	5000 lbs. (2268 kg)	40 [1016]	30 [762]	18 [457]	18 [457]
8450	4000 lbs. (1814 kg)	50 [1270]	30 [762]	18 [457]	18 [457]

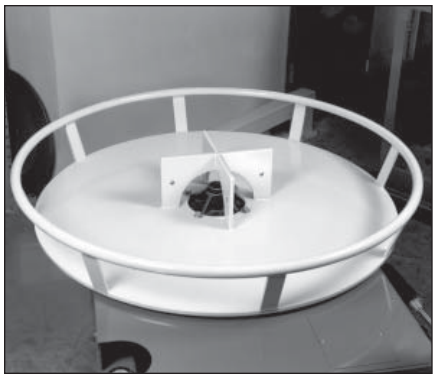
Heavy-Duty Turntables Specifications

Model	Maximum Coil Weight	Standard TCL Dimensions			
		“D”	“F”	“H”	“S”
8760	7000 lbs. (3175 kg)	60 [1524]	36 [914]	18 [457]	18 [457]
8670	6000 lbs. (2722 kg)	70 [1778]	36 [914]	18 [457]	18 [457]

Optional Accessories for RMG Turntables

Wire Basket

This is a solid steel ring welded to the circumference of the turntable plate. Unlike most advertised "snag rings", RMG's basket construction is virtually indestructable. The basket helps prevent random loops dropping below the turntable's plate. On most applications, selecting the next larger top plate represents a better way of preventing random loops from dropping below the top plate. On high-speed applications, a combination of a larger top plate and an electrically-interlocked air brake is the best way of preventing overcoasting and random loops.

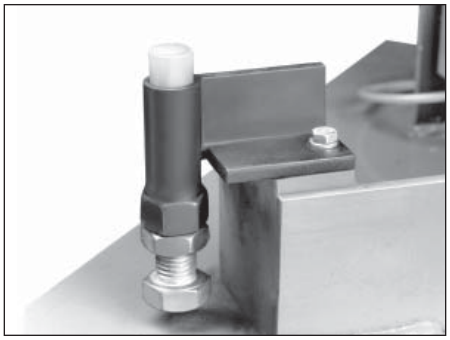


Wire Basket

Mechanical Brake

This is simply a manually adjustable friction-type brake and is usually not recommended because the constant drag tends to cause the wire to cinch up. RMG's mechanical brake offer's two distinct advantages:

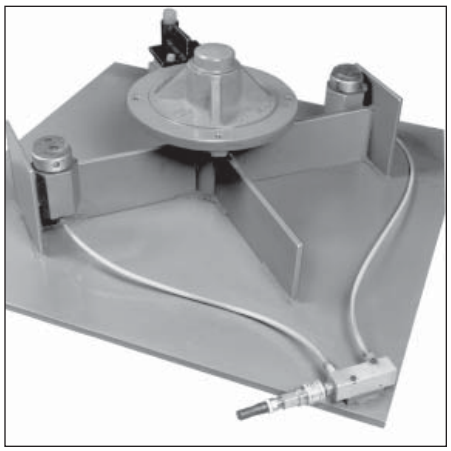
1. RMG's brake construction prevents damage to the brake mechanism.
2. The braking action is applied on the bottom surface of the top plate near the outboard edge. This provides much better control of the braking drag force.



Mechanical Brake

Air Brake

Especially suitable for relatively high-speed applications in excess of 100 fpm (30.5 m/m) or whenever the product of the coil weight times the speed in fpm exceeds 300,000. (For example, 2000 lbs x 150 fpm = 300,000). The air brake permits the coil to rotate freely during normal uncoiling. When the wire production machine stops, air is directed to two equally balanced air cylinders (four cylinders on heavy-duty turntables) for controlled deceleration. Electro-pneumatic air valve not included with air brake.



Air Brake

Solenoid Valve for Air Brake

This is a three-way solenoid valve used to direct air pressure to the turntable's air brake whenever the production machine stops. Air pressure is automatically relieved from the air brake whenever the production machine starts.

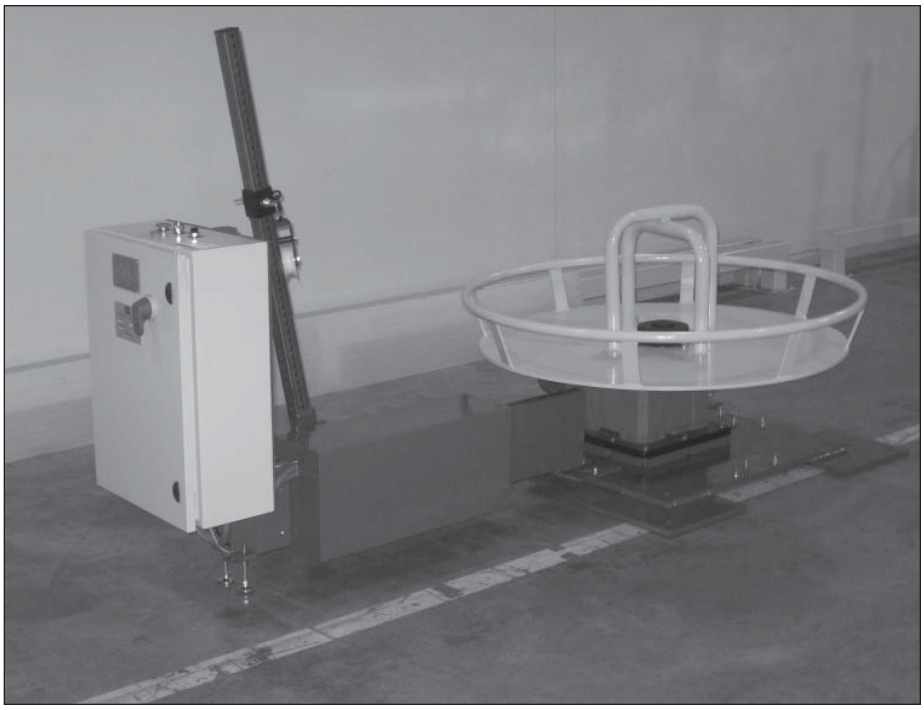
RMG Variable Frequency Drive Power-Assisted Turntables

RMG power-assisted turntables have been designed to augment the RMG standard free wheeling turntables, which have been regarded as the standard of the industry.

At RMG, we've designed these turntables to be responsive to higher production speeds and larger coil weights, as well as to meet the demands for a simple, effective, easy to service turntable that is responsive to all operating conditions.

Features

1. Wire speed ratings up to 500 fpm (150 m/min).
2. Automatic speed control, no operator intervention required.
3. A/C Drive Control with Dynamic Braking-No brake pads, shoes or motor brushes to wear out.
4. Choice of several turntable diameters, 30" (762 mm), 40" (1016 mm), 50" (1270 mm), or 60" (1524 mm).
5. Standard 18" (457 mm) fixed spider or optional 16" (406 mm) to 24" (610 mm) adjustable spider.
6. Coil weight capacities up to 3,000 lbs. (1360 kg).
7. Wire basket (snag ring) standard on all models.
8. 3 HP TEFC electric motor @ 230/460VAC, 3 ph, 60 Hz and 24 VDC control circuit.
9. Direct drive control eliminating chain and belt replacements.
10. Electrical components mounted in a NEMA 12 (IP67) enclosure.
11. Emergency stop circuit.
12. Full interlock capabilities for interfacing with production machine.
13. Control arm home detection for safe start-up of turntable.
14. Reverse jog control for rewinding unused portion of coil.
15. Pneumatically loaded dancer arm for precise tension adjustment.
16. Dancer arm has a 60 degree rotation for arm placement.
17. Controls conveniently and safely located.



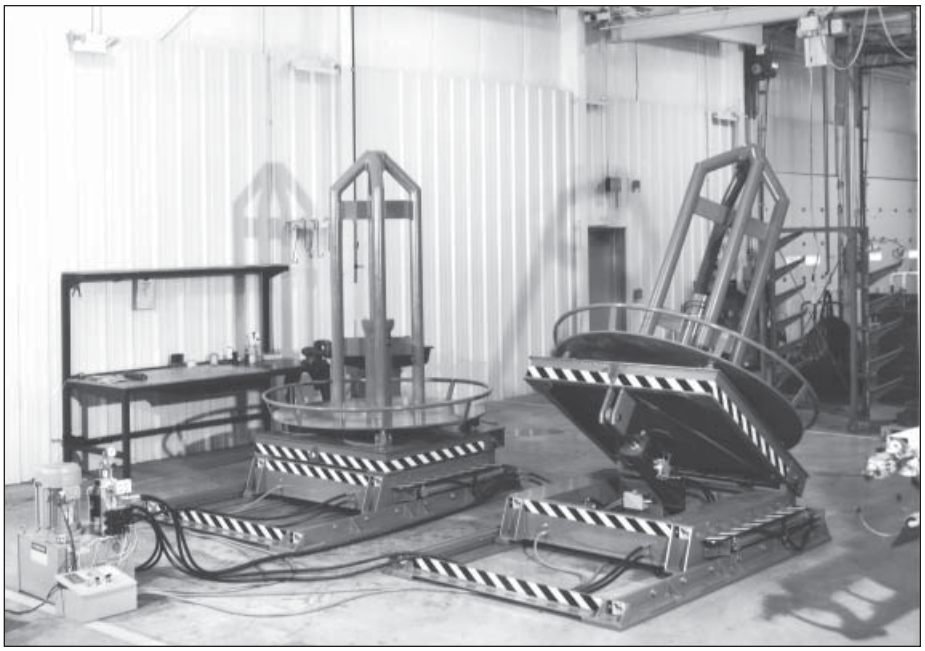
Variable Frequency Drive Power-Assisted Turntable

How the system works

Air adjustable tension dancer arm senses the demand of the production machine under all operating conditions. This arm controls the operation of a variable frequency drive controller which changes the speed of the top plate. As the production machine decelerates and stops, the control arm automatically returns to the stop position. Using dynamic breaking the VF drive reduces the coil rpm. When the control arm reaches the stop position D/C injection braking is applied to bring the coil to a complete stop. This speed control system enables the unit to match the consumption rate of the production equipment greatly reducing load on the feeding system.

RMG
Tilting Turntable
Assembly

5.14



Dual tilting turntables,
turntables are shown here with safety bellows removed.

The RMG tilting turntable (coil upender) is a high-speed, heavy-duty unit designed and built to meet the demanding needs of steel mill applications.

Excellent for usage with hot-rolled green rod.

Standard Features

- Tilts to 90° to accept a horizontal coil.
- Fixed spider eliminates the need for a coil carrier.
- 7.5 HP (5.6 kW) unit used for tilting function.
- Rated for up to 6000 lbs. (2722 kg) coils.
- Available with 60” (1524 mm) or 70” (1778 mm) diameter top plate, with anti-snag ring.
- Four pad air brake assembly.
- Bellows machine enclosure for safety.
- Remote mounted controls.
- Hydraulic system designed to hold the turntables in place in the unlikely event of hydraulic failure.

Optional Features

- Sliding base provided for tangle detection; includes cylinders to reset unit position.
- Power units can be fitted for tilting up to four turntables independently.

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