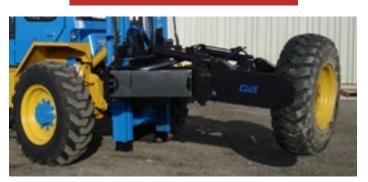


TIRE MANIPULATORS

TM5 / TM5U



TM10



TM20 R57 / TM20 R63



TM30



TM40



FEATURES	TM5	TM10	TM20	TM30	TM40
Tire Fall Back Protection	✓	✓	✓	✓	✓
Load Holding Valves	✓	✓	✓	✓	✓
Body Rotate Cylinders	Single	Single	Single	Single	Double
Manual Central Greasing	✓	✓	✓	✓	✓
Integral Side Shift	Optional 12" (+/-6")	Optional 12" (+/-6")	Optional 12" (+/-6")	Optional 16" (+/-8")	Optional 16" (+/-8")
Rim Handling Grip Pads	N/A	Optional	✓	✓	✓
Proportional Controls	√	✓	√	√	√

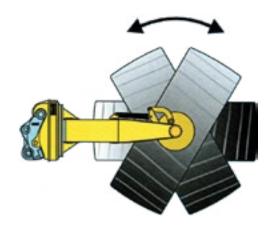
MANIPULATOR FUNCTIONS

PAD ROTATION

The tire Grip Pads are rotated to:

- Move the tire from vertical to horizontal
- Turn the tire over from face to face

For operator convenience, 360° rotation is available



BODY ROTATION -

The whole grip arm assembly is rotated on the longitudinal axis of the machine to:

- Align holes in the rim with mounting studs
- Seat tires on mounted rims

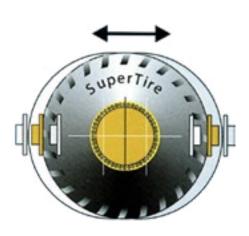


SIDESHIFT

The whole grip arm assembly is moved side to side to:

 Facilitate horizontal alignment of the rim over the wheel hub or a tire over a mounted rim

The sideshift function is an option, but it typically required on any machine type. Unless the machine is already equipped with such function, suck as forklifts with side shift carriages, it is highly recommended.



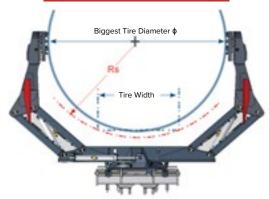
TIRE MANIPULATORS

SPECIFICATIONS	TM5	TM10	TM20*	TM30	TM40
TM Max Capacity Final Rating**	5500 lbs (2500 kg)	10000 lbs (4500 kg)	20000 lbs (9100 kg)	30000 lbs (13600 kg)	40000 lbs (18200 kg)
Clamp Range Arms Close-Open Span***	30" - 100" (76cm - 280cm)	22" - 135" (56cm - 340cm)	48" - 159" (122cm - 400cm)	33" - 166" (84cm - 420cm)	33.5" - 177" (85cm - 450cm)
Min. Rotation Clearance	56" (142cm)	61" (155cm)	73.5" (187cm)	105.5" (268cm)	111" (282cm)
Body Rotation	90°	75°	75°	75°	65°
Pad Rotation	120° Cylinder Drive	360° Continuous	360° Continuous	360° Continuous	360° Continuous
B	15 - 25gpm	15 - 25gpm	25 - 30gpm	25 - 30gpm	50 - 60gpm
Recommended Hydraulics	3000psi	3000psi	3000psi	3000psi	3000psi

CENTER OF GRAVITY (C of G)

TM 'Bearing Forward' C of G**** Payload C of G**** W A B

SWING RADIUS (Rs)



ABOUT CWS

The CWS® by Paladin® brand is known for big demands and smart solutions especially within the mining and forestry industries. Focused on innovation and design, CWS has manufacturing capabilities for attachments that withstand the harshest of climates within this rugged industry.

Offering confidence in performance, reliability and service, CWS is committed to helping customers meet the challenges that go hand in hand with productive and efficient mining. Offering a comprehensive line of attachments and best in class warranty, CWS has safe and efficient mining solutions.

^{*}TM20 is available in TM20 R57 and TM20 R63 configurations

^{**}Maximum capacity may be derated depending on machine and counterweight may be required to utilize TM max. capacity

^{***}Varies, dependent on tire grip pad option

^{****}Arms opened for the biggest tire