

TR Series

Anti-Drift Turning Rolls

Automatically compensates for vessel irregularities and roll misalignment



The Anti-Drift Roll has two synchronized “Steerable Wheels”. Each axle is connected to a gearbox which is driven by an AC servo motor. As each axle is rotated, the relationship between the axis of rotation of each wheel and the axis of rotation of the vessel changes. This change creates a thrust load on the vessel to counter vessel lateral movement. The amount and direction of axle rotation is commanded by the Anti-Drift Control.

Each axle is fitted with a “Neutral Position Indicator” (arrow) to provide a reference to the plane of rotation for the wheel. During initial set-up, the axles are rotated to visually align each arrow to the contact point between the wheels and the vessel ensuring that the centerline of rotation of each wheel is nearly in the same plane as the centerline of the vessel and that maximum “steering” can be accomplished with +/- 90° rotation of each axle.

During operation, an electrical signal from the Drift Sensor (transducer or laser that tracks the vessel) is fed to the Anti-Drift Control. The control commands the idler axles to rotate in proportion to the error signal and in the correct direction to counter the vessel drift.

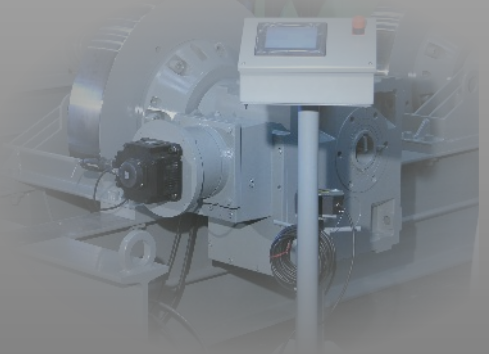
The system maintains a vessels girth joint within +/-3 mm maximum longitudinal movement.

A programmable over travel distance produces an audible alarm and delayed rotation stop in the event the vessel drift exceeds this value.

Capacities from 10 ton to 1,200 ton

Features

- Holds axial vessel position within +/- 3mm (.12")
- Produces minimal vessel movement during Anti-Drift correction
- Low maintenance and upkeep cost due to design
- Quick vessel response to anti-drift correction
- Both laser and roller contact drift sensors available
- Steel and Rubber wheels available
- Constant Centerline Models Available
- Can work with existing drive rolls



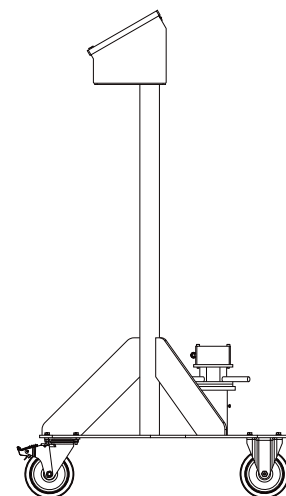
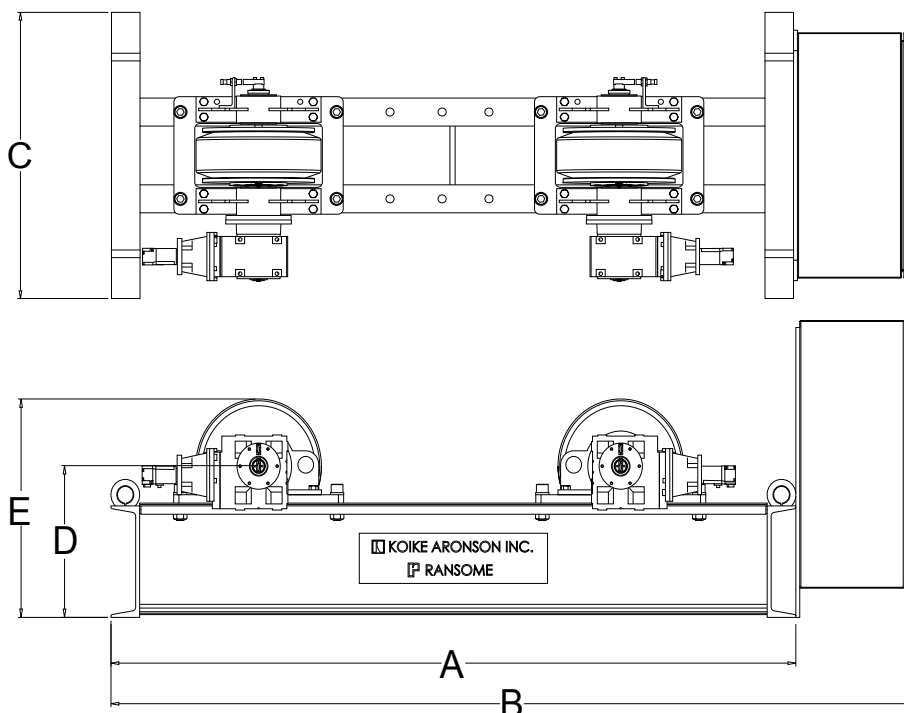
KOIKE ARONSON, INC. / RANSOME

Specifications

Anti-Drift Turning Rolls

MODEL	WRI 10-AD	WRI 30-AD	WSI 60-AD	WSI 90-AD	WSI 120-AD	WSI 200-AD	WSI 300-AD	WSI 400-AD	WSI 600-AD	WSI 800-AD	WSI 1200-AD
Capacity Per Unit	5 ton	15 ton	30 ton	45 ton	60 ton	100 ton	150 ton	200 ton	300 ton	400 ton	600 ton
Matching Drive Roll	WRD10	WRD30	WSD60	WSD90	WSD120	WSD200	WSD300	WSD400	WSD600	WSD800	WSD1200
Diameter Range	22" - 13'	30" - 16'	30" - 16'	30" - 16'	30" - 16'	30" - 16'	56" - 18'	56" - 18'	54" - 24'	102" - 16'	96" - 32'
Wheel Size	12" Dia x 4 3/4" Wide	20" Dia x 7" Wide	20" Dia x 5" Wide	20" Dia x 5" Wide	20" Dia x 5" Wide	20" Dia x 5" Wide	28" Dia x 5" Wide	28" Dia x 5" Wide	30" Dia x 7" Wide	30" Dia x 7" Wide	32" Dia x 10" Wide
Wheel material	RUBBER	RUBBER	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL	STEEL
Number of Center Settings	7	6	6	6	6	6	4	4	5	2	5
'A' Frame Length	65 1/2"	112 3/4"	112 3/4"	112 3/4"	112 3/4"	112 3/4"	142"	142"	161 1/2"	157"	234"
Capacity Per Unit	76 3/4"	124"	124"	124"	124"	124"	152 1/4"	152 1/4"	171 1/2"	157"	234"
'C' Overall width	28"	36"	40"	42"	43"	44"	44"	45"	48"	48"	54"
'D' Wheel Centerline Height	13 9/16"	17 3/4"	17 3/4"	17 3/4"	17 3/4"	20 3/4"	27 3/8"	27 3/8"	27 1/2"	25 1/2"	32"
'E' Overall Height	19 9/16"	27 3/4"	27 3/4"	27 3/4"	27 3/4"	30 3/4"	41 3/8"	41 3/8"	42 1/2"	40 1/2"	48"
Voltage	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60	460/3/60

All dimensions are for reference only and subject to change without notice.



**ANTI-DRIFT CONTROL STAND
W/ LASER**