

# TTR AirBlocks<sup>®</sup>



## EFFICIENCY AND SPEED

The TTR (Titanium Roller) AirBlock<sup>®</sup> surpasses all other blocks with an incredible 98% efficiency, harnessing power that other blocks lose to friction. A 98% efficiency rating allows trimmers to grind in a higher gear longer, making trimming faster and more effective. This lightweight roller bearing block was developed to withstand the extreme rigors of the America's Cup on yachts including *Alinghi*, *Emirates Team New Zealand*, *BMW Oracle Racing*, and *Victory Challenge*. The TTR is the first choice on Volvo Open 70s and Grand Prix yachts like *Puma*, *Telefonica*, *Ericsson*, and *Numbers*.

Loops not included



Wide or narrow sheaves available

## USES

Versatile TTR AirBlocks<sup>®</sup> are perfect for use as flying runners, traveler controls, spinnaker sheet blocks, mastbase blocks, and mainsheet blocks.

## FEATURES

Nearly twice the maximum working load of the same size Black Magic<sup>®</sup> blocks, the TTR puts 98% efficiency into a compact package.

A center cage keeps titanium roller bearings separated and parallel to reduce friction.

Soft attachments eliminate heavy shackles and carry the primary load, allowing the block body to be extremely lightweight.

The fully articulating soft attachments and the sculpted head ensure a fair lead.

## Installation

Soft attachments fasten to padeyes and any other support structures.

Footblocks mount using a central post to support the majority of the load, allowing the sideplate to be very light.

## MATERIALS

6061-T6 Hardkote-anodized Teflon<sup>®</sup>-impregnated aluminum sideplates keep lashings aligned and sheaves running smoothly.

High-load titanium rollers handle radial loads, while snap-fit Torlon<sup>®</sup> ball bearings carry sideloads.

Inner and outer bearing races are made of titanium for strength.

## Options

The soft attachment becket converts a 2:1 block to 3:1 with almost no additional weight.

Wider blocks accommodate two sheets for fast sail changes.

Custom flying runner blocks are available on request.

## Maintenance

Roller bearings and balls snap-fit securely into place for disassembly and reassembly.

Lightly lubricate rollers with standard Harken winch grease. Rinse balls with fresh-water.

Block easily opens for maintenance by removing two screws and secondary lashing at the head.

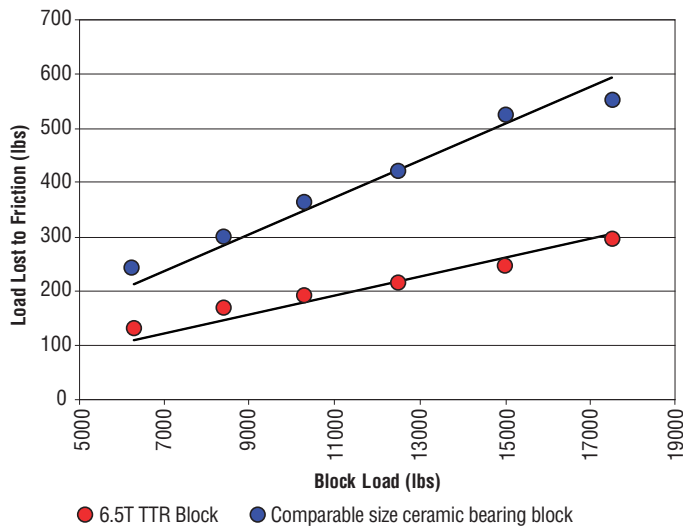


Soft attachments can be configured as beckets or fiddle blocks



Billy Black photos

### BLOCK LOAD vs. FRICTION LOSS



C8754



C8734



C8723



C8580



C8575

Part No.	Description	Sheave Ø		Length		Weight		Max line Ø		Maximum working load		Breaking load	
		in	mm	in	mm	oz	g	in	mm	lb	kg	lb	kg
C9273	3.0T TTR AirBlock®	2.24	57	2.79	71	3.84	109	3/8	10	6614	3000	13228	6000
C8491	5.0T TTR AirBlock®	3	75	3.82	97	7.77	220	1/2	12	11025	5000	22050	10000
C8580	5.0T Wide TTR AirBlock®	3	75	3.82	97	9.32	264	2 x 1/2	2 x 12	11025	5000	22050	10000
C8723	5.0T TTR footblock	3	75	4.29	109	16.16	458	9/16	14	11025	5000	22050	10000
C8724	5.0T Wide TTR footblock	3	75	4.68	119	17.6	499	2 x 9/16	2 x 14	11025	5000	22050	10000
C8727	5.0T TTR sheave	3	75	—	—	6.56	186	9/16	14	11025	5000	22050	10000
C8575	6.5T TTR AirBlock®	4	100	4.92	125	16.03	454	5/8	16	14333	6500	28666	13000
C9015	6.5T TTR sheave	4	100	—	—	14.1	400	3/4	20	14333	6500	28666	13000
C9161	6.5T Wide TTR AirBlock®	4	100	5.79	147	22.42	635	2 x 3/4	2 x 20	14333	6500	28666	13000
C9388	6.5T Wide TTR footblock	4	100	6.17	157	41.06	1164	2 x 11/16	2 x 18	14333	6500	28666	13000
C8462	8.0T TTR AirBlock®	5	125	6.06	154	29.48	835	11/16	18	17641	8000	35281	16000
C9162	8.0T Wide TTR AirBlock®	5	125	7.24	184	37.6	1066	2 x 3/4	2 x 20	17641	8000	35281	16000
C8807	8.0T TTR footblock	5	125	6.49	165	48.78	1383	11/16	18	17641	8000	35281	16000
C9406	8.0T TTR Self-contained sheave	5	125	—	—	23.60	669	5/8	16	17641	8000	35281	16000
C8754	10.0T TTR AirBlock®	6	150	7.1	181	48.29	1368	13/16	20	22046	10000	44092	20000
C8957	10.0T Wide TTR AirBlock®	6.1	155	7.67	195	72.77	2063	2 x 7/8	2 x 22	22046	10000	44092	20000
C8755	12.0T TTR AirBlock®	7	175	8.3	221	66.86	1894	7/8	22	26455	12000	52910	24000
C8734	15.0T TTR AirBlock®	8	200	9.537	242	109.04	3089	1	26	33069	15000	66138	30000

Loops not included