

the **CrossFit** JOURNAL ARTICLES

Rowing Workouts

Angela Hart

Once you've mastered the essentials of rowing technique, you can work to improve your rowing piece times and your score on CrossFit workouts that include rowing, such as "Jackie," "Fight Gone Bad," and "Tabata This." The ultimate goal is to generate maximal power on the rowing machine and maximize the number of calories or watts you can row in a set amount of time, with the lowest possible 500-meter pace times. Time spent on the rowing machine will accomplish both goals in addition to continually improving technique and efficiency.

In addition to training on the rower alone in various time and power domains, you can use rowing in nearly infinite combinations with other exercises to create workouts that cover a broad range of training modalities and goals. Here are some workouts incorporating rowing to get you started.

Partner relay

Using the Change Display button on the performance monitor (PM), set up the screen to show :00/500m on the second row for intensity and 0 meters on the third row. Sitting side-by-side, have two athletes row at a warm-up pace for six to eight minutes to refine proper technique and begin building heat in the muscles. Determine who will begin the relay. At the end of the warm-up, the first person looks at the meters readout on the PM and rows 100 meters at maximal intensity. At the end of 100 meters, the first rower tells the partner "Go," and the second team member rows 100 meters at maximal power while the first team member rows lightly at paddle pressure to recover in active rest. At the end of 100 meters, the second team member

says "Go", and the first rows 200 meters at maximal intensity. The team member in active rest should cheer on and motivate (or heckle) the other.

Continue alternating back and forth with one team member rowing at max intensity while the other team member recovers and prepares for the word "Go." The possible progressions are numerous. For example, you could do 100m / 200m / 300m / 400m / 500m / 400m / 300m / 200m / 100m. This would have good training carryover to "Fight Gone Bad" and "Tabata This." A straight progression up to 1000 meters in 100-meter increments would be great prep for "Jackie."

You can adapt this sort of setup in countless ways to accommodate various numbers of team members, make it a race between two (or more) teams, train different time, distance, and rest intervals, or base the work on calories or watts or time instead of distance, etc. Be creative.

Damper-changing workout

This is a 30-minute workout that helps determine the optimal damper setting for each individual. It can be done individually or with a group.

Set the performance monitor (PM) to display whatever units are most motivational for the individual (500-meter pace, watts, meters, or calories). Warm up for six to eight minutes at 25- to 50-percent intensity with a technique focus. Set the monitor (PM) for six minutes of work time and one minute of rest time. Set the damper on 3 or 4 (about one-third up from the bottom) and row for three minutes at aerobic intensity (75 to 85 percent). Maintain a consistent pace and commit to this

1 of 3

Rowing Workouts (continued...)

number for the remaining aerobic pieces of the workout. After three minutes of aerobic steady-state rowing, kick up the intensity for three minutes (40 seconds at max / 20 seconds recovering on the paddle / 30 seconds at max / 30 seconds on the paddle / 20 seconds at max / 40 seconds on the paddle).

During the one minute of rest, take the damper up to 6 or 7 (two-thirds up from the bottom). At start of next six minutes, repeat three minutes of aerobic steady state, finding the same 500 meter pace, wattage, or calorie reading as last time and then power the three intervals as before.

During the one-minute rest, take the damper to 10 (all the way to the top) and repeat the same protocol for next six-minute cycle.

Then repeat with the damper at 5 (halfway down). Then with the damper at 1 (at the bottom). Each time, get right back onto the aerobic intensity reading established during the first round and then go to maximal intensity during the three short intervals.

At the end, set the damper back to the 3-to-5 range and cool down for a few minutes, again with the focus on technique. Use this workout to determine which damper setting allows you to be the most efficient. Higher damper settings mean slower stroke rates and longer muscular contractual work on the drive phase of each stroke. Lower damper settings mean higher stroke rates and quicker muscular contractual work. Your physiology and anatomy will determine which damper setting is most effective for longer or shorter periods of work and various intensities. Remember, the damper does not determine the resistance which is created by how hard you work. (For more on the damper and how it works, see Peter Dreissigacker's article in CFJ 56.)

40-minute Tabata circuits workout

Set up the performance monitor (PM) for five minutes of work and five minutes of rest, and set the units to whatever measure is most motivational for the individual (500-meter pace, watts, meters, or calories).

This is a four-round workout in which each round consists of five minutes of various kinds of rowing and four minutes of calisthenics done in Tabata intervals (alternating twenty seconds of work and ten seconds of rest for four minutes). Five minutes is allotted for the Tabata segment, allowing thirty seconds to transition off

the rower before beginning the calisthenics, and thirty seconds afterward to transition back to the rower for the next five-minute rowing segment. The activities are as follows:

Interval	Rowing activity, 5 minutes	Tabata activity, 4 minutes
#1	Warm-up with technique focus, 50 to 70% intensity	Squats
#2	Steady-state aerobic rowing at 75 to 85%	Pull-ups
#3	30 sec. light rowing, 4 min. Tabata, 30 sec. light rowing	Sit-ups
#4	2 x (1 min at 75-85%, 20 sec. max, 40 sec. light, 30 sec. max)	Push-ups

If there are more bodies than rowing machines, this can be done as a team circuit so that each 5 minute segment has one team member on the rowing machine and one team member completing the Tabata interval with the switch every 5 minutes.

A scoring system for the white board is easy to establish using the usual Tabata scoring (lowest of reps in any of the work intervals) for each of the calisthenics segments and the total calories or the power ratio for rowing segments 2 through 4.

If you want to calculate scores based on power ratios (which is the preferred method if you are comparing individuals of different genders and sizes), divide the total watts for each rowing segment (recorded in the PM log) by the rower's body weight, in pounds.

For example, if a 178-pound person rows 310 watts, the power ratio is 1.74, which means this rower is pulling all of his/her mass plus an additional 74%. The power ratio scoring system begins with 100% mass movement, so this would be 74 points. For someone who is not pulling their own mass, the score is negative. For example, if a 178-pound person rows 173 watts, the power ratio is 0.97 and the score is -3 points.

Tabata wattage interval

Warm up by rowing aerobically for eight to ten minutes. Row at a wattage reading that matches your body weight and observe your rate of perceived exertion or note your heart rate using a heart rate monitor. For some, rowing at this output is an easy and sustainable goal. For others, this will be incredibly challenging or

Rowing Workouts (continued...)

even impossible. How difficult this initial effort feels for the individual will determine the percentage of increase during each subsequent twenty seconds.

Set the monitor to a Tabata interval: twenty seconds of work and ten seconds of rest. During each twenty-second work period, add wattage equal to a percentage of body weight (BW) that is challenging but allows you to complete the increase sequence over all 8 intervals. For example, a 150-pound athlete could increase rowing intensity by 10, 20, or 30 percent of bodyweight in each interval, as shown in the following table:

Interval	10% body weight increase	20% body weight increase	30% body weight increase
#1	BW + 10% (150 + 15 = 165 watts)	BW + 20% (150 + 30 = 180 watts)	BW + 30% (150 + 45 = 195 watts)
#2	BW + 20% (150 + 30 = 180 watts)	BW + 40% (150 + 60 = 210 watts)	BW + 60% (150 + 90 = 240 watts)
#3	BW + 30% (195 watts)	BW + 60% (240 watts)	BW + 90% (285 watts)
#4	BW + 40% (210 watts)	BW + 80% (247 watts)	BW + 120% (330 watts)
#5	BW + 50% (225 watts)	BW + 100% (300 watts)	BW + 150% (375 watts)
#6	BW + 60% (240 watts)	BW + 120% (330 watts)	BW + 180% (420 watts)
#7	BW + 70% (255 watts)	BW + 140% (360 watts)	BW + 210% (465 watts)
#8	BW + 80% (270 watts)	BW + 160% (390 watts)	BW + 240% (510 watts)

These are just three examples, certainly not the only options. Use the percentage increase that best suits the athlete's needs and the workout's intent. Maybe a 5 percent increase (with the eighth interval at body weight plus 40 percent) would be most appropriate, or maybe a 50 percent increase (with the eighth interval at body weight plus 400 percent for 20 seconds) would be best. For very heavy or elderly trainees, the goal is simply to be at body weight by the eighth interval, so that the first 20 seconds is at 30 percent of body weight and each 20-second interval adds 10 percent, until the eighth interval is at a wattage that matches body weight. Another option is to add the percentage to the previous wattage as opposed to the body weight. Adding 10 percent each interval in this scheme would look like this for a 150-pound rower (rounding up if the previous number ended in 5 or above):

Interval	10% BW added to previous intensity
#1	BW + 10% (150 + 15 = 165 watts)
#2	165 + 10% (17) = 182 watts
#3	182 + 10% (18) = 200 watts
#4	200 + 10% (20) = 220 watts
#5	220 + 10% (22) = 242 watts
#6	242 + 10% (24) = 266 watts
#7	266 + 10% (27) = 293 watts
#8	293 + 10% (29) = 322 watts

These workouts will provide excellent met-con training on their own and will improve rowing technique and efficiency while increasing success in all CrossFit workouts that utilize the rowing machine. Begin each workout with a warm-up that focuses primarily on proper technique and building muscular heat. Equally important is an adequate cool-down/stretch period. Enjoy the workouts and be ready to rise to the top of the white board.



Angela Hart is the director of the [Indoor Rowing Training and Certification Institute](#) and a Master Rowing Trainer for [Concept2 Rowing](#). A competitive rower since 1982, she has coached at the scholastic, collegiate, and master levels. In 1999, she coached a junior national women's team, and she was a rowing sports specialist during the 1996 Olympic Games. She conducts training and certification workshops on the rowing machine and teaches group rowing classes in the Washington DC area. In addition to having completed the basic CrossFit instructor training, she is an ACE-certified personal trainer and rowing educator, an AFAA-certified group fitness instructor, a US Rowing level-3 coach, and a 200-hour registered yoga teacher with the Yoga Alliance. She can be contacted at angela.irtci@verizon.net.