

The Power Behind Performance®

## POWER CHUTE™

# IMPORTANT INFORMATION PLEASE READ AND KEEP

## **DISCLAIMER**

The following guidelines should be observed when using the Power Chute™.

- Always consult your physician before participating in any physical activity.
- Read all instructions carefully before using.
- The Power Chute<sup>™</sup> is designed solely for use in running workouts to improve athletic performance. DO NOT use the Power Chute<sup>™</sup> as a jumping chute or any other non-running related activity.
- Always use the Power Chute<sup>™</sup> in an area free from obstructions on which the chute may become snagged, tangled or torn.
- Power Systems, Inc. assumes no liability for accidents or damage that may occur with the use of the Power Chute™.

For more information on the Power Chute™ or other training products contact:

#### ADVANTAGES OF USING THE POWER CHUTE™

- 1) The major advantage of running with the Power Chute<sup>™</sup> is that you have the ability to work both resistance and overspeed training during the same run. In the initial part of the run the Power Chute<sup>™</sup> creates a drag effect, which makes it a resistance type of training; you are running against the resistance of the inflated Power Chute<sup>™</sup>. During the resistance phase stride length is developed, a critical component of running speed. During the run the Power Chute<sup>™</sup> can be released, letting the Power Chute<sup>™</sup> drop to the ground. This causes a drastic "change" of running speed that will allow the athlete to run faster than normal. This overspeed phase of the run will improve stride frequency, another key elements of running speed.
- 2) The Power Chute<sup>™</sup> is available in three sizes to accommodate users of all ages and skill levels. By varying the size of the Power Chute<sup>™</sup>, the distance of the run and the direction of the run, you can add tremendous variety to your workout and maximize your results.
- 3) You can run forward, backward, sideways and change direction while using the Power Chute<sup>™</sup>. This makes it very versatile and adaptable to any sport specific movement.
- 4) The Power Chute<sup>™</sup> is the only running device that can accomplish overspeed training without the use of a training partner. Athletes can train alone, whenever they want, without having to schedule a training partner.
- 5) Athletes enjoy training with the Power Chute<sup>™</sup>. This type of training is very motivational, making athletes give superior effort for better performance.

#### CONSIDERATIONS WHEN USING THE POWER CHUTE™

- 1) Run against the wind or across the wind. Do not run with the wind to your back. This will cause the chute to shift while running (both side to side and up and down). Some shifting is fine and will not hamper your training, but try to minimize shifting whenever possible for best performance. You should not run with the Power Chute™ during extremely windy situations, as this will cause excessive shifting.
- 2) In some cases, the Power Chute<sup>™</sup> will not inflate fully and will drag close to the ground. If this happens, consider the following:
  - A) Note the direction of the wind. You might be running with the wind at your back. Change direction and run against the wind.
  - B) The Power Chute<sup>™</sup> may be too large for your age, size and maturity level. Use a smaller Power Chute<sup>™</sup>.
  - C) You might not be running fast enough. You must run fast for the Power Chute<sup>™</sup> to properly open and provide the proper training stimulus.
- 3) If you are using the Power Chute<sup>™</sup> indoors, consider the following:
  - A) Make sure there are no obstructions to tangle the chute.
  - B) Make sure you have enough room for the run and room to slow down after the run. A quick, abrupt stop can cause the chute to drop too suddenly and get tangled in your legs.

#### SELECTING THE RIGHT SIZE OF POWER CHUTE

The Power Chute<sup>™</sup> comes in four sizes (small, medium, large and extra-large) to accommodate athletes of all sizes and maturity levels. The larger the Power Chute<sup>™</sup>, the more resistance. There are six suggested variations of resistance when using the Power Chute<sup>™</sup>.

POWER CHUTE™	APPROXIMATE RESISTANCE	
SMALL	15 lbs	
MEDIUM	20 lbs	
LARGE	30 lbs	
EXTRA-LARGE	50 lbs	
XL & SMALL	65 lbs	
XL & MEDIUM	70 lbs	

Follow the chart below to see what variations are best for you depending on your size and maturity level.

Power Chute™ Size Chart			
Athlete Weight	Beginner	Intermediate	Advanced
Under 170 lbs.	S	S,M	M,L
170 to 210 lbs.	S,M	M,L	L, XL
Over 210 lbs.	M,L	L,XL	XL&S, XL&M

#### VARY THE SIZE OF THE POWER CHUTE™ DURING THE WORKOUT

#### TRAINING FOR SPEED:

Using smaller Power Chutes<sup>™</sup> allows you to work more on the speed component. The Smaller Power Chutes<sup>™</sup> create less drag, allowing you to still run very fast but with some resistance. Depending upon your body size you will use a small, medium, large or extra-large Power Chute<sup>™</sup>. Training runs should not exceed 100 yards. For best results, complete the first half of the run with the Power Chute<sup>™</sup> attached (providing resistance), and the last half without the Power Chute<sup>™</sup> (overspeed).

#### TRAINING FOR POWER:

To work on explosive power you need to use heavy resistance. This means using a larger Power Chute™ or two Power Chutes™ at the same time. The extra drag that is created will make your body work harder to generate the power output necessary to complete the run. The training runs should be short (20-40 yards). Do no release the Power Chute™ during the run; the chute should remain attached throughout the entire run.

#### TRAINING FOR ENDURANCE:

For endurance training, use a medium or large Power Chute<sup>™</sup> and run for 100-200 yards. The moderate resistance with a longer run will help develop muscular endurance. The chute should remain attached throughout the entire run: do not release the Power Chute<sup>™</sup> during the run.

#### **HOW TO USE THE POWER CHUTE™**

The Power Chute<sup>™</sup> is very versatile and can be used by athletes of all sized and sports, male and female. After you have selected the right size of Power Chute<sup>™</sup>, you should do the following:

- Using the Velcro belt adjustment, position the belt around your waist so it is nice and snug.
  The D-ring to which the Power Chute is attached should be in the middle of the back for
  forward running.
- 2) Prior to running the Power Chute should be directly behind you, hanging from the belt and resting on the ground. Be sure that the area behind you is free of any obstacles or debris that could cause damage to the Power Chute<sup>™</sup>.
- 3) To run backwards, rotate the belt around your waist so that the Power Chute<sup>™</sup> is directly in front, hanging to the ground.
- 4) To run sideways, rotate the belt around your waist so that the Power Chute<sup>™</sup> is hanging to the ground in the opposite direction from which you plan to run.
- 5) During the run the Power Chute<sup>™</sup> will inflate instantly so you only have to concentrate on the drill, not the Power Chute<sup>™</sup>.
- 6) When the Power Chute<sup>™</sup> is to be released during the run, reach for the Velcro strap with your dominant hand and pull it open. The Power Chute<sup>™</sup> will automatically fall to the ground. The key here is not to break running form, but to release the Power Chute<sup>™</sup> while still running with good technique. It will take a few tries to get used to releasing the Velcro strap while maintaining good running form.
- 7) When the run is completed, pick up the Power Chute<sup>™</sup>, hang it over your shoulder and walk back to the starting line. **DO NOT drag the Power Chute**<sup>™</sup>; always carry the chute over you shoulder when not in use. Otherwise, the chute may become tangled in your legs and stepped on or torn if dragged over the ground.
- 8) At the starting line, strap the belt back on and get ready for the next run.

#### **PROGRAM DESIGN**

By varying the size of the Power Chute<sup>TM</sup> and the distance of your runs, you can improve the three basic components that are important to all sports: speed, power and endurance. You should work on all three phases. Depending upon the sport and time of year, more emphasis is placed on one or two of the phases (e.g. Football players might work more on endurance in the off season but work more on the speed and power phases in the pre-season.) Consult with your coach to design workouts based on your needs.

The following are some basic workouts including suggested number of repetitions and resistances. Use these as guidelines to personalizing your workouts. Here again, consult with your coach or other qualified individuals.

#### SPEED WORKOUT:

For maximum gains in speed, the runs need to be short to medium distances with maximum effort on each run.

Power Chute™ sizes: Use a small, medium, large or extra-large Power Chute™

depending upon your size and maturity level. Use the chart on

Page 2 to assist you in the size selection.

Length of runs: Runs should not be more than 100 yards. Any combination such

as 20-40-60-80-100 yards is good.

Number or Runs: The number of runs will depend upon the amount of time

available and the conditioning level of the athlete. Six to ten "all

out" runs per workout is recommended.

Rest Intervals: For maximum results, you must be well rested before each run.

A 2-5 minute rest interval is recommended for to allow the ATP-PC system time to recover and to help reduce the build-up of lactic acid, a by-product of the anaerobic energy production.

Release of Power Chute<sup>TM</sup>: In speed workouts it is important to do the first half of the run

with the Power Chute<sup>™</sup> attached, and complete the run without the Power Chute<sup>™</sup>. The release of the chute brings into play the overspeed component that helps to develop stride frequency.

#### **POWER WORKOUT:**

For maximum gains in power, runs need to be very short, all out efforts with adequate rest between runs.

Power Chute™ sizes: To increase power, the resistance has to be significant for your

legs and arms to pump hard. Use a large, extra-large or two Power Chutes™ together when training for power. Sizes will

vary depending upon your size and maturity level.

Length of runs: The runs should not be more than 40 yards long. Runs of 10-20-

30-40 yards are good.

Number or Runs: The number of runs will depend upon the amount of time

available and the conditioning level of the athlete. Six to ten "all

out" runs per workout is recommended.

Rest Intervals: For maximum results, you must be well rested before each run.

A 2-5 minute rest interval is recommended for to allow the ATP-PC system time to recover and to help reduce the build-up of lactic acid, a by-product of the anaerobic energy production.

Release of Power Chute™: During power runs the Power Chute™ should not be released.

Keep the Power Chute™ attached throughout the entire run. Remember; use caution at the end of the run so that the chute

does not get tangled around the feet as you decelerate.

#### **ENDURANCE WORKOUT:**

For maximum gains in endurance, the runs need to be fairly long of moderate intensity with short rest intervals between runs.

Power Chute<sup>™</sup> sizes: The size of the Power Chute<sup>™</sup> for endurance runs generally a

medium or large. Again, the size will depend upon your size and maturity level. As a rule of thumb, the amount of resistance should be more that during speed runs and less than during

power runs.

Length of runs: The runs should not be more than 200 yards long. Runs of 100-

150-200 yards would be best. In a few cases, depending upon the sport (e.g. track distance runners) longer distance may be

desired.

Number or Runs: The number of runs will depend upon the amount of time

available. Six to ten "all out" runs per workout is recommended.

Rest Intervals: For endurance training, rest between runs should be kept to a

minimum. A 1:2 work-rest ratio is suggested. This means the amount of rest should be twice as long as the exercise time. For example, one minute of exercise should be followed by two

minutes of rest.

Release of Power Chute™: During endurance runs, the Power Chute™ should not be

released. Keep the Power Chute™ attached throughout the

entire run.

### TAKING CARE OF YOUR POWER CHUTE™

- The Power Chute<sup>™</sup> is very durable and should not tear or break under normal use. Be certain to stay clear of other people, poles, fences, equipment, etc. when running. The Power Chute<sup>™</sup> has to fly unobstructed behind you during the run.
- Never drag the Power Chute<sup>™</sup> on the ground. Always carry or instruct your athletes to carry the Power Chute<sup>™</sup> back to the starting point.
- 3) During workouts, if the Power Chute<sup>™</sup> is not used, lay it flat on the ground. Keep the Power Chute<sup>™</sup> dry and away from water, rain and mud.
- 4) During workouts the belt will absorb body perspiration. Hang the Power Chute<sup>™</sup> after every workout to dry using the loop on top of the chute.
- Your Power Chute<sup>™</sup> can be hand washed with mild soap in cold water. DO NOT use bleach.
- 6) With proper care and use, the Power Chute<sup>™</sup> will provide your years of reliable training.

Power Systems Inc. www.power-systems.com 1-800-321-6975

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