# Weight Training for Speed & Power

Teaching Progressions & Periodization

# **Categories of Weightlifting**

- Olympic Lifts
- Static Lifts
- Ballistic Lifts
- Bodybuilding Lifts



# **The Olympic Lifts**

- Exercises
  - The Competitive Lifts (Snatch, Clean and Jerk)
  - Derivatives of These (Pulls, Cleans and Snatches at Various Depths)
- Purposes
  - Complex Strength and Flexibility Development
  - Coordination Development and Harmonization
  - Endocrine Stimulation via Intensity & Lactate Production
- Negative Effects
  - None when Properly Scheduled

# **Examples of Olympic Lifts**

# **The Static Lifts**

- Exercises
  - Lifts Emphasizing Major Muscle Groups, Gross Movements, Large ROM, Low Speeds
  - Squats and Presses
- Purposes
  - Absolute and Postural Strength Development
  - Body Balancing
  - Endocrine Stimulation via Time Under Tension and Fiber Quantity
- Negative Effects
  - Short Term Mobility & Coordination Losses
  - Possible Rare Hypertrophy Issues

# **Examples of Static Lifts**

# **The Ballistic Lifts**

- Exercises
  - Lifts Emphasizing Major Muscle Groups, Gross Movements, High
    Speeds and Eccentric Components, Typically Small ROM
  - Weighted Jumps and Speed Presses
- Purposes
  - Absolute Strength Enhancement
  - Elastic Strength Development
  - Slight Endocrine Stimulation via Lactate Production
- Negative Effects
  - Risks Associated with High Impacts and Spinal Loading under Impact

#### **Examples of the Ballistic Lifts**

# **The Bodybuilding Lifts**

- Exercises
  - Lifts Emphasizing Smaller Muscle Groups, at times more Precise
    Movements
  - Done in Circuit or Stage Fashion with Short Rests
- Purposes
  - Glycogen and Endocrine Stimulation
  - Stimulation of Recovery Processes
  - Specific Strength Development
- Negative Effects
  - None when Properly Scheduled
  - Possible Rare Hypertrophy Issues

### Examples of the Bodybuilding Lifts

#### **Teaching the Olympic Lifts**

- Key Components and Performance Training Adjustments
  - Extending the Hips
  - Resetting in the Standing Position
  - Higher Rack Positions
- Teaching Components
  - Teaching the Setup
  - Teaching the Deadlift
  - Teaching the "Tap"
  - Teaching the Pulls
  - Polishing the Pull
  - Teaching the Racks

### **Teaching the Setup**

- Foot Alignment
- Presetting the Back
- Lowering
- Shoulder Positions
- Grip and Wrist Position
- Grip Width

# **Teaching the Setup**

#### **Teaching the Deadlift**

- Starting and Ending Height
- The Head and Back
- Shoulder Positions
- Hip Positions
- Pausing at the Top

### **Teaching the Deadlift**

### **Teaching the Tap**

- The Deadlift and Pause
- The Shift and Tap
- Maintaining Shoulder Positions
- Common Errors

### **Teaching the Tap**

#### **Teaching the Pull**

- The Deadlift and Tap
- The Pull
- Delaying the Pull
- Initiating in the Shoulders
- Finishing Positions
- Return and Reset

# **Teaching the Pull**

### **Polishing the Pull**

- Eliminating the Pause
- Teaching Bar Acceleration Patterns
- Tap to Brush
- Addressing Clean Snatch Differences

# **Polishing the Pull**

#### **Teaching the Racks**

- Preliminary Experience
  - The Front Squat
  - The Snatch Squat
- Arm Positions
- Head Position
- Bar Position
- Amortization
  - Isometric Preparation
  - Eccentric and Concentric Activity

#### Preliminary Lifts and Rack Positions

#### **Teaching the Clean Rack**

- Key Points
  - Arm Positions
  - Head Position
  - Bar Position
  - Amortization
- Teaching Progressions
  - Spotted Hand Racks
  - Spotted Bar Racks
  - Spotted Cleans

### **Teaching the Clean Rack**

#### **Teaching the Snatch Rack**

- Key Points
  - Arm Positions
  - Head Position
  - Bar Position
  - Amortization
- Teaching Progressions
  - Spotted Hand Racks
  - Spotted Bar Racks
  - Spotted Snatches

# **Teaching the Snatch Rack**

### **Teaching Multiple Lifting Levels**

- Lifting from the Floor
- Lifting From the Knee
- Lifting From the Thigh

# **Multiple Lifting Levels**

### **Teaching the Squat**

- Creating a Target
- Teaching the Setup
  - Unracking the Bar
  - Padding
  - The Bar Position
  - The Stance
  - Presetting the Back
- Initiating the Squat
  - Hip Flexion
  - Abduction of the Femurs
- Lowering and Deceleration
- The Ascent
  - Hip Extension
  - Delayed Adduction of the Femur

# **Teaching the Squat**

#### **Teaching the Bench Press**

- Teaching the Setup
  - Locating on the Bench
  - Balancing the Bar
  - Unracking the Bar
  - The Grip and Hand Positions
- The Descent
  - Arm Flexion
  - Target
- The Ascent
  - The Vertical Component
  - The Horizontal Component
  - Relationship to Bench Position

### **Teaching the Bench Press**

### **Teaching Split Position Lifts**

- Teaching the Stance
  - Foot Spacing
  - Weight Location
- The Descent
  - Weight Distribution
  - Location of the Body's Center of Mass
  - The Front Knee/Shin
- The Ascent

### **Teaching Split Position Lifts**

# www.sacspeed.com bschex@sacspeed.com

Schexnayder Athletic Consulting



#### General Concepts of Weight Training Periodization

- Progress Patiently and Eliminate Preconceived Notions
- Olympics Always
- Progress from Simple to Complex
- Start with Few Exercises, then Diversify
- **Progress from Double to Single Leg/Split Work**
- Keep Power Levels Up Throughout the Workout
- The Value of Large ROM
- Understanding Fatigue, Power, and ROM
- Temper High Intensity Work with Low Intensity Work
- Don't Be Enslaved by Percentages
- Value Work Done Prior to the Weight Room

#### Strength Training Progressions and Hierarchy

- The Hierarchy
  - 1. General Strength
  - 2. Power
  - 3. Absolute Strength
  - 4. Elastic Strength
- Key Progression Concepts
  - Understand General Strength Prerequisites
  - Power Before Absolute Strength
    - Rate Coding Development
    - Limiting Absolute Strength Development Time
  - Prerequisites for Advanced Elastic Strength Work

#### **Session Construction**

#### • Neuromuscular Theme

- 1. Olympic Lifts (5-8 sets) typically One Primary Exercise
- 2. Static or Ballistic Lifts (Lower or Whole Body, approx. 30 reps total, 1 or 2 Exercises only)
- 3. Static or Ballistic Lifts (Lower or Whole Body, approx. 30 reps total, 1 or 2 Exercises only)

#### Bodybuilding Theme

1. Bodybuilding Lifts (20-24 sets)

#### Transition Theme

- 1. Olympic Lifts (5-8 sets) typically One Primary Exercise
- 2. Bodybuilding Lifts (20-24 sets)

#### **Compatible Training**

#### **Neuromuscular Theme**

- Done on days with
  - Acceleration, Absolute Speed, or Speed Endurance Work
  - Moderate to Intense Multiple Jumping and Throwing
  - Intense Technical Work

#### **Bodybuilding Theme**

- Done on days with
  - General Strength or Medicine Ball Work
  - Tempo Running
  - Low Intensity Technical Work

#### **Transition Theme**

• Done on Speed/Power days in Special Situations

#### **Olympic Lift Periodization**

#### **Session Parameters**

- 5-8 sets of 1-5 repetitions
- Intensities 50 100%
- Densities approximately 50%

**Use to Train Power and Endocrine Fitness** 

- Low Weight High Repetitions
- Endocrine Fitness via Moderate Lactate
- The Power of 3's

**Use to Train RFD** 

- High Weight Low Repetitions
- Periodic Use and Power Review

#### **Static Lift Periodization**

#### **Session Parameters**

- 4-6 sets of 4-8 repetitions
- Intensities 30-90%
- Densities approximately 30-50% at highest usage

#### **Use to Develop Absolute Strength**

- Patient Weight Increases in the Goal
- Reduce Repetitions to Facilitate Progress
- **Provide Endocrine Support at High Intensity Training Times**
- Diversify at Peak Training Times

**Delay Heavy Static Work Until Power is Trained** 

Time Spent Determined by Athlete's Training Age

#### **Ballistic Lift Periodization**

**Session Parameters** 

- 4-6 sets of 5-10 repetitions
- Intensities 10-30% of Athlete's Bodyweight
- Densities approximately 10-30% at highest usage

**Use Cautiously** 

**Use to Enhance and Maintain Strength** 

- Tension Levels
- Time Under Tension Levels

#### **Bodybuild Lift Periodization**

**Session Parameters** 

- 20-24 sets of 10-12 repetitions
- Intensities 60-75% ("Feel" last Repetition)
- Densities approximately 30-50% at highest usage

**Use Frequently Early to Set Endocrine Levels** 

**Use to Slowly Transition from Statics** 

**Use as Needed to Stimulate Recovery** 

#### **General Preparation**

#### • Olympics

- Train Power using 4-5 reps @ 50-70%
- Train Endocrine Fitness The Power of 3's
- Simple Movements and Few Exercises
- Statics
  - Start Patiently with 6-8 reps @ 40-60%
  - Primarily Double Leg/Arm Work
  - Simple Movements and Few Exercises
- Ballistics
  - None
- Bodybuilding
  - Use 2-3x per week to Set Endocrine Levels

#### **Specific Preparation**

#### • Olympics

- Introduce RFD using 3-4 reps @ 70-90 %
- Review Power using General Prep Protocol
- Employ More Complex Movements
- Statics
  - Double Leg/Arm Work Intensifies to 4-6 reps @ 70-90 %
  - Pyramids Possible with Upper Body Work
  - Introduce Single Leg Work using General Prep Protocol
  - Diversify Exercises
- Ballistics
  - None
- Bodybuilding
  - Review Periodically

#### **Precompetition**

- Olympics
  - Train RFD using 1-2 reps @ 90-100 %
  - Review Power Frequently using General Prep Protocol
- Statics
  - Eliminate Intense Static Work
- Ballistics
  - Employ 1-2 x per week to Enhance and Maintain Strength
- Bodybuilding
  - Increase Slightly to ease Transition away from Statics
  - Transition Theme Sessions a Possibility Here

#### Peaking

- Olympics
  - Mix RFD and Power Protocols
  - Slight Reduction in Volume / Density
- Statics
  - Eliminated Completely
- Ballistics
  - Greatly reduced, used in Comp Schedule Breaks
- Bodybuilding
  - Use as Needed to Battle Sluggishness

# www.sacspeed.com bschex@sacspeed.com

Schexnayder Athletic Consulting

