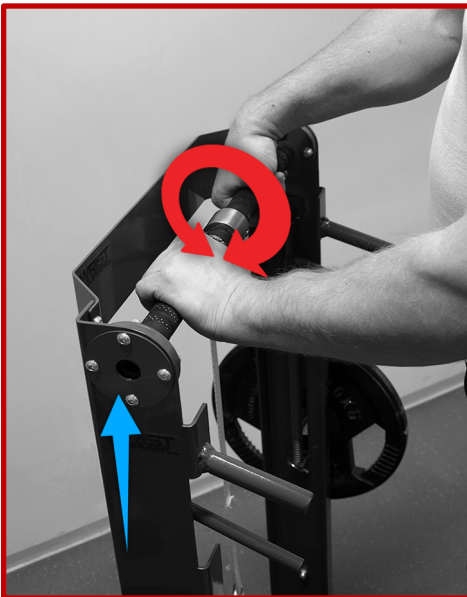




Exercises are created by Martin Padar

THE MAIN FOREARM MUSCLES WE WORK OUT ON WRIST EQUIPMENT



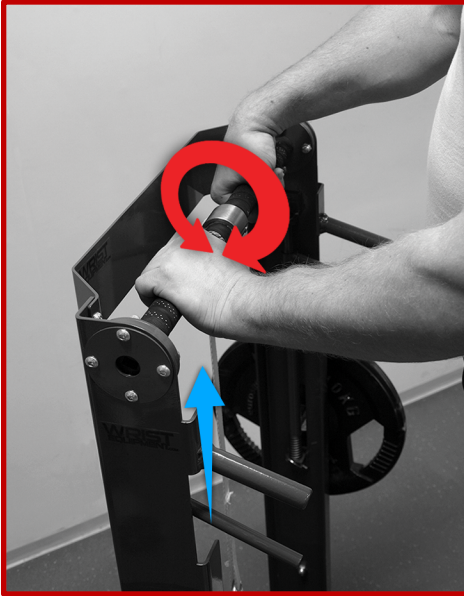
THE WRIST FLEXORS – When using WRIST EQUIPMENT, place hands on the handle bar and turn the handle bar away from yourself. The metal infused rubber straps will scroll up from the user's side.

THE MAIN MUSCLES

The muscles which straightly flex/bend the wrist, are the ulnar and radial wrist flexors (flexor carpi ulnaris et flexor carpi radialis), the muscles which hold and fix the handle-grip from fingers and palm are the finger flexors and extensors (flexor digitorum profundus et superficialis, extensor digitorum communis) and the long palm muscle (palmaris longus). Also very important in gripping is the participation of intrinsic muscles of the hand. These include the abductor pollicis brevis, opponens pollicis, flexor pollicis brevis (thenar muscles), adductor pollicis, opponens digiti minimi, flexor digiti minimi, abductor digiti minimi (hypothenar muscles), palmaris brevis, lumbricales, interossei palmares.

THE ASSISTING MUSCLES

Stabilising isometric tension is also in shoulderbone muscles (biceps, triceps), in shoulder muscles (deltoideus), in the chest muscles (pectoralis major et minor), in some of the back muscles (trapezius, rhomboideus). Also some eccentric tension (contraction through the lengthening of muscle-belly) is always in straight antagonists (wrist extensors).



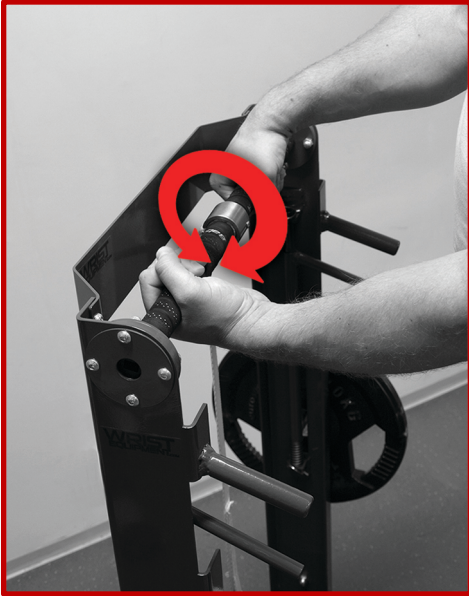
THE WRIST EXTENSORS – When using WRIST EQUIPMENT, place hands on the handle bar and turn the handle bar toward yourself. The metal infused rubber straps will scroll up opposite the user's side.

THE MAIN MUSCLES

The ulnar and radial wrist extensors (extensor carpi ulnaris et extensor carpi radialis longus/brevis). the muscles which hold and fix the handle-grip from fingers and palm are the finger flexors and extensors (flexor digitorum profundus et superficialis, extensor digitorum communis) and the long palm muscle (palmaris longus). The intrinsic muscles: abductor pollicis brevis, opponens pollicis, flexor pollicis brevis (thenar muscles), adductor pollicis, opponens digiti minimi, flexor digiti minimi, abductor digiti minimi (hypothenar muscles), palmaris brevis, lumbricales, interossei palmares.

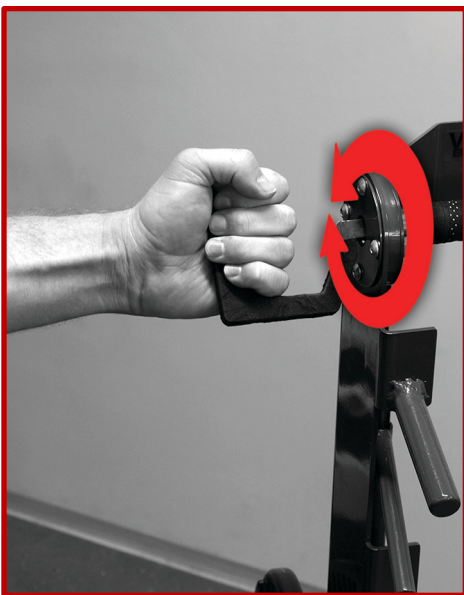
THE ASSISTING MUSCLES

Stabilising isometric tension is also in shoulderbone muscles (biceps, triceps), in shoulder muscles (deltoideus), in the chest muscles (pectoralis major et minor), in some of the back muscles (trapezius, rhomboideus). Also some eccentric tension (contraction through the lengthening of muscle-belly) is always in straight antagonists (wrist flexors).



COMBINED OPTION

Both the wrist flexors/benders and extensors work at the same time by gripping the handle bar with one hand on top and one underneath, turning the bar, with both hands working together, either toward or away from yourself.



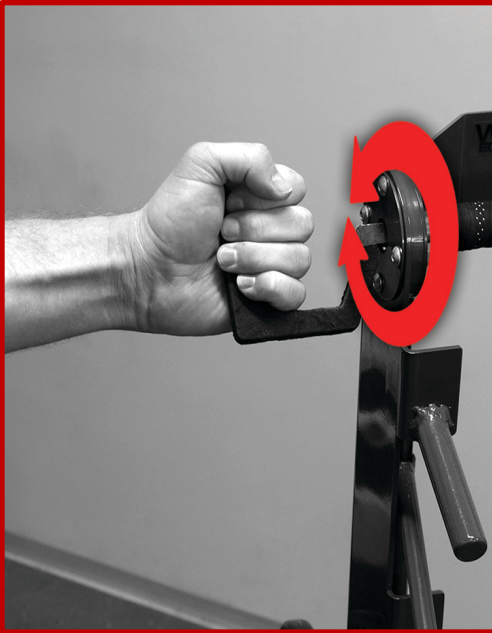
THE FOREARM INWARDS-ROTATORS (PRONATORS) – When using WRIST EQUIPMENT, lift the weight by turning “the doorknob,” attached to the side of the handle bar, with your left hand to the right and, alternatively with your right hand to the left.

THE MAIN MUSCLES

The round inwards-rotator of the forearm (pronator teres), the square inwards-rotator of the forearm (pronator quadratus), the brachioradial muscle (brachioradialis), the muscles which hold and fix the handle-grip from fingers and palm are the finger flexors and -extensors (flexor digitorum profundus et superficialis, extensor digitorum communis) and the long palm muscle (palmaris longus). The intrinsic muscles: abductor pollicis brevis, opponens pollicis, flexor pollicis brevis (thenar muscles), adductor pollicis, opponens digiti minimi, flexor digiti minimi, abductor digiti minimi (hypothenar muscles), palmaris brevis, lumbricales, interossei palmares.

THE ASSISTING MUSCLES

Stabilising isometric tension is also in shoulderbone muscles (biceps, triceps), in shoulder muscles (deltoideus), in the chest muscles (pectoralis major et minor), in some of the back muscles (trapezius, rhomboideus). Also some eccentric tension (contraction through the lengthening of muscle-belly) is always in straight antagonists (supinator, biceps brachii, brachioradialis).



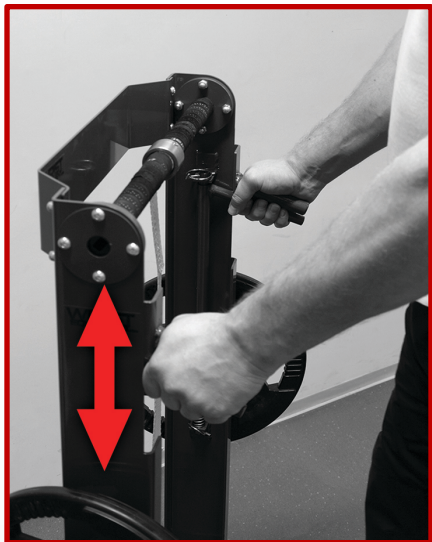
THE FOREARM OUTWARDS-ROTATORS (SUPINATOR) - When using WRIST EQUIPMENT, lift the weight by turning “the doorknob,” attached to the side of the handle bar, with your left hand to the right and, alternatively with your right hand to the left.

THE MAIN MUSCLES

The outwards-rotator of the forearm (supinator), the biceps (biceps brachii), the brachioradial muscle (brachioradialis), the muscles which hold and fix the handle-grip from fingers and palm are the finger flexors and -extensors (flexor digitorum profundus et superficialis, extensor digitorum communis) and the long palm muscle (palmaris longus). The intrinsic muscles: abductor pollicis brevis, opponens pollicis, flexor pollicis brevis (thenar muscles), adductor pollicis, opponens digiti minimi, flexor digiti minimi, abductor digiti minimi (hypothenar muscles), palmaris brevis, lumbricales, interossei palmares.

THE ASSISTING MUSCLES

Stabilising isometric tension is also in shoulder muscles (deltoideus), in the chest muscles (pectoralis major et minor), in some of the back muscles (trapezius, rhomboideus). Also some eccentric tension (contraction through the lengthening of muscle-belly) is always in straight antagonists (pronator teres, pronator quadratus, brachioradialis).



THE FINGER FLEXORS-BENDERS – When using WRIST EQUIPMENT, lift the weight by turning the handle bar with your fingers facing WRIST EQUIPMENT and with your back facing the machine.

THE MAIN MUSCLES

The superficial and deep finger flexors (flexor digitorum superficialis et profundus), the finger extensors (extensor digitorum communis) the long palm muscle (palmaris longus), The intrinsic muscles: abductor pollicis brevis, opponens pollicis, flexor pollicis brevis (thenar muscles), adductor pollicis, opponens digiti minimi, flexor digiti minimi, abductor digiti minimi (hypothenar muscles), palmaris brevis, lumbricales, interossei palmares.

If to train with face towards machine, the main tension goes to index-and middle finger (both deep and superficial finger flexors), if to train with back towards machine, the main tension goes to ring-and little finger (both deep and superficial finger flexors).

THE ASSISTING MUSCLES

Stabilising isometric tension is also in shoulderbone muscles (biceps, triceps), in shoulder muscles (deltoideus), in the chest muscles (pectoralis major et minor), in some of the back muscles (trapezius, rhomboideus).





- THE SIZE OF ECCENTRIC CONTRACTION IN ANTAGONIST, WHILE AGONIST WORKS, DEPENDS ON THE INTENSITY OF THE CONTRACTION OF AGONIST.
- IF AGONIST WORKS ON LOW INTENSITY (-30% of the max), THEN ANTAGONIST IS FREE FROM THE TENSION, STRETCHES, AND THERE WILL NOT EXIST THE CO-CONTRACTION.