



**Indoor Wheelchair Soccer**

**FUNCTIONAL CLASSIFICATION PROFILES**

(Version 8)

## PHILOSOPHY

Indoor Wheelchair Soccer created these functional profiles with the objective of equality within each class across every disability group. The charge was to develop profiles that met the following standard: Given all players being of an elite caliber, the profile for each disability category would be within an acceptable range of equality. For example, elite class 3 players with cerebral palsy would be competitive with elite class 3 players with spinal cord injury within an acceptable range of equality.

The level of training was not taken into account in the development of the profiles. It should not be taken into account in the classification of any one player. The classification of players should be based on the functional characteristics outlined below regardless of his or her ability level. Ability levels are controlled elsewhere in the rulebook under divisions.

Only players with neurological, neuromuscular / muscular, bone and joint (orthopedic), and amputation disabilities, either congenital or acquired, progressive or non-progressive, ambulatory or non-ambulatory, are eligible to be classified in wheelchairs for the purpose of competition in indoor wheelchair soccer.

The major considerations in the classification of indoor wheelchair soccer players is his or her ability and function in relation to:

1. The operation of a wheelchair,
2. Sitting balance,
3. Catching, throwing, and manipulating an indoor wheelchair soccer ball.

*The following 5 class profiles are presented for use in classification of indoor wheelchair soccer players.*

### **CLASS I - GENERAL OVERVIEW**

Players may have severe disabilities of the upper extremities, trunk, and lower extremities that require the use of a motorized wheelchair for functional mobility. Non-functional propulsion of a manual wheelchair with the upper or lower extremities, and the inability to functionally manipulate, catch, or throw an indoor wheelchair soccer ball are the main characteristics of this class.

### **SPECIFIC DISABILITY CHARACTERISTICS:**

#### **1A-BRAIN INJURY, CEREBRAL PALSY, AND STROKE**

- Severe spasticity, athetosis, ataxia or mixed quadriplegia
- Severely reduced range of motion and /or severe motor control problems in the upper extremities.
- No overhead throw
- Non-existent to poor trunk control
- Severely reduced or non-existent active/passive range of motion and/or motor control in the lower extremities.

#### **1B-NEURO-MUSCULAR/ MUSCULAR**

- Severe weakness and/or motor control problems in both upper extremities
- Severe bilateral limitation of upper extremity function against gravity
- Non-functional over head throw
- No dynamic trunk control
- Legs non-functional for manual wheelchair propulsion

or

- Uses motorized wheelchair due to endurance and/or functional limitations (need for this must be documented by physician)

#### 1-C-BONE AND JOINT (ORTHOPEDIC)

- Severe deformity and/or contractures in both upper extremities with severe limitation of range of motion of the shoulders, elbows, and hands, or combination thereof, making them non-functional to propel a wheelchair or functionally manipulate an indoor wheelchair soccer ball
- Severe trunk deformity with non-existent to poor trunk control or severe limitation of trunk movements
- Severe to moderate deformity or joint limitation of one or both lower extremities

#### 1D-SPINAL CORD INJURY

- C6 or above quadriplegia
- Functional to non-functional elbow flexors, wrist extensors – not able to functionally propel a manual wheelchair
- Non-functional elbow extensors, finger flexors, and intrinsic muscles
- Non-functional trunk or lower extremities
- Players with a C6 spinal lesion able to operate a manual wheelchair functionally would be considered class 2

#### 1E-AMPUTATION

- Bilateral above elbow amputation with ankle disarticulation or higher of at least one lower extremity
  - Non-functional operation of a manual wheelchair with lower extremity
- or
- One above and one below elbow with the below elbow stump less than 3 inches, with ankle disarticulation or higher of at least one lower extremity – non-functional operation of a manual wheelchair with lower extremity

### **CLASS II - GENERAL OVERVIEW**

Players may have severe to moderate disabilities of one or both upper extremities and trunk, and severe to minimal or no disability of one or both lower extremities. Player has the ability to functionally propel a manual wheelchair with one or both hands, one or both feet, or a combination of one foot and one hand.

Player may be able to use at least one arm at shoulder height or above. He/she may be able to trap-catch, catch, or throw an indoor wheelchair soccer ball with limited trunk function, and limited control of catch and throw. If a player fits the above description for Class II, he may use either a manual or a power chair in competition. That player will play as a Class II.

### **CLASS II SPECIFIC DISABILITY CHARACTERISTICS**

#### 2A-BRAIN INJURY, CEREBRAL PALSY, AND STROKE

- Severe to moderate spasticity, athetosis, ataxia or mixed quadriplegia, triplegia, or hemiplegia
- Severe to moderate reduction of function, range of motion, and/or motor control in one or both upper extremities
- Poor to fair functional trunk control/sitting balance (determining factor in placing hemiplegic in class II)
- Severe to moderate reduction of range of motion and/or motor control in one or both lower extremities

#### 2B-NEURO-MUSCULAR/ MUSCULAR

- Severe to moderate weakness or coordination problems in both upper extremities, with or without involvement in lower extremities
- Poor to fair trunk control

#### 2C-BONE AND JOINT (ORTHOPEDIC)

- Severe to moderate deformity or joint movement limitation of one or both upper extremities
- Severe to moderate limitation of trunk control
- Severe to normal lower extremities

- Unable to functionally throw an indoor wheelchair soccer ball with both hands above shoulder height

#### 2D-SPINAL CORD INJURY

- C7 level (C6 if can propel manual wheelchair functionally)
- Functional elbow flexors and wrist extensors
- Functional elbow extension against gravity (triceps)
- No functional finger flexors, wrist flexors, or intrinsic muscles
- No trunk balance
- Able to raise extended arms over head

#### 2E-AMPUTATION

- Bilateral below elbow amputation with stumps 3 in. or less  
Or
- One above elbow and one below elbow amputation (stumps 3 in. or longer)

### **CLASS III - GENERAL OVERVIEW**

Players may have moderate to minimal disability affecting one or both upper extremities. Trunk control will be affected in brain injury, CP, stroke, neuromuscular/muscular, and spinal cord injury. However, amputee and bone and joint (orthopedic) may have good to normal trunk control that assists in propulsion of the chair with one or both lower extremities may be severely to minimally involved. Players may have the ability to functionally propel a manual wheelchair with one or both hands, one or both feet, or a combination of one foot and one hand, catch, manipulate, and throw an indoor wheelchair soccer ball with one or both hands with minimal difficulty. The class III spinal cord injured player has poor trunk control with near - normal to normal upper extremities.

### **SPECIFIC DISABILITY CHARACTERISTICS**

#### 3A-BRAIN INJURY, CEREBRAL PALSY, AND STROKE

- Moderate to mild spastic, athetoid, ataxic or mixed quadriplegia, triplegia, diplegia, or hemiplegia
- Moderate to mild range of motion and/or motor control problems in upper extremities.
- May have minimal upper extremity involvement bilaterally
- Minimal trunk involvement
- Severe to mild involvement in one or more lower extremities
- Hemiplegics may have severe to minimal involvement in affected arm and hand

#### 3B-NEUROMUSCULAR / MUSCULAR

- Moderate to minimal weakness or coordination problems in one upper extremity – may or may not have involvement in lower extremities
- Minimal trunk involvement

or

- Minimal weakness or coordination problems in both upper extremities and shoulder girdle
- Good to normal trunk control (sitting balance)
- May or may not have weakness or coordination problems in one or both lower extremities

#### 3C-BONE AND JOINT (ORTHOPEDIC)

- Severe to moderate deformity or contracture in one upper extremity

or

- Minimal deformity or contracture in both upper extremities

or

- Severe to moderate trunk involvement/ deformity
- May or may not have lower extremity involvement

#### 3D-SPINAL CORD INJURY

- C8 to T5 spinal cord injury – functional elbow, wrist, finger flexors and extensors to fully functional upper extremities
- Functional trunk control non-existent - (T5 has upper trunk extension – no abdominal muscles)

### 3E-AMPUTATION

- Unilateral BE amputation - 3 in. stump or less.

or

- Partial hand amputation bilaterally (at least one thumb remaining)

### **CLASS IV - GENERAL OVERVIEW**

Players with brain injury, cerebral palsy, or stroke, with minimal involvement in one or more limbs who show near normal function in the upper extremities and good to normal trunk control. Players who have spinal cord injuries, T6 to T9, with none to partial abdominal muscle innervations, no lower spinal extension. Players who have a neuromuscular/muscular or bone and joint disabilities with one upper extremity minimally affected and lower extremities that may be fully functional to severely involved. These players may have some spinal deformity, which does not interfere with functional trunk movements for the sport. Players with partial amputation of one hand with at least thumb and 2 fingers remaining. May have lower extremity amputations.

### **SPECIFIC DISABILITY CHARACTERISTICS**

#### 4A-BRAIN INJURY, CEREBRAL PALSY, AND STROKE

- Minimally hemiplegic, diplegic, upper extremity monoplegic (athetosis, spasticity, ataxia or mixed involvement)
- Minimal range of motion and/or motor control involvement in one or both arms.
- Good trunk control (spasm or motor control may limit dynamic trunk function during sport)
- Severe to no range of motion or motor control problems in one or both lower extremities

#### 4B-NEUROMUSCULAR / MUSCULAR

- Minimal weakness or coordination problems in one upper extremity plus or minus leg involvement
- May have minimal involvement of trunk

#### 4C-BONE AND JOINT (ORTHOPEDIC)

- Minimal involvement in one upper extremity (involvement must affect sport)
- Severe to no contracture or deformity in one or both lower extremities
- Good to normal trunk control (sitting balance) – may have minimal trunk deformity

#### 4D-SPINAL CORD INJURY

- T6 to T9
- Fully functional upper extremities
- Poor to moderate trunk control depending on level of injury
- None to ½ abdominal muscles
- Non-functional lower extremities

#### 4E-AMPUTATION

- Partial amputation of one hand with at least thumb and two fingers remaining
- May have leg or foot amputations as well (which do not affect sitting balance)

or

- Hemi-pelvectomy, which affects sitting balance

### **CLASS V - GENERAL OVERVIEW**

Players may have a brain injury, CP, or stroke with no involvement in upper extremities or trunk (leg monoplegia). Players with spinal cord injuries (T10 and below) have most of their abdominal muscles and trunk extensors intact. Players with neuromuscular/muscular involvement or bone and joint (orthopedic) involvement that only functionally affect the lower extremities. Players may have unilateral or bilateral lower extremity amputations below the hip joint.

### **SPECIFIC DISABILITY CHARACTERISTICS**

#### 5A-BRAIN INJURY, CEREBRAL PALSY, AND STROKE

- Monoplegia – leg – mild to severe involvement
- No trunk involvement
- No upper extremity involvement

5B- NEUROMUSCULAR / MUSCULAR

- No weakness in upper extremities
- Near normal to normal trunk strength (if near normal, does not affect sport)
- Severe to minimal weakness in one or both lower extremities

5C- BONE AND JOINT (ORTHOPEDIC)

- No involvement in upper extremities
- No trunk deformity
- Severe to mild deformities in one or both lower extremities

5D-SPINAL CORD INJURY

- T10 and below
- Functional trunk control
- F+ to normal abdominal muscles
- F+ to normal low back extensors
- Must have muscle weakness in lower extremities to be eligible for participation in sport

5E-AMPUTATION

- Mid-foot or higher amputation of one or both lower extremities

