

Physical Education Badminton Equipment

RACKETS

A good badminton racket consists of 7 components.

Head, Grommets, String, "T" or Throat Piece, Shaft, Handle, Grip.

The racket head should be made of at a minimum, Tempered Steel. It should have a full set of grommets that are preferably made of nylon. A better material for the head of the racket would be a high grade of aluminum, preferably in the 6000 series for strength and lightness and not too thin a tube for durability sake. Graphite as a material is also very strong and light but the cost is prohibitive.

Since the strings are the component that come in contact with the shuttle, and will determine the hours of service for your rackets provided the frame is good, it is important that they be made of a strong multifilament nylon. No mono or steel strings should be employed as they will not hold up and in the case of steel will impact the life of the frame and the shuttles.

The shaft of the racket should be tempered steel and your "T" piece should ideally be made of the same material as the head. Zinc/aluminum is a strong standard in the industry. On a welded steel "T" be sure the seam is complete and welded on the top of the "T".

The handle and grip are usually thought of as the same component but are very separate items. The handle can be solid wood or a hollowed hard wood. The "cone" or feral, should be attached securely as should the bottom cap, or the grip will have little hope of staying in place. The grip itself should be a good quality P.U. material (soft and absorbent) and never a vinyl or plastic as the racket will inadvertently be thrown when perspiration develops on the hand. Ideally it should be tacked at the bottom and the top and be held in place by a non-solidifying adhesive or tape.

SHUTTLECOCKS

The 3 factors when considering shuttles are flight, durability, and cost. For the best possible flight, a high quality, tournament FEATHERD shuttle matches this category. The reasons are: The rotation should be perfect. The response off the strings (the time it takes for the shuttle to go from compressed flat to open) is the fastest possible. The compression of the cork and the interaction of the inserted feathers into the cork cause the tip of the shuttle to lead the way off the strings. The cost of this grade of shuttle is prohibitive.

A high grade Nylon shuttle should match as much as possible the characteristics described previously while providing significantly better durability. Towards that end, a high quality nylon injection molded skirt (feathers) and base are critical. The response will be enhanced if the rotation of the shuttle is molded and designed into the skirt. Since there are no feather quills to insert, the tube at the base of the skirt inserts into the tip of the shuttle. This tip is best made of a synthetic material such as P.U. or nylon since the tube is inserted into it and the tube does not

compress. A soft lower quality cork also plays well but is not durable. A high quality cork will last longer but poses a threat to your strings because of it's inability to compress. The color of your shuttles is dictated by the color of your facility walls and the lighting.