# Technical Specifications ■

Torsion Air™ Nesting Chair

April 2011

## **Seat and Backrest**

Seat is two-piece construction of molded plywood upholstery board with a molded compound curved polypropylene shroud with a textured finish. Seat is always upholstered. Foam (13/4") is applied to the molded plywood upholstery board. Fabric is then upholstered over the foam. Backrest frame is molded glass-reinforced nylon. Mesh fabric is 100% polyester. Backrest has an integral "handle".

Seat flips up to allow chairs to nest for storage and transport.

Seat and back are field replaceable.

## **Backrest Supports**

Two welded steel backrest supports attach the backrest to the torsion mechanism.

#### **Torsion Mechanism**

The back flex is achieved by the torsion mechanism. It consists of two flat torsion springs captured at both ends by steel bushings that are welded to the backrest supports. The torsion mechanism creates gradually increasing resistance over the full 12° of back flex.

## Flip-and-Fold Tablet

Available on RH or LH side. The tablet support is 1 <sup>3/16</sup>" O.D. x 14-gauge round steel tubing. The support is welded to the chair frame. The tablet mechanism consists of two die cast aluminum housings and a stamped steel hinge assembly. The main housing is mounted inside the steel support tube and secured with a thread-forming screw. The mechanism has two through-bolted pivot axes with bushing that allow stowing. The mechanism permits 12° of horizontal rotation for ingress/egress without stowing the tablet. With the tablet stowed, the chair will nest with other Torsion Air chairs with or without tablets. The tablet is made from blow-molded high-density polyethylene and is only available in black. The tablet is connected to the mechanism and supported by a 12-gauge steel plate. The tablet has an effective working surface 12" deep by 16" across.

# **Basic Flip-Up Tablet**

Available on RH or LH side. The tablet arm support structure is 1" diameter, 13-gauge tubing, welded to the main chair frame. A formed steel hinge is welded to the top of the support structure and secured with screws to the underside of the writing surface. Writing surface is nominally  $9^{\frac{1}{2}}$ " x  $20^{\frac{3}{4}}$ " x  $12^{\frac{1}{2}}$ " plywood core of  $\frac{5}{8}$ " thick, 11-ply hardwood, surfaced with 0.030" high-pressure laminate top and plain backer undersurface. Edges are lacquered and sealed. When so equipped, and with the tablet flipped up, chairs will nest with other Torsion Air chairs with tablets, or without.

## Frame

The frame is made up of four legs welded to a steel mechanism tube. The legs are 1" diameter, 13-gauge high-strength low alloy steel tubing.

## Arms

Armcaps are made of polypropylene. Armrests rotate with the back. Armcaps are field replaceable.

## Leg Finishes

Baked on electrostatically applied 45 sheen epoxy powder-coating or bright nickel-chrome plating.

# Casters/Glides

Double wheels (60mm) of high-impact thermoplastic. High-impact plastic frame. Caster is always black. Bell glide (2" high) made of high-impact plastic also available, black only.

