We believe every manufacturer should have a core mission. Ours is to always be at the Center of Superior Web Handling.

- Carbon Fiber Air Shafts
- Air Shafts
- Core Chucks
- Adapter Chucks
- Safety Chucks
- Bowed Rolls

www.nimcor.com
888.464.6267
Since 1961 NimCor has pioneered web handling solutions with innovative air shafts, air chucks and bowed rolls. Today, these NimCor products are used throughout the world by industry leaders who continue to seek superior productivity and web handling performance.

NimCor serves many diverse industries:
- wide web converting
- narrow web converting
- papermaking
- printing
- packaging
- blown film extruding
- plastic web converting
- foils and light metal converting
- many specialty manufacturers and converters

Additional information is available on our web site. As a custom solutions provider, NimCor offers you many choices and options. Call us for immediate answers to your particular web handling needs. We're ready to help!

Did you know that NimCor also offers you these value-added products and services?
- load and deflection calculations
- bowed roll installation and positioning diagrams
- carbon fiber idlers
- custom carbon fiber tubing
- custom journals for all core shafts
- hardened journals
- faster order turnaround than any other provider
- a wide selection of air shaft valves
- two basic blow guns for shaft inflation
- a national network of knowledgeable reps
- emergency repair service
- fast parts delivery

Did you know that NimCor provides parts and service for every product we’ve ever sold?
- same-day shipping on stock parts ordered by noon (Eastern Time Zone)
- an extensive library of engineering drawings identified by product serial numbers
- extensive inventories of all commonly used parts and components
- trained customer service reps to provide meaningful phone support
- Priority status for all emergency repairs

For superior web handling ... come to NimCor!
Carbon Fiber Air Shafts

NimCor offers an outstanding line of precision engineered carbon fiber shafts with unique performance features.

Because NimCor winds carbon fiber tubes in-house, we can control the strength and stiffness of your composite shafts using various fibers, resins and winding techniques. This design freedom results in higher strength-to-weight ratios, lower shaft weights, and improved ergonomics.

Why Carbon Fiber Air Shafts?
✓ dampens vibrations
✓ increases critical speed ranges
✓ reduces risk of worker injuries
✓ improves machinery efficiencies

Custom Carbon Fiber Tubes

NimCor has the capability to produce composite tubes up to 18 feet long and 21 inches in diameter. Our manufacturing engineers are experts in using various fiber and resin systems; allowing us to custom design air shafts to meet today’s most demanding applications.

- Specializing in thermoset filament winding
- High-strength PAN-based carbon fibers
- Ultra-high modulus pitch-based carbon fibers
- Structural epoxy resin systems matched to operating environment
- Durable resin outer coatings readily available
- Bearing journals and metallic mounting features expertly bonded to composite tubes
- Excellent for low-inertia idlers, print sleeve adapters and anilox roll bases

NimCor has the capability to produce composite tubes up to 18 feet long and 21 inches in diameter. Our manufacturing engineers are experts in using various fiber and resin systems; allowing us to custom design air shafts to meet today’s most demanding applications.
Air Shaft Designs

High-performance air shafts ... custom-engineered for a perfect fit.

From precision-fit journals to the gripping elements, NimCor air shafts are custom engineered to meet the exact needs of your application. NimCor retains all shaft drawings on file should you ever require a duplicate component or part.

Large Button
The large button air shaft is one of the most popular and versatile models.
- suitable for 2½” and larger core I.D.
- straight, staggered or offset button patterns
- suitable for most unwind and rewind applications

Small Button
Ideal for narrow web widths.
- for cores 1” and larger
- straight, staggered or offset button patterns
  (Shown with bearings)

Midget Button
Miniature version of a small button air shaft.
- ideal for narrow web widths
- straight, staggered or offset button patterns
- for cores 5⁄8” to 1½”

Lug
Elongated gripping elements provide excellent grip.
- for a full range of core sizes
- hardened lugs available for use with metal cores
- straight, staggered or offset patterns

Leaf
Primarily used for rewinding applications.
- continuous leaf surface helps retain shape of thin-wall cores
- steel or aluminum leaves
- plain or knurled leaf finish
- for cores from 1½” and larger
- core centering strips available

Most shaft bodies available in steel, aluminum and carbon fiber.

Button and lug gripping elements available in steel, aluminum or urethane.

ISO 9001 Certified since 1994

Product data sheets for specifying and quoting available at www.nimcor.com
Trapper Leaf
Primarily used for coreless winding.
• leaves help keep shape during coreless winding
• pneumatic activated leaf clamps web material edge to begin coreless winding

External Bladder
Easy to maintain and service.
• replace bladders quickly and easily
• replace parts without removing journals
• variety of core sizes

Sleeve
Leaf shaft design using fiberglass sleeves.
• provides smooth, continuous surface support
• lightweight design
• for cores from 3” and larger

Differential
Friction shafts hold multiple cores securely throughout winding.
• available for 3” and 6” cores
• available in steel or plastic
• equalizes winding tension over multiple cores
• bidirectional or unidirectional rotation

Reel Spools
Designed to pre-center and securely grip one roll or series of slit rolls.
• for cores from 3” up to 20”
• commonly used in tissue making

Custom core shafts are readily available, just call for a quote.

Custom-designed mounting journals available in choice of materials, from aluminum to hardened steel alloy.
Air Mechanical Chucks

Maximum torque with air-assisted grip.

NimCor’s air-actuated mechanical core chucks are designed for heavy-duty shaftless applications where maximum torque is required. These rugged chucks are easy to mount and easy to use with convenient air valve access.

- Self centering design
- Positive grip lugs
- Easy mounting saves time
- Convenient air entry through flange or back

A wide range of high-strength expansion mechanisms handle both domestic or metric core sizes.

Torque Chucks

Torque-activated chucks with high-performance, no-slip grip.

These torque-activated core chucks are made for continuous-duty shaftless applications. Perfect control when running heavy rolls with high brake torques. Constructed for long-term performance, these rugged chucks combine excellent gripping strength with trouble-free core insertion and removal.

- For 3” and 6” core sizes
- Excellent gripping strength without core damage
- Automatic engagement in either direction
- Precise centering with no-slip grip
- Long-wear construction reduces maintenance

Safety Chucks

Optimum safety at an exceptional value.

NimCor’s auto-locking safety chucks provide added operator protection in all winding applications. Self-closing design secures shaft regardless of rotation direction. The safety shield improves operator safety while protecting bearings against dirt and debris.

- Wide range of sizes, sockets and shapes
- Wide range of operating capacities
- Affordable and readily available
- Pedestal or flange mount

Positive automatic locking when rotating in either direction.

ISO 9001:2015 Certified since 1994

Product data sheets for specifying and quoting available at www.nimcor.com
Air Adapter Chucks

Fast and affordable handling of larger cores.

Choose from rugged aluminum or heavy-duty steel clamping collars for secure mounting onto core bars or backstand spindles. The choice of pneumatic bladder material is based upon your application to provide positive, high-torque engagement without wear or damage to cores.

- Fast-clamp design for convenient bar or spindle mounting
- Inserts easily into cores – up to 12" diameters
- Bladder material specified to meet your application
- High-torque grip with air inflation
- Removes easily without damage to core ends
- In stock and readily available

Dual chucks available with shared-air configuration

Available with and without core stop flanges.

**Note:** Torque based on 80 P.S.I. per pair of chucks.
Bowed Rolls

For better web control ... whenever it’s needed.

NimCor’s rugged bowed rolls provide precision web handling for the most demanding web converters — available in both permanent bow and adjustable bow models.

Proven mounting solutions ensure ease of installation as well as extended versatility in web control.

These precision bowed rolls are ideal for separation of slit webs, or the elimination of web wrinkles, slack edges and soft spots.

Exceptional performance is evidenced in the even distribution of lateral web tension and vibration-free operation at all specified speeds.

Outer sleeves are made of highly durable synthetic rubber compounds and specified to each application. Corded sleeves available for high operating speeds.

Adjusta-Bow™

A highly versatile roll with adjustable bow to meet varying web conditions.

- Adjustable while running
- Adjustable to meet different weights, grades, tensions and materials
- Provides precise control over slit separations and web wrinkling
- 3½” to 6½” diameters standard
- Optional drive pulley
- Extensive range of cover compounds and bearing supports
- Available with pedestal or flange mounts

Mounts & Bearing Designs

NimCor offers precision-engineered mounts and bearing housings that simplify bowed roll installations and servicing.

ISO 9001 Certified since 1994

Product data sheets for specifying and quoting available at www.nimcor.com
This optional housing lets you rotate the roll apex while running at full line speeds to achieve optimal web engagement and control. A socket-end drive shaft is supplied as standard. Customers can also apply motorized drives.

**Adjustable Bearing Housings**

A rugged, fixed bowed roll engineered for consistent, stable performance.
- Amount of bow is engineered for each application
- Provides precise web control
- 1½" to 7½" diameters standard
- Optional drive pulley
- Various cover compounds and bearing supports available
- Available with pedestal or flange mounts

**NimCor gives you more mounting options!**

- Mount on top of frame
- Mount inside of frame
- Mount outside of frame

**Bowed roll coverings are available to meet any web or environment challenge:**
- Abrasion resistant
- Oil and/or chemical resistant
- Heat resistant
- Acid resistant
- Solvent resistant
- High-release properties
- Dielectric properties

**Look to NimCor to help you keep your bowed rolls running longer.**

- ✔ technical support
- ✔ parts inventory
- ✔ repair services
- ✔ complete cover replacements
Vertical Center Lifts

NimCor Vertical Center Lifts keep workers safe and productive when lifting and maneuvering heavy rolls. Reduces risk of injury — even when handling small rolls. Models available to handle rolls with 3" and 6" cores.

- Self-expanding and self-locking
- Gravity activates serrated leaf to grip inner core
- Cannot be released while suspended vertically
- Fits 3" and 6" core diameters — other sizes available upon request
- Choose from spring-loaded or air-assisted models

Roll Restorer

The NimCor Roll Restorer is the industry's most convenient tool for quickly turning seemingly unusable stock back into profitable inventory.

Choose from Two Mobile Models:
- Standard model (2" to 6" core I.D.)
- Heavy Duty model (2" to 12" core I.D.)

The Roll Restorer comes with everything you need to salvage damaged rolls!

- Air-operated hydraulic pump
- 20-ton hydraulic ram with expander head
- Bar-lock assembly
- 1" diameter alloy steel draw bar
- Expander head and adapter flange
- Rugged mobile cart or forklift-mountable

The NimCor Roll Restorer helps salvage valuable paper, film, foil, plastic, paperboard — virtually any roll with a crushed or damaged core. The Roll Restorer can also be used to install shafts while restoring damaged rolls.
Flexo Press Accessories

Carbon Fiber Press Cylinders

With in-house winding operations, NimCor’s carbon fiber flexo press cylinders are quickly becoming the fastest and most economical way to keep presses running on a fast track.

• Tailor-made replacement cylinders for most all press makes and models
• Faster delivery and lower cost than ordering from off-shore press manufacturers
• Lightweight carbon fiber cylinders offer better ergonomics for a safer workplace
• Precision balanced to higher critical speeds than possible with steel

Carbon Fiber Bridge Mandrel Adapters

Get replacement carbon fiber bridge mandrel adaptors for hydraulic-mount sleeve flexo presses without enduring the long lead times and premium pricing common with offshore press OEMs.

• More economical than most OEM replacements
• Shorter lead times keep your presses running
• Reverse engineered to fit any hydraulic sleeve-style flexo press

Give new life to worn or damaged carbon fiber cylinders and mandrel adaptors!

Flexo printers are saving thousands with NimCor refurbishing services. Carbon fiber flexo cylinder and adapter refurbishing includes body resurfacing, replacing worn stainless steel inner rings, repairing worn or damaged journals – creating a product that looks new and performs like new. Call for us for a quote.
We believe every manufacturer should have a core mission. Ours is to always be at the Center of Superior Web Handling.