## Northeast Ohio Beam Alliance Limited (NEO Beam)

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- Who we are
- What we're about
- Our capabilities and plans
- How we fit your needs

#### • Industrial - Academic Partnership

- Mercury Plastics, Inc.
- Kent Regional Business Alliance
- Kent State University

**NEO Beam** *Limited-liability corporation* 

Mercury Plastics, Inc. (MPI) Privately-held corporation

MPI Customers

Kent Regional Business Alliance (KRBA) Not-for-profit corporation



#### • Kent State University

- Academic programs
- Technical training
- Applied research
- NEO Beam consortium
- Industry customers

#### • Facility Targets Mission

- Economical
- Flexible
- Reliable
- Supports development-to-commercialization





- Electron Beam: RDI Dynamitron
  - Beam Power: 150 KW
  - Beam Energy: 5 MeV
  - Beam energy turndown to 1 MeV
  - Beam power turndown to 1 KW
  - Flexible control system

- Vault
  - Scan horn to floor: 5 ft
  - Floor area: 21 ft x 30 ft
  - Floor-to-ceiling: 8 ft
  - Slots for continuous products
  - Conveyor for discrete products
  - Ports for bulk products
  - Few-of-a-kind run capabilities

- Conveyor System SI Handling Systems
  - Cart size: 48" x 72", 750 # /cart max. cap.
  - 5 to 55 feet / min. under-beam
  - Control modes
    - Master with beam-following
    - Slave-to-beam
    - Independent

- Reel to Reel Materials Handling
  - Tubing sizes: 0.188 in. to 1.25 in. OD
  - 1200 fpm to 120 fpm (size dependent)
  - Reel size: 48 in. to 96 in. (10,000 # max.)
  - Min. bend radius: 30 in.
  - Race-track and bow-tie under beam options
  - Flexible control modes for product needs

• On-site support facilities

– Labs:

- Dosimetry
- Polymer physical properties
- Temporary space
- Offices and General
  - Temporary office / general space
  - Video conferencing
  - Complete freight and materials handling

- Milestone
  *Start Construction Date Dec 1998*
  - Accelerator Delivery Jul 1999
  - Facility Operational Oct 1999
  - *Commercial Jan 2000*

- Training and developing your workforce
- Partnering on your development
- Consortium
- Beaming services