

# Carpet Fiber Identification



Project Consultants & Associates, Inc.

# Recycled Materials

- No longer “green add-ins”
- Add value to products
- Critical raw materials

# Toys of Old

- Materials with recycled content are NOT “Made in Japan”

# The Vision

I saw the angel in the marble and  
carved until I set him free.

Michelangelo

# Recycled Carpet

- Recycled carpet critical for many manufactured goods
- Carpet composition - fibers, low melt, high melt, inert materials
- Recycled carpet is a viable raw material

# Fiber Identification

- Fibers must be identified in many operations
- Viable, cost effective fiber ID equipment is in demand

# Basketball Too!



# Fiber ID Units

- Currently available, running line
- Industrial quality
- Portable

# Fiber ID Units

- Easy to use
- Works with “real world” carpet
- Cost effective
- Vendor support

# Technical Requirements

- Fast reading time (< 1 sec)
- Accurate and repeatable
- No “false positive” readings
- Not affected by fiber color
- Not affected by carpet texture

# Technical Requirements

- Not affected by moisture
- Not affected by dirt
- Not affected by topicals
- Available, updatable ID library



# Companies Investigated

Analytical Spectral Devices

Applied Instrument Technologies

Axsun Technologies

Bran + Luebbe

Brimrose

Bruker Optics Inc

# Companies Investigated

Foss NIRSystems

Infrared Fiber Systems

LT Industries

Mattson

MSS – CP Manufacturing

Perkin Elmer

Stamicarbon

Thermo Electron Corporation

# Unit Cost

Range \$25,000 to \$70,000

# The Future

Success is not final, failure is not fatal:  
it is courage to continue that counts.

Winston Churchill