

Doing it right; the first time;  
on time; every time.



### The Value of Solution Selling

“The Torque Transmission gearbox was selected for its small envelope, light weight and high torque strength. We subjected the right angle drives to rigorous testing and the drives successfully passed all of our tests.”

Craig Wunderly,  
Chief Engineer  
Applied  
Resources



Torque Transmission, Fairport Harbor, OH – December, 2006

**Applied Resources** is a manufacturer of The Raptor, the first commercially available, FDA-approved “Smart” Assistive Robot. The Raptor provides assistance for individuals with severe disabilities who use powered wheelchairs. The robotic arm’s elbow contains a right angle gearbox from **Torque Transmission**, which offers dual shaft output from an extended shaft input.

### The Problem

The company was seeking an alternative to the heavy, expensive metal gearboxes available on the market. They were looking for a readily available unit, but required a specific gear ratio and input shaft length

### The Solution

Torque Transmission’s **Right Angle Miter Gear Drive (RAB)**

- The drive is customized with a special cut gear ratio to increase torque to meet the customer’s requirement
- Further customization includes a longer input shaft than the standard drive configuration
- Molded nylon provides light weight and durability

### The Value to the Customer

**Applied Resources** realized the following benefits:

- Low cost. Half the cost of comparable metal case drives
- No up-front engineering cost by utilizing the standard gearbox configuration
- Lightweight molded nylon
- Durability

For more information call Gary Rusnak at 1-800-544-6642 or e-mail her at [sales@torquetrans.com](mailto:sales@torquetrans.com), or visit us at [www.torquetrans.com](http://www.torquetrans.com).