



## Parflex Harnesses & Bundles

Combine All The Advantages Of Parker Tubing



ENGINEERING YOUR SUCCESS.

# Harness & Bundle Solutions

## Reduce Costs

Parflex preformed harnesses and bundles can reduce installation times by more than 70%. In time studies, an average chassis tubing installation took 4 employees about 40 minutes to complete, but with a Parflex preformed harness, installation time dropped to 10 minutes with only 1 employee. Based on labor rates of \$30/hr, customers can save over \$75 per hour and 150 production minutes. In addition to reducing assembly time, preformed harnesses and bundles allow customers to free up employees who were once cutting and installing tubing to work in other bottleneck areas, thus increasing overall throughput.

A preformed harness or bundle can also increase shelf space while

reducing inventory and scrap. Furthermore, when utilizing JIT deliveries, a preformed harness or bundle could bypass the dock and be delivered straight to the production line.

Parflex preformed harnesses and bundles are the economical way to achieve maximum output while minimizing costs and effort. For more information on putting this tubing solution to work for your company, please contact the Parflex division.

### Order Information

Several different harnesses may be required on a single unit depending upon the model of the vehicle, wheel base, and options available. To determine your harness needs:

- **Recognize the cost savings** available to you through the use of harnesses. How many dollars will be saved on tubing installation alone? On scrap reduction?
- **Call Parker** to have one of our application engineers evaluate your application.
- **Have one of our engineers design and build a prototype** harness for your application.
- **Qualify the prototype** in your application. Prints and quote will be completed upon qualification.
- **Implement the harness** into your Purchasing / Production systems – one harness = one part number. Allows you to eliminate multiple part numbers you once had for each air brake line.

### Advantages

- Reduces installation time
- Reduces tubing scrap
- Reduces inventory components and costs
- Custom designs improve throughput
- Reduces labor costs

### Certifications

- Air brake tubing used in a Parflex Harness conforms to SAE J844
- DOT FMVSS 49CFR 571.106 except 2A, 3A, & 5A are not DOT sizes
- Parflex facility is ISO/TS 16949:2008 with ISO 14001 environmental certification

### Product Features

- Individual tubes are pre-cut and assembled into a single unit
- JIT programs available
- Custom designed and engineered to meet the exacting requirement of each truck or bus
- Each tube can be color-coded and/or numbered
- Harnesses may contain any number of tube sizes ranging from 1/8" O.D. to 3/4" O.D.
- Harnesses can be supplied with special clamps, brackets, and fittings to meet any need required by the customer

### Construction

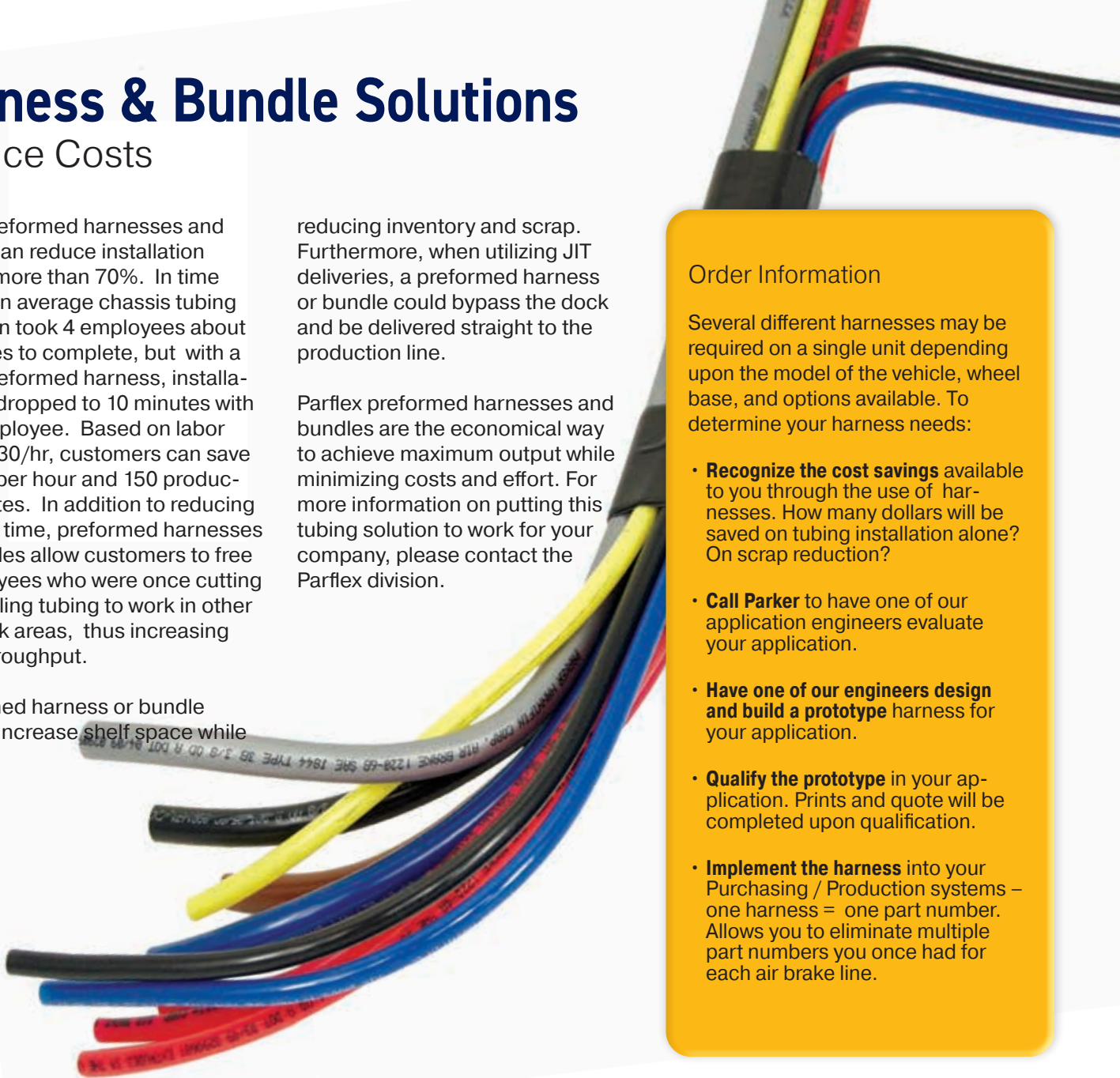
- Tube: Nylon Air Brake Tubing

### Operating Parameters

(Delta) Working Length @ Rated WPSI: +2%/-4%

### Options

Cut Tubes	Formed Harnesses
Cut Tube Kits	Straight Harnesses
Formed Tubes	Jacketed Bundles

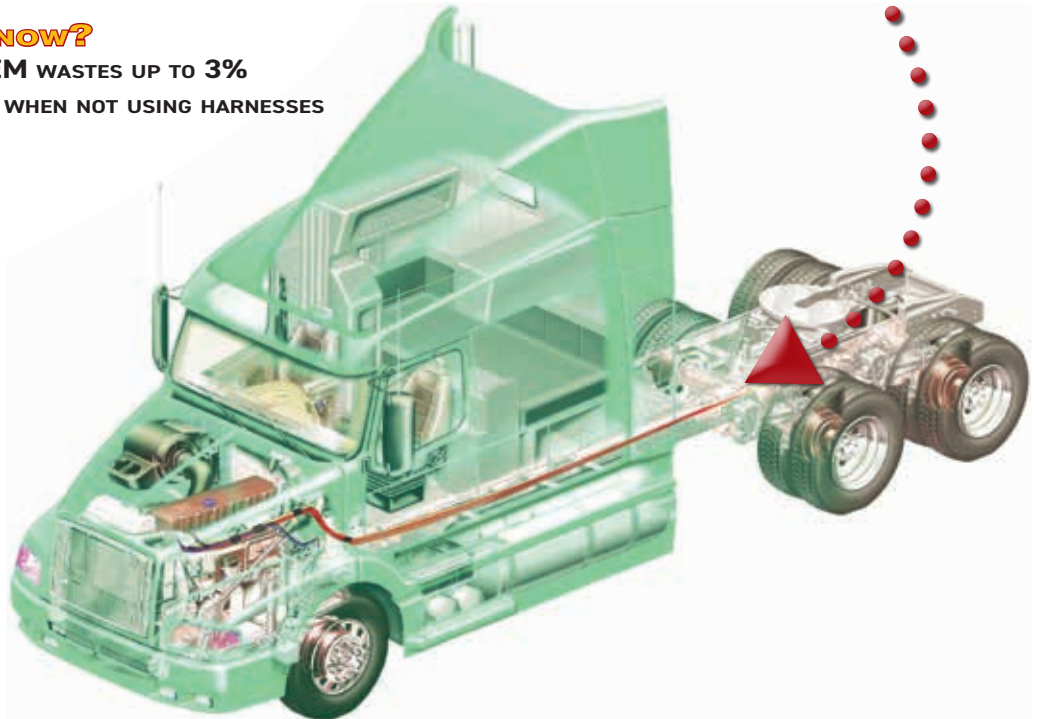




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SAVES  
150 production  
minutes

Harness Time Study			
	Average Time 1 chassis installation	Number of Employees	Total Client Labor
Single Tubing	40 min.	4	160 minutes
Parflex Bundled Tubing	10 min.	1	10 minutes

\$\$\$ **DID YOU KNOW?**  
THE AVERAGE OEM WASTES UP TO 3%  
OF THEIR TUBING WHEN NOT USING HARNESES



As the time study illustrates, a harness can result in significant savings. The greater the number of components, such as valves and air tanks, the greater the savings.

Multiple options are available. Whether it is a complex design or a few single line tubes, Parflex can engineer a tubing solution for you. Technical support and design ideas can also be provided by Parker to facilitate a company's needs.



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