## OFFSHORE REFERENCE LIST

### 1969 - Heerema - Netherlands
- Five (5) Pipe Tensioners
- Capacity: 12 t each
- Type: Wheel type
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1971 – N.O.C. - Netherlands
- Two (2) Pipe Tensioners
- Capacity: 35 t each
- Speed: 18 m/min
- Diameter: 3 to 48"
- Type: Horizontal 2-track
- Two (2) Hydraulic Power Units
- One (1) Remote Control Console.

### 1973 - Suleyman Vezir - Russia
- Three (3) Pipe Tensioners
- Capacity: 30 t each
- Speed: 18 m/min
- Diameter: 3 to 48"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1974 – N.O.C. - Netherlands
- Two (2) Pipe Tensioners
- Capacity: 70 t each
- Speed: 34 m/min
- Diameter: 3 to 48"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1975 – N.O.C. - Belgium
- Two (2) Pipe Tensioners
- Capacity: 70 t each
- Speed: 34 m/min
- Diameter: 3 to 48"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1976 – Northern Offshore
- One (1) Pipe Tensioner
- Capacity: 23 t
- Speed: 9 m/min
- Diameter: 8 to 36"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit

### 1980 - STK - France
- One (1) Pipe Tensioner
- Capacity: 5 t
- Diameter: 1 to 14"
- Type: Vertical 2-track
- One (1) Remote Control Console

### 1980 - Jardine - Singapore
- One (1) Pipe Tensioner
- Capacity: 40 t
- Speed: 31 m/min
- Diameter: 3 to 48"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console

### 1981 – Belco - Peru
- One (1) Pipe Tensioner
- Capacity: 25 t
- Speed: 33 m/min
- Diameter: 3 to 40"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console

### 1981 - Bouygues - France
- One (1) containerised Pipe Tensioner
- Capacity: 55 t
- Speed: 50 m/min
- Diameter: 3 to 40"
- Type: Horizontal 2-track
- One (1) Electric Power Unit
- One (1) Remote Control Console

### 1982 - Bouygues - France
- One (1) containerised Pipe Tensioner
- Capacity: 55 t
- Speed: 50 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) A&R Winch
- Capacity: 70 t
- Speed: 40 m/min
- One (1) Measuring Sheave
- Capacity: 70 t
- Position: Fixed Vertical
- One (1) Electric Power Unit
- One (1) Remote Control Console

### 1982 – Verolme - Brazil
- Four (4) Pipe Handling Davits
- Capacity: 50 t each
- Speed: 4 m/min
- Type: Single Line, Fixed Base
- Four (4) Local Control Consoles.
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console

### 1982 – Petrojet – Egypt
- One (1) containerised Pipe Tensioners
- Capacity: 40 t
- Speed: 26 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1984 – Satmarindo - Indonesia
- One (1) containerised Pipe Tensioner
- Capacity: 40 t
- Speed: 31 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) Measuring Sheave, model MS80FH
- Capacity: 80 t
- Position: Fixed Horizontal
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1984 – Petrojet - Egypt
- One (1) containerised Pipe Tensioner
- Capacity: 40 t
- Speed: 26 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1985 - NPCC - Abu Dhabi
- One (1) Pipe Tensioner
- Capacity: 45 t
- Speed: 47 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) Pipe Tensioner
- Capacity: 65 t
- Speed: 20 m/min
- Diameter: 3 to 60"
- Type: Horizontal 2-track
- One (1) A&R Winch
- Capacity: 110 t
- Speed: 20 m/min
- One (1) Measuring Sheave
- Capacity: 110 t
- Position: Fixed Horizontal
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.
### 1985 – Heerema - Netherlands
- Two (2) Umbilical Winches
  - Type: Single drum
  - Capacity: 3 t each
  - Speed: 10 m/min
  - Storage/each: 270 m @ 25mm
- One (1) Hydraulic Power Unit
- One (1) Remote Control Console.

### 1986 - Allseas - Netherlands
- Three (3) Pipe Tensioners
  - Capacity: 55 t each
  - Speed: 54 m/min
  - Diameter: 3 to 36"
  - Type: Horizontal 2-track
- One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 33 m/min
  - One (1) Measuring Sheave
    - Capacity: 120 t
    - Position: Fixed Horizontal
  - One (1) Sheave, model
    - Capacity: 120 t
    - Position: Fixed Horizontal
  - One (1) Hydraulic Power Unit
  - One (1) Remote Control Console.

### 1988 - Bouygues - France
- One (1) Cable Tensioner
  - Capacity: 20 t
  - Speed: 29 m/min
  - Diameter: 1 to 30"
  - Type: Vertical 2-track
- One (1) Hydraulic Power Unit
  - One (1) Remote Control Console.

### 1991 - Hyundai - Korea
- Two (2) Pipe Tensioners
  - Capacity: 45 t each
  - Speed: 31 m/min
  - Diameter: 3 to 48"
  - Type: Horizontal 2-track
- One (1) A&R Winch
  - Capacity: 110 t
  - Speed: 23 m/min
  - One (1) Measuring Sheave
    - Capacity: 110 t
    - Position: Fixed Horizontal
  - One (1) Hydraulic Power Unit
  - One (1) Remote Control Console.

### 1991 - Heerema - Netherlands
- Three (3) Pipe Tensioners
  - Capacity: 65 t each
  - Speed: 39 m/min
  - Diameter: 3 to 30"
  - Type: Horizontal 2-track
- One (1) Measuring Sheave
  - Capacity: 195 t
  - Position: Retractable Vertical
- One (1) Line-up Tool
- One (1) Pipe Stopper
- Ten (10) Clamping Roller sets
- One (1) Hydraulic Power Unit
  - One (1) Remote Control Console.

### 1992 – Heerema - Netherlands
- One (1) Umbilical Winch
  - Type: Double drum
  - Capacity: 2.5 t each
  - Speed: 12 m/min
  - Storage/each: 500 m @ 188mm
  - One (1) Hydraulic Power Unit
  - One (1) Remote Control Console.

### 1994 - Hyundai - Korea
- Two (2) Pipe Tensioners
  - Capacity: 90 t each
  - Speed: 43 m/min
  - Diameter: 3 to 60"
  - Type: Horizontal 2-track
- One (1) Measuring Sheave
  - Capacity: 230 t
  - Speed: 23 m/min
  - One (1) Measuring Sheave
    - Capacity: 225 t
    - Position: Fixed Horizontal
  - One (1) Hydraulic Power Unit

### 1994 – Essar - India
- One (1) Pipe Tensioner
  - Capacity: 45 t
  - Speed: 30 m/min
  - Diameter: 3 to 48"
  - Type: Horizontal 2-track
- One (1) Remote Control Console

### 1997 - CNOOC - China
- One (1) Pipe Tensioner
  - Capacity: 23 t
  - Speed: 25 m/min
  - Diameter: 4 to 30"
  - Type: Vertical 2-track
- One (1) Hydraulic Power Unit
  - One (1) Remote Control Console

### 1997 – Valentine - Abu Dhabi
- One (1) Pipe Tensioner
  - Capacity: 55 t
  - Speed: 30 m/min
  - Diameter: 3 to 60"
  - Type: Horizontal 2-track
- One (1) A&R Winch
  - Capacity: 60 t
  - Speed: 30 m/min
  - One (1) Measuring Sheave
    - Capacity: 60 t
    - Position: Fixed Horizontal
  - One (1) Electric Power Unit (DC)
  - One (1) Remote Control Console.

### 1997 - IMCC - Kuwait
- One (1) Pipe Tensioner
  - Capacity: 16 t
  - Speed: 20 m/min
  - Diameter: 3 to 18"
  - Type: Vertical 2-track
- One (1) Hydraulic Power Unit
  - One (1) Remote Control Console

### 1998 – Torch Inc. - USA
- One (1) Pipe Tensioner
  - Capacity: 23 t
  - Speed: 18 m/min
  - Diameter: 2 to 28"
  - Type: Vertical 2-track
- One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console.

### 1998 - Komaritim - Indonesia
- One (1) Pipe Tensioner
  - Capacity: 25 t
  - Speed: 17 m/min
  - Diameter: 3 to 52"
  - Type: Vertical 2-track
- One (1) Remote Control Console

### 1998 – Stolt - Singapore
- Two (2) Pipe Tensioners
  - Capacity: 25 t each
  - Speed: 17 m/min
  - Diameter: 3 to 52"
  - Type: Vertical 2-track
- One (1) A&R Winch
  - Capacity: 50 t
  - Speed: 17 m/min
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) Pipe Handling System
  - Capacity: 20 t per pipe joint
  - Speed: 24 m/min
  - Diameter: 6 to 52"

### 1999 – Torch Inc. - USA
- One (1) Flexible Lay-System, consisting of;
  - One (1) 200t Offshore Reel
  - One (1) adjustable Reel Drive
  - One (1) complete Lay-Ramp including;
    - one (1) Straightener
    - one (1) 10t Tensioner
    - one (1) Work Station
    - one (1) 20t Hang-Off Clamp
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) Transpooling System, consisting of;
    - One (1) 200t Offshore Reel
    - One (1) Under Roller
    - One (1) Spooler/Level Winder
    - One (1) Hydraulic Power Unit
    - One (1) Local Control Console
OFFSHORE REFERENCE LIST Cont’d

1999 – Stolt Offshore - UK
Three (3) Pipe Tensioners
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 t each</td>
<td>20 m/min</td>
<td>2 to 22&quot;</td>
<td>4-track</td>
</tr>
</tbody>
</table>
Two (2) Pipe Tensioners
One (1) A&R Capstan Winch
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>17 t each</td>
<td>20 m/min</td>
<td>12&quot;</td>
<td>Vertical 2-track</td>
</tr>
</tbody>
</table>
One (1) A&R Storage Reel
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,500 m</td>
<td>20 m/min</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

2000 – CNOOC - China
One (1) Pipe Handling System, consisting of Eighteen (18) Longitudinal Endo-Rollers
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 t each</td>
<td>20 m/min</td>
<td>22&quot;</td>
<td>Adjustable Base</td>
</tr>
</tbody>
</table>
One (1) Line-Up Station
Four (4) Pipe Ramp Support Roller Units
One (1) Hydraulic Power Unit
One (1) Local Control Console
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 t per pipe joint</td>
<td>30 m/min</td>
<td>8 - 60&quot;</td>
<td>Vertical 2-track</td>
</tr>
</tbody>
</table>

2000 – IOEC - Iran
One (1) Pipe Handling System, consisting of
One (1) Transverse Conveyor System
One (1) Line-Up Station
One (1) Front End Roller
Four (4) Pipe Ramp Support Roller Units
Three (3) Stern Support Roller Units
Nine (9) Stinger Roller Boxes
One (1) Hydraulic Power Unit
One (1) Local Control Console
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 t each</td>
<td>20 m/min</td>
<td>4 - 60&quot;</td>
<td>-</td>
</tr>
</tbody>
</table>
One (1) A&R Winch
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 t</td>
<td>20 m/min</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

2001 – SeaTrucks - Nigeria
One (1) complete Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 t each</td>
<td>20 m/min</td>
<td>60&quot;</td>
<td>Wheel type</td>
</tr>
</tbody>
</table>
One (1) A&R Winch
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 t</td>
<td>15 m/min</td>
<td>22&quot;</td>
<td>-</td>
</tr>
</tbody>
</table>

2000 – Heerema - Netherlands
One (1) complete Pipe Handling and Multi-Jointing System, consisting of among others:
Pipe Supports
Transfer Vehicles
Line-Up Stations
Shelters & Cranage
Hoists
Auxiliaries
Hydraulic Power Units
Electric Power Units
Local Control Consoles
Remote Control Consoles
Pipe Tracking System
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 t per single joint</td>
<td>1 m/min</td>
<td>5&quot;</td>
<td>Wheel type</td>
</tr>
</tbody>
</table>
One (1) A&R Winch
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>35 t</td>
<td>1 m/min</td>
<td>5 - 5&quot;</td>
<td>-</td>
</tr>
</tbody>
</table>
One (1) Local Control Console
<table>
<thead>
<tr>
<th>Capacity</th>
<th>Speed</th>
<th>Diameter</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 t</td>
<td>15 m/min</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### 2001 – NPCC - Abu Dhabi
One (1) control- and drive system for upgrade of a 2 tensioner (110t) system to a 3 tensioner (150t) Pipe Lay System

### 2001 – Stolt Offshore – UK
Two (2) Pipe Tensioners
- **Capacity**: 115 t each
- **Speed**: 20 m/min
- **Diameter**: 2 to 22″
- **Type**: 4-track

Including one (1) Electric Power Unit (AC) and upgrade of
Two (2) 17t Pipe Tensioners to
- **Capacity**: 20 t each
- **Speed**: 20 m/min
- **Diameter**: 2 to 22″
- **Type**: 4-track

One (1) 65t Pipe Tensioner to
- **Capacity**: 75 t each
- **Speed**: 20 m/min
- **Diameter**: 2 to 22″
- **Type**: 4-track

One (1) 65t A&R Winch to
- **Capacity**: 75 t
- **Speed**: 20 m/min
- **One (1) 35 t A&R Winch to**
- **Capacity**: 40 t
- **Speed**: 20 m/min
- **One (1) Remote Control Cabin.**

### 2001 – SeaTrucks - Nigeria
One (1) Pipe Tensioner
- **Capacity**: 60 t
- **Speed**: 20 m/min
- **Diameter**: 4 - 60″

### 2002 – NPCC - Abu Dhabi
One (1) A&R Winch
- **Capacity**: 155 t
- **Speed**: 30 m/min

### 2002 – Heerema - Netherlands
One (1) Double/Double-Jointing System, consisting of:
- Pipe Supports
- Longitudinal Rollers
- Transfer Vehicles
- Line-Up Stations
- Shelter & Hoists
- Auxiliaries
- Hydraulic Power Unit
- Electric Power Unit (AC)
- Local Control Consoles
- Remote Control Consoles
- Pipe Tracking System
- **Capacity**: 12 t per single joint
- **Diameter**: 4.5 - 32″

### 2002 – JDR Cable - England
One (1) Umbilical Winch
- **Tension**: 9 t (dynamic)
- **Speed**: 20 m/min
- **Capacity**: 2,400 m @ 106 mm

One (1) Level Winder/Fairlead
One (1) Electric Power Unit (AC)
One (1) Local Control Console

### 2002 – Global Industries - USA
One (1) complete Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
- **Capacity**: 100 t each
- **Speed**: 30 m/min
- **Diameter**: 4 - 60″

One (1) A&R Winch
- **Capacity**: 200 t
- **Speed**: 30 m/min

Three (3) Electric Power Units (AC)
One (1) Remote Control Console

### 2002 – Global Industries - USA
One (1) Pipe Handling System, consisting of
Four (4) Longitudinal Endo-Rollers

One (1) Line-Up Station
One (1) Local Control Console
- **Capacity**: 30 t per pipe joint
- **Speed**: 25 m/min
- **Diameter**: 6 - 48″

### 2002 – Global Industries - USA
One (1) Pipe Handling System, consisting of
Twelve (12) Longitudinal Endo-Rollers
Three (3) Drive Cabinets
- **Capacity**: 30 t per pipe joint
- **Speed**: 25 m/min
- **Diameter**: 4 - 60″

### 2002 – Allseas – Netherlands
One (1) Pipe Tensioner
- **Capacity**: 100 t
- **Speed**: 30 m/min
- **Diameter**: 3 - 60″
- **Type**: Vertical 2-track

### 2003 – SADRA - Iran
One (1) Pipe Handling System, consisting of
Twenty-nine (29) Longitudinal Conveyor Rollers

Two (2) Transfer Car Systems
One (1) Line-Up Station
Four (4) Pipe Ramp Support Roller Units
Two (2) Stern Support Roller Units
Six (6) adjustable Stinger Roller Boxes
One (1) Hydraulic Power Unit
Two (2) Local Control Consoles
- **Capacity**: 30 t per pipe joint
- **Speed**: 30 m/min
- **Diameter**: 4 - 60″

### 2003 – SADRA - Iran
Six (6) Pipe Handling Davits
- **Capacity**: 40 t each
- **Speed**: 3 m/min
- **Type**: Dual Line, Fixed Base

Six (6) Hydraulic Power Units
Six (6) Local Control Consoles
One (1) common Remote Control Console

### 2003 – Menck - Germany
One (1) Umbilical Winch
- **Tension**: 185 kN
- **Speed**: 12 m/min
- **Capacity**: 360 m @ 6 x 2″

One (1) Level Winder/Fairlead
One (1) Electric Power Unit (AC)
One (1) Local Control Console
One (1) Umbilical Winch
- **Tension**: 15 kN
- **Speed**: 12 m/min
- **Capacity**: 360 m @ 2 x 2″

One (1) Electric Power Unit (AC)
One (1) Local Control Console
<table>
<thead>
<tr>
<th>Year</th>
<th>Company</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2003 | Valentine - Abu Dhabi | One (1) complete Pipe Tensioning System, consisting of:
One (1) Pipe Tensioner
Capacity: 50 t
Speed: 22 m/min
Diameter: 3 - 60"
One (1) 45mt Pipe Tensioner,
(upgrade/refurbishment of existing Tensioner)
One (1) A&R Winch
Capacity: 100 t
Speed: 22 m/min
Storage: 900 m of 64 mm SWR
One (1) Hydraulic Power Unit (upgrade)
One (1) Remote Control Console. |
| 2004 | Saipem - France | One (1) Pipe Tensioner
(upgrade/refurbishment of existing Tensioner)
Capacity: 75 t
Speed: 20 m/min
Diameter: 2 to 22"
Type: 4-track
One (1) Electric Power Unit (AC)
One (1) Remote Control Cabin. |
| 2004 | NPCC - Abu Dhabi | One (1) Pipe Tensioner
Capacity: 25 t
Speed: 25 m/min
Diameter: 4 to 32"
Type: Vertical 2-track
One (1) A&R Winch
Capacity: 25 t
Speed: 25 m/min
Storage: 500 m of 38 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console. |
| 2004 | Stolt Offshore - France | Survey and upgrade of existing and supply of new Pipe Handling Equipment on board laybarg ‘LB 200’
One (1) Pipe Tensioner
Capacity: 350 t each
Speed: 25 m/min
Diameter: 6 to 60"
Type: Vertical 2-track |
| 2005 | Allseas - Netherlands | Three (3) Pipe Tensioners
Capacity: 127.5 t each
Speed: 12 m/min
Diameter: 100 to 420 mm
Type: 4-track
One (1) A&R Capstan Winch
Capacity: 255 t
Speed: 12 m/min
One (1) A&R Storage Reel
Capacity: 2,500 m
SWR diameter: 85 mm
One (1) Electric Power Unit (AC)
One (1) Remote Control Cabin. |
| 2005 | SeaTrucks - Nigeria | One (1) Pipe Tensioning System, consisting of:
One (1) Pipe Tensioner
Capacity: 100 t
Speed: 25 m/min
Diameter: 4 - 60"
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System, consisting of:
Seventeen (17) Longitudinal Endo-Rollers
Two (2) Transverse Conveyors System
One (1) Line-Up Station
Two (2) Pipe Ramp Support Roller Units
Two (2) Pipe Stern Support Roller Units
Eight (8) Stinger Roller Boxes
One (1) Hydraulic Power Unit
One (1) Local Control Console
Capacity: 32 t per pipe joint
Diameter: 4 - 60" |
| 2005 | Menck - Germany | One (1) Umbilical Winch
Tension: 185 kN
Speed: 12 m/min
Capacity: 240 m @ 6 x 2"
One (1) Level Winder/Fairlead
One (1) Electric Power Unit (AC)
One (1) Local Control Console
One (1) Umbilical Winch
Tension: 15 kN
Speed: 12 m/min
Capacity: 240 m @ 2 x 2"
One (1) Electric Power Unit (AC)
One (1) Local Control Console |
| 2005 | SubSea7 - USA | One (1) Pipe Tensioner
Capacity: 75 t each
Speed: 20 m/min
Diameter: 2 to 22"
Type: 4-track
One (1) Electric Power Unit (AC)
One (1) Remote Control Console. |
2005 – Global Industries - USA
One (1) Pipe Tensioner
Capacity : 100 t
Speed : 25 m/min
Diameter : 4 - 60”
One (1) Electric Power Unit (AC)
One (1) Remote Control Console.

2005 – SubSea7 - Brazil
Two (2) Pipe Tensioners
Capacity : 150 t each
Speed : 12 m/min
Diameter : 100 to 420 mm
Type : 4-track
One (1) A&R Traction Winch
Capacity : 12 m/min
One (1) A&R Storage Reel
Capacity : 2,500 m
SWR diameter : 93 mm
One (1) Electric Power Unit (AC)
One (1) Remote Control Cabin.
One (1) upgrade 350mt A-frame

2005 – Ezra - Singapore
Two (2) Pipe Tensioners
Capacity : 100 t
Speed : 25 m/min
Diameter : 6 - 60”
One (1) A&R Winch
Capacity : 220 t
Speed : 25 m/min
Storage : 1,200 m of 88 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System, consisting of:
Longitudinal Endo-Rollers
Transfer Vehicles
Line-Up Station
Pipe Ramp Support Roller Units
Pipe Stern Support Roller Units
Stinger Roller Boxes
One (1) Hydraulic Power Unit
One (1) Local Control Console
Capacity : 35 t per pipe joint
Diameter : 4 - 52”

2005 – Ezra - Singapore
Five (5) Pipe Handling Davits
Capacity : 50 t each
Speed : 3 m/min
Type : Dual Line, Fixed Base
Five (5) Hydraulic Power Units
Five (5) Local Control Consoles
One (1) common Remote Control Console

2005 – MRTS - Russia
One (1) Pipe Tensioner
Capacity : 100 t
Speed : 25 m/min
Diameter : 4 - 60”
One (1) A&R Winch
Capacity : 100 t
Speed : 25 m/min
Storage : 700 m of 64 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2005 – MRTS - Russia
One (1) complete Pipe Handling System, consisting of:
Longitudinal Endo-Rollers
Transverse Conveyors System
Longitudinal Rollers
Line-Up Station
Pipe Rack Support Roller Units
Pipe Stern Support Roller Units
Stinger Roller Boxes
One (1) Hydraulic Power Unit
One (1) Local Control Console
Capacity : 25 t per pipe joint
Diameter : 4 - 60”

2006 – Apecs - Singapore
Two (2) Pipe Tensioners
Capacity : 60 t
Speed : 25 m/min
Diameter : 6 - 60”
One (1) A&R Winch
Capacity : 120 t
Speed : 25 m/min
Storage : 500 m of 44 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console.

2006 – Helix - USA
Three (3) Pipe Tensioners
Capacity : 135 t each
Speed : 30 m/min
Diameter : 6 to 42”
One (1) A&R Tractoin Winch
Capacity : 450 t
Speed : 30 m/min
One (1) A&R Storage Reel
Capacity : 3,500 m
SWR diameter : 110 mm
One (1) A&R Storage Reel
Capacity : 3,500 m
SWR diameter : 85 mm
One (1) Electric Power Unit (AC)
One (1) Remote Control Console.

2006 – Helix - USA
One (1) one complete Pipe Handling System, consisting of:
Longitudinal Endo-Rollers
Pipe Elevators
Transverse Conveyor System
Longitudinal Rollers
Line-Up Station
Pipe Rack Support Roller Units
Pipe Stern Support Roller Units
One (1) Hydraulic Power Unit
Two (2) Local Control Consoles
Capacity : 25 t per pipe joint
Diameter : 6 - 42”
**OFFSHORE REFERENCE LIST Cont’d**

### 2006 – Oceanteam - UK
- **Two (2) Pipe Tensioners**
  - Capacity: 120 t each
  - Speed: 1,000 m/ hr
  - Diameter: 50 to 420 mm
  - Type: 4-track
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Cabin.

### 2006 – OffCon – Sharjah, UAE
- **One (1) Pipe Tensioning System, consisting of:**
  - Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 4 - 60”
  - Type: horizontal
  - One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 25 m/min
  - Storage: 700 m of 64 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System, consisting of:
    - Seventeen (17) Longitudinal Endo-Rollers
    - Two (2) Transverse Conveyors System
    - One (1) Line-Up Station
    - Three (3) Pipe Ramp Support Roller Units
    - Two (2) Pipe Stern Support Roller Units
    - Eight (8) Slinger Roller Boxes
    - One (1) Hydraulic Power Unit
    - Two (2) Local Control Consoles
    - Capacity: 32 t per pipe joint
    - Diameter: 4 - 60”

### 2007 – Petrobras – Brazil
- **One (1) Pipe Tensioning System, consisting of:**
  - Two (2) Pipe Tensioners
  - Capacity: 160 t
  - Speed: 25 m/min
  - Diameter: 6 - 48”
  - Type: vertical
  - One (1) A&R Traction Winch
  - Capacity: 320 t
  - Speed: 16 m/min
  - One (1) A&R Storage Reel
  - Capacity: 1,700 m
  - SWR: 95 mm
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

### 2007 – NOR Offshore – Singapore
- **Five (5) Pipe Handling Davits**
  - Capacity: 50 t each
  - Speed: 3 m/min
  - Type: Dual Line, Fixed Base
- **Five (5) Hydraulic Power Units**
- **Five (5) Local Control Consoles**
- **One (1) common Remote Control Console**

### 2007 – Mardive – Abu Dhabi, UAE
- **One (1) Pipe Tensioning System, consisting of:**
  - Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 20 m/min
  - Diameter: 4 - 60”
  - Type: horizontal
  - One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 20 m/min
  - Storage: 700 m of 64 mm SWR
  - One (1) complete Pipe Handling System
  - Capacity: 30 t per pipe joint
  - Diameter: 4 - 60”

### 2007 – Larsen & Toubro – India
- **One (1) Pipe Tensioning System, consisting of:**
  - Two (2) Pipe Tensioners
  - Capacity: 100 t
  - Speed: 35 m/min
  - Diameter: 4 - 60”
  - Type: vertical
  - One (1) A&R Winch
  - Capacity: 200 t
  - Speed: 25 m/min
  - Storage: 1,600 m of 88 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 35 t per pipe joint
  - Diameter: 4 - 60”

### 2007 – MDL – India
- **One (1) Pipe Tensioning System, consisting of:**
  - Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 6 - 60”
  - Type: horizontal
  - One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 25 m/min
  - Storage: 650 m of 64 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 25 t per pipe joint
  - Diameter: 6 - 60”

### 2007 – Valentine - Abu Dhabi
- **One (1) Pipe Tensioner**
  - Capacity: 62.5 t
  - Speed: 30 m/min
  - Diameter: 3 to 60”
  - Type: Horizontal 2-track
  - One (1) A&R Winch
  - Capacity: 125 t
  - Speed: 30 m/min
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
### 2007 – COOEC – China
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 100 t each
  - Speed: 40 m/min
  - Diameter: 4 - 60"
  - Type: vertical
- One (1) A&R Winch
  - Capacity: 200 t
  - Speed: 40 m/min
  - Storage: 1,200 m of 88 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

### 2007 – Punj Lloyd – India
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 60 t each
  - Speed: 25 m/min
  - Diameter: 6 - 60"
  - Type: horizontal
- One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 25 m/min
  - Storage: 650 m of 64 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 25 t per pipe joint
  - Diameter: 6 - 60"

### 2007 – COOEC – China
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 200 t each
  - Speed: 40 m/min
  - Diameter: 4 - 60"
  - Type: vertical
- One (1) A&R Winch
  - Type: Traction
  - Capacity: 400 t
  - Speed: 40 m/min
  - Storage: 3,500 m of 108 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

### 2007 – Wellstream - USA
One horizontal lay spread, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 75 t each
  - Speed: 1,200 m / hr
  - Diameter: 50 to 600 mm
  - Type: 4-track
- One (1) A&R Winch
  - Capacity: 150 t
  - Speed: 20 m / min
  - Storage: 1,200 m of 72 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Cabin.
  - Two (2) Reel Drive Systems
  - Capacity: 300 t
  - Pull: 20mt @ 1 rpm
  - Type: Adjustable Base
  - Two (2) Electric Power Units (AC)
  - One (1) Remote Control Console.

### 2007 – Swiber - Singapore
Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 6 - 60"
- One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 25 m/min
  - Storage: 500 m of 44 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

### 2007 – Aramco - Singapore
Six (6) Pipe Handling Davits
  - Capacity: 50 t each
  - Speed: 10 m/min
  - Type: Dual Line, Fixed Base
  - Six (5) Hydraulic Power Units
  - Six (6) Local Control Consoles
  - One (1) common Remote Control Console

### 2008 – Cecon - Norway
One vertical lay tower, consisting of:
- One (1) Pipe Tensioner
  - Capacity: 200 t
  - Speed: 1,200 m/ hr
  - Diameter: 100 to 600 mm
  - Type: 4-track
- One (1) A&R Winch
  - Capacity: 80 t
  - Speed: 500 m / hr
  - Storage: 3,500 m of 56 mm SWR
  - One (1) Handling Tower Winch
  - Capacity: 90 t
  - Speed: 40 m / min
  - Storage: 200 m of 76 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Cabin.

### 2008 – OffCon - Sharjah, UAE
One (1) Pipe Tensioning System, consisting of:
- Three (3) Pipe Tensioners
  - Capacity: 200 t
  - Speed: 25 m/min
  - Diameter: 4 - 60"
  - Type: horizontal
- Two (2) A&R Traction Winches
  - Capacity: 300 t.
  - Speed: 25 m/min
- Two (2) A&R Storage Reels
  - Capacity: 3,500 m
  - SWR diameter: 92 mm
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 32 t. per pipe joint
  - Diameter: 4 - 60"
2008 – OIS – Nigeria
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
Capacity : 60 t each
Speed : 20 m/min
Diameter : 4 - 52”
Type : horizontal
One (1) A&R Winch
Capacity : 120 t
Speed : 20 m/min
Storage : 650 m of 64 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 25 t per pipe joint
Diameter : 4 - 60”

2008 – OffCon – Sharjah, UAE
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
Capacity : 200 t
Speed : 25 m/min
Diameter : 4 - 60”
Type : horizontal
One (1) A&R Traction Winch
Capacity : 400 t
Speed : 25 m/min
Two (2) A&R Storage Reels
Capacity : 3,500 m
SWR diameter : 109 mm
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 32 t per pipe joint
Diameter : 4 - 60”

2008 – OIS – Nigeria
One (1) Pipe Tensioning System, consisting of:
One (1) Pipe Tensioner
Capacity : 25 t
Speed : 25 m/min
Diameter : 4 - 32”
Type : vertical
One (1) A&R Winch
Capacity : 25 t
Speed : 25 m/min
Storage : 500 m of 38 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 12 t per pipe joint
Diameter : 4 - 32”

2008 - SHL - Netherlands
One (1) 5,000t Crane Hoisting System, consisting of:
Two (2) Main Hoist Winches
Capacity : 2 x 100 t
Speed : 50 m/min
Storage : 2 x 1,520 m of 64mm SWR
One (1) Boom Hoist Winch
Capacity : 2 x 100 t
Speed : 71 m/min
Storage : 2 x 1,590 m of 64mm SWR
One (1) Auxiliary Hoist 1
Capacity : 55 t
Speed : 52 m/min
Storage : 2 x 1,110 m of 52mm SWR
One (1) Auxiliary Hoist 2
Capacity : 54 t
Speed : 60 m/min
Storage : 470 m of 52mm SWR
One (1) Whip Hoist
Capacity : 60 t
Speed : 52 m/min
Storage : 450 m of 52 SWR
One (1) Trolley Hoist
Capacity : 16 t
Speed : 60 m/min
Storage : 230 m of 30mm SWR
One (1) Trolley Travel Hoist
Capacity : 35 t
Speed : 30 m/min
Storage : 70 m of 52mm SWR

2008 – GSP – Rumania
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
Capacity : 60 t
Speed : 25 m/min
Diameter : 6 - 60”
Type : horizontal
One (1) A&R Winch
Capacity : 120 t
Speed : 25 m/min
Capacity : 700 m of 64 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 12 t per pipe joint
Diameter : 6 - 32”

2008 – GSP – Rumania
One (1) 8-p Mooring System, consisting of:
Eight (8) Winches
Capacity : 100 t
Speed : 16 m/min
Capacity : 2,500 m of 52 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (8) Local Control Stations

2008 – ZPMC – China
Four (4) complete Pipe Handling Systems
Capacity : 30 t per pipe joint
Diameter : 4 - 60”

2009 – Menck - Germany
One (1) Hydraulic Hose Winch
Tension : 185 kN
Speed : 12 m/min
Capacity : 360 m @ 6 x 2”.
One (1) Level Winder/Fairlead
One (1) Electric Power Unit (AC)
One (1) Local Control Console
One (1) Air Hose / Umbilical Winch
Tension : 15 kN
Speed : 12 m/min
Capacity : 360 m
One (1) Electric Power Unit (AC)
One (1) Local Control Console
### OFFSHORE REFERENCE LIST Cont’d

#### 2009 – Wellstream – USA
One horizontal lay spread, consisting of:
- One (1) Pipe Tensioner
  - Capacity: 200 t each
  - Speed: 1,000 m/hr.
  - Diameter: 100 to 700 mm
  - Type: 4-track
- One (1) Electric Power Unit (AC)
- One (1) Remote Control Cabin.

#### 2009 – Sigur Ros – Malaysia
One (1) Pipe Tensioning System, consisting of:
- One (1) Pipe Tensioner
  - Capacity: 60 t
  - Speed: 20 m/min
  - Diameter: 4 - 60"
  - Type: Horizontal
  - One (1) A&R Winch
  - Capacity: 60 t
  - Speed: 20 m/min
  - Storage: 700 m of 48 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

#### 2009 – Heerema – Netherlands
One (1) Barge Mooring System, consisting of:
- Four (4) Mooring winches
  - Capacity: 20 t
  - Speed: 30 m/min
  - Storage: 200 m of 32 mm SWR
- Four (4) Passive Heave Compensators
  - Including Accumulators & Nitrogen Volume
  - Capacity: 20 t
  - Speed: 36 m/min
  - Cylinder stroke: 2000 mm
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

#### 2009 – Menck - Germany
One (1) Hydraulic Hose Winch
  - Tension: 185 kN
  - Speed: 12 m/min
  - Capacity: 240 m @ 6 x 2.5"
- One (1) Electric Power Unit (AC)
  - One (1) Local Control Console
- One (1) Air Hose / Umbilical Winch
  - Tension: 15 kN
  - Speed: 12 m/min
  - Capacity: 360 m
- One (1) Electric Power Unit (AC)
  - One (1) Local Control Console

#### 2009 – Hafar – Singapore
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 30 t
  - Speed: 25 m/min
  - Diameter: 4 - 48"
  - Type: Vertical
  - One (1) A&R Winch
  - Capacity: 60 t
  - Speed: 25 m/min
  - Storage: 700 m of 48 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

#### 2009 – CICSA - Mexico
Four (4) Mooring Winches incl. Mooring Equipment package
  - Capacity: 40 t
  - Speed: 9-18 m/min
  - Storage: 914 mtr of 52 mm SWR
- Four (4) Electric Power Unit (AC)
- Four (4) Local Control Stations

#### 2010 – Swiber – Singapore
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 4 - 60"
  - Type: Horizontal
  - One (1) A&R Winch
  - Capacity: 120 mt
  - Speed: 25 m/min
  - Storage: 700 m of 64 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 30-t per pipe joint
  - Diameter: 6 - 60"

#### 2010 – Acergy - UK
One (1) Pipe Tensioning System, consisting of:
- Two (2) Pipe Tensioners
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 4 - 60"
  - Type: Horizontal
  - One (1) A&R Winch
  - Capacity: 120 t
  - Speed: 25 m/min
  - Storage: 700 m of 64 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Ready Light System
  - One (1) SCADA System
  - One (1) Remote Control Console
  - One (1) complete Pipe Handling System
  - Capacity: 30-t per pipe joint
  - Diameter: 6 - 60

#### 2010 – Van Oord – Netherlands
One (1) Suction Tube Winch
  - Capacity: 150 t
  - Speed: 18 m/min
  - Storage: 200 mtr of 84 mm SWR

#### 2010 – Ombak - Malaysia
One (1) Pipe Tensioning System, consisting of:
- One (1) Pipe Tensioner
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 4 - 60"
  - Type: Horizontal
  - One (1) A&R Winch
  - Capacity: 60 t
  - Speed: 25 m/min
  - Storage: 700 m of 48 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console

#### 2010 – NPCC – Abu Dhabi, UAE
One (1) Pipe Tensioning System, consisting of:
- Three (3) Pipe Tensioners
  - Capacity: 132 t
  - Speed: 36 m/min
  - Diameter: 4 - 66"
  - Type: Vertical
  - One (1) A&R Traction Winch
  - Capacity: 385 t
  - Speed: 36 m/min
  - One (1) A&R Storage Reel
  - Capacity: 2,000 m
  - SWR diameter: 108 mm
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console
  - One (1) Complete Double Joint Pipe Handling System
  - Capacity: 40 t per pipe joint
  - Diameter: 4 - 66"

#### 2010 – COOEC – China
One (1) Stinger Monitoring System:
- CCTV System
- Sonar System
- Angle Inclination Monitoring System
- Load Monitoring system, including rollbox loadcells & Main Hinge Loadpins
  - One (1) Remote Monitoring Console

#### 2010 – Heerema – Netherlands
One (1) Barge Mooring System, consisting of:
- Six (6) Mooring winches
  - Capacity: 25 t CT
  - Speed: 40 m/min
  - Storage: 200 m of 36 mm SWR
- Six (6) Electric Power Units (AC)
- Six (6) Remote Control Consoles
  - Two (2) Anchor Windlasses
    - Capacity: 85 t
    - Speed: 12 m/min
    - Chain: 92 mm
    - Brake force: 280 t
  - One (1) Electric Power Unit (AC)
  - Two (2) Remote Control Consoles

#### 2010 – MRTS - Russia
One (1) A&R Single Drum Winch
  - Capacity: 200 t
  - Speed: 25 m/min
  - Storage: 1,200 m of 90 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console.

#### 2010 – Ombak - Malaysia
One (1) Pipe Tensioning System, consisting of:
- One (1) Pipe Tensioner
  - Capacity: 60 t
  - Speed: 25 m/min
  - Diameter: 4 - 60"
  - Type: Horizontal
  - One (1) A&R Winch
  - Capacity: 60 t
  - Speed: 25 m/min
  - Storage: 700 m of 48 mm SWR
  - One (1) Electric Power Unit (AC)
  - One (1) Remote Control Console.
OFFSHORE REFERENCE LIST Cont’d

2011 – J. Ray McDermott – USA
One vertical lay spread, consisting of:
One (1) Pipe Tensioner
Capacity : 300 t
Speed : 1,000 m/ hr.
Diameter : 50 to 620 mm
Type : 4-track
One (1) Electric Power Unit (AC)
One (1) Remote Control Cabin.
One (1) 20 t Horizontal Spooling Tensioner.

2011 – Allseas – Netherlands
Traction Winch Systems consisting out of:
Four (4) Traction Winches
Capacity : 500 t
Speed : 25 m/min
Diameter : 6 - 60"
Four (4) Storage Winches
Storage : 7,000 m of 138 mm SWR
Four (4) Compensators
Four (4) Spoolers
Four (4) 500 t Measuring Sheaves
One (1) Turn Sheave Assembly

2011 – Adamac – Nigeria
One (1) Pipe Tensioning System, consisting of:
One (1) Pipe Tensioner
Capacity : 60 t
Speed : 25 m/min
Diameter : 6 - 60"
One (1) A&R Winch
Capacity : 120 t
Speed : 25 m/min
Storage : 700 m of 64 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 30 t per pipe joint
Diameter : 4 - 60"

2011 – Wellstream – USA
One Winch System, consisting of:
One (1) A&R Winch
Capacity : 260 t
Speed : 1,000 m/hr.
Storage : 2,500 m of 88 mm SWR
Type : Traction
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2011 – Adamac – Nigeria
One (1) Pipe Tensioning System, consisting of:
One (1) Pipe Tensioner
Capacity : 60 t
Speed : 25 m/min
Diameter : 6 - 60"
Type : Horizontal
One (1) A&R Winch
Capacity : 120 t
Speed : 25 m/min
Storage : 700 m of 64 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console
One (1) complete Pipe Handling System
Capacity : 30 t per pipe joint
Diameter : 4 - 60"

2011 – EMS – Singapore
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
Capacity : 100 t each
Speed : 25 m/min
Diameter : 6 - 60"
Type : Vertical
One (1) A&R Winch
Capacity : 200 t
Speed : 25 m/min
Storage : 1,000 m of 90 mm SWR
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2012 – MRTS – Russia
One (1) Flexlay System, consisting of:
One (1) Pipe Tensioner
Capacity : 20 t each
Speed : 1,200 m/hr
Diameter : 50-600 mm
Type : Horizontal
One (1) Reel Drive System
Capacity : 350 t
Pull : 20 t @ 1 rpm
Type : Fixed Base
One (1) Overboarding Chute
One (1) Inlet Chute
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2012 – TL Offshore – Malaysia
Three (3) Vertical Lay Systems for PLSV’s operated and owned by TL Offshore, consisting of:
Five (5) Pipe Tensioners
Capacity : 300 t
Speed : 720 m/ hr.
Diameter : 50 to 630 mm
Type : 4-track
Two(2) A&R Winch Systems
Capacity : 610 t
Speed : 600 m/ hr.
Storage : 3,500 m of ø138 mm SWR
Type : Traction
Two(2) A&R Winch Systems
Capacity : 200 t
Speed : 600 m/ hr.
Storage : 3,500 m of ø76 mm SWR
Type : Traction
One (1) A&R Winch System
Capacity : 340 t
Speed : 600 m/ hr.
Storage : 2,500 m of ø102 mm SWR
Type : Traction
Five (5) Storage Winches
Five (5) Spooler Devices
Two (2) 610 t Measuring Sheaves
Two (2) 200 t Measuring Sheaves
One (1) 340 t Measuring Sheave
Six (6) 20 t Vertical Spooler Tensioners
Six (6) 20 t Spooling Winches
Two (2) 30 t Initiation Winches
Three (3) Electric Power Units (AC)
Three (3) Remote Control Consoles

2012 – TL Offshore – Malaysia
Single Joint Pipe Handling Equipment for two (2) Vessels, consisting of following equipment for handling 35 t Pipe Joints:
- Longitudinal Conveyors, Idle & Driven
- Walking Beam Systems
- Pipe Elevators
- Transfer Vehicles
- Fixed Pipe Supports
- Line Up Tools
- Bend Stall Supports
- Pipe Ramp Support Rollers
- Track Type Supports
- Electrical Power Units
- Hydraulic Power Units
- Local Control Consoles

2013 – BP – UK
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
Capacity : 175 t
Speed : 32 m/min
Diameter : 6 - 60"
Type : Vertical
One (1) A&R Traction Winch
Capacity : 350 t
Speed : 32 m/min
One (1) A&R Storage Reel
Capacity : 2,500 m
SWR diameter : 112 mm
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2013 – Shell – Netherlands
Twelve (12) Underwater Swivel Fairlead
For 89mm Steel Wire Rope
OFFSHORE REFERENCE LIST Cont’d

2013 – TL Offshore – Malaysia
Three (3) Vertical Lay Systems for PLSV’s operated and owned by TL Offshore, consisting of following equipment:
Six (6) Pipe Tensioners
  Type: Diameter: Speed: Capacity:
  : 300 t : 720 m/ hr. : 50 to 630 mm
  : 4-track
Three (3) A&R Winch Systems
  Capacity: Speed: Storage:
  : 615 t : 600 m/ hr. : 3,500 m of ø138 mm SWR
Type: Traction
Three (3) Remote Control Consoles
Six (6) Pipe Spooling Winches
Type: Speed:
  : Traction : 200 t
Six (6) Spooler Devices
Type: Speed:
  : Traction
Three (3) Vertical Lay Systems
  Type: Diameter:
  : 50 to 630 mm
One (1) Remote Control Console
Type: Pull:
  : Adjustable, full reel skidding
Three (3) Remote Control Consoles

2013 – GE OIL & GAS – UK
One (1) Vertical Lay System, consisting of following equipment:
One (1) Tower Structure
  Capacity: Speed: Diameter:
  : 75 t : 720 m/ hr. : 50 to 630 mm
Including:
  - Top radius controller
  - Base frame
  - Work Platform
  - Hang-off beam
  - Maintenance platforms
  - Control system for tower
  - HPU
One (1) preparation for existing tensioner
  Capacity: Speed: Diameter:
  : 75 t : 720 m/ hr. : 50 to 630 mm
  Type: 4-track

2014 – Huien Int. – China
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
  Capacity: Speed: Diameter:
  : 150 t : 40 m/min : 6 - 60°
  Type: Vertical
One (1) A&R Winch
  Capacity: Speed:
  : 300 t : 40 m/min
Type: Vertical
One (1) Remote Control Console

2014 – Technip – Malaysia
TLP Winches & Fairleads, consisting of:
Two (2) Holdback Winches
  Capacity: Speed:
  : 300 t : 1,5 m/min
Two (2) Hawser Winches
  Capacity: Speed:
  : 80 t : 1,5 m/min
Type: Speed:
  : Vertical
Type: SWR diameter:
  : 79 mm
SWR Storage Capacity:
  : 40 m/min
Type:
  : Vertical
Two (2) Holdback underwater swivel fairleads
Two (2) Hawser Swivel fairleads

2014 – Van Oord – Netherlands
One (1) Pipe Tensioning System, consisting of:
Two (2) Pipe Tensioners
  Capacity: Speed:
  : 20 t : 1000 m/ hr
Type: Speed:
  : Vertical
Type: SWR diameter:
  : 79 mm
Two (2) Pipelay Mooring Winches
  Capacity: Speed:
  : 200 t : 60 m/min
Type: SWR:
  : 50 - 648mm
Type: Type:
  : Vertical
Four (4) Integrated Guiding Rollers
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2014 – Ocean Installer – Norway
One (1) Reel Drive System System, consisting of:
One (1) RDS, Road transportable
  Capacity: Pull:
  : 400t : 20 t @ 1 rpm
Type: Type:
  : Adjustable, full reel skidding
One (1) Rail System
One (1) Electric Power Unit (AC) in DNV container
One (1) Remote Control Console in DNV container

2014 – Yantai Salvage Bureau – China – under construction
One (1) 600t Pipe Tensioning System, consisting of:
Three (3) Pipe Tensioners
  Capacity: Speed:
  : 200 t : 40 m/min
Type: Type:
  : Vertical
One (1) A&R Storage Winch
  Capacity: Speed:
  : 600 t : 40 m/min
SWR Storage:
  : 3,500m
One (1) 600t Tilted Measuring Sheave
One (1) 600t Retractable Guiding Sheave
One (1) Compensator system
One (1) Electric Power Unit (AC)
One (1) Remote Control Console

2014 – Undisclosed Client – under construction
One (1) Pipelay Mooring Winch System, consisting of:
Ten (10) Pipelay Mooring Winches
  Capacity: Speed:
  : 250 t : 15 m/min
SWR:
  : 76,2mm
Ten (10) Vertical Measuring Sheaves
Ten (10) Vertical Sheaves
Ten (10) Horizontal Sheaves
Ten (10) Balanced Head Swivel Fairleads
One (1) Electric Power Unit (AC)
Two (2) Remote Control Consoles
Ten (10) Local Control Consoles