

## INSULATOR WASHING

Bronto Skylift aerial devices are user friendly and reliable, and have been designed with comprehensive safety features for improved operation and efficiency.

In addition to the conventional repair and maintenance tasks of overhead lines, utility companies are often confronted with other problems as well. Transmission and distribution line insulators are frequently contaminated with salt, dust, industrial pollution, bird droppings and so forth. Contamination can create a conductive path on the surface of the insulator, causing "flash over", which can result in expensive power interruptions and damage.

To reduce "flash over", many utility companies have successfully implemented preventive insulator washing programs with conventional live-line insulator washing equipment. All insulated and non-insulated Bronto Skylift aerial devices can be fitted with integrated insulator washing capability resulting in a real multipurpose vehicle with several capabilities

- live-line bare hand work
- general maintenance and repair work
- live-line insulator washing

thus considerably reducing down time and increasing efficiency.



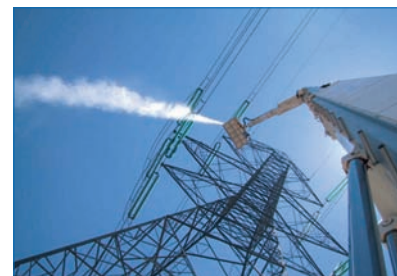
## Features



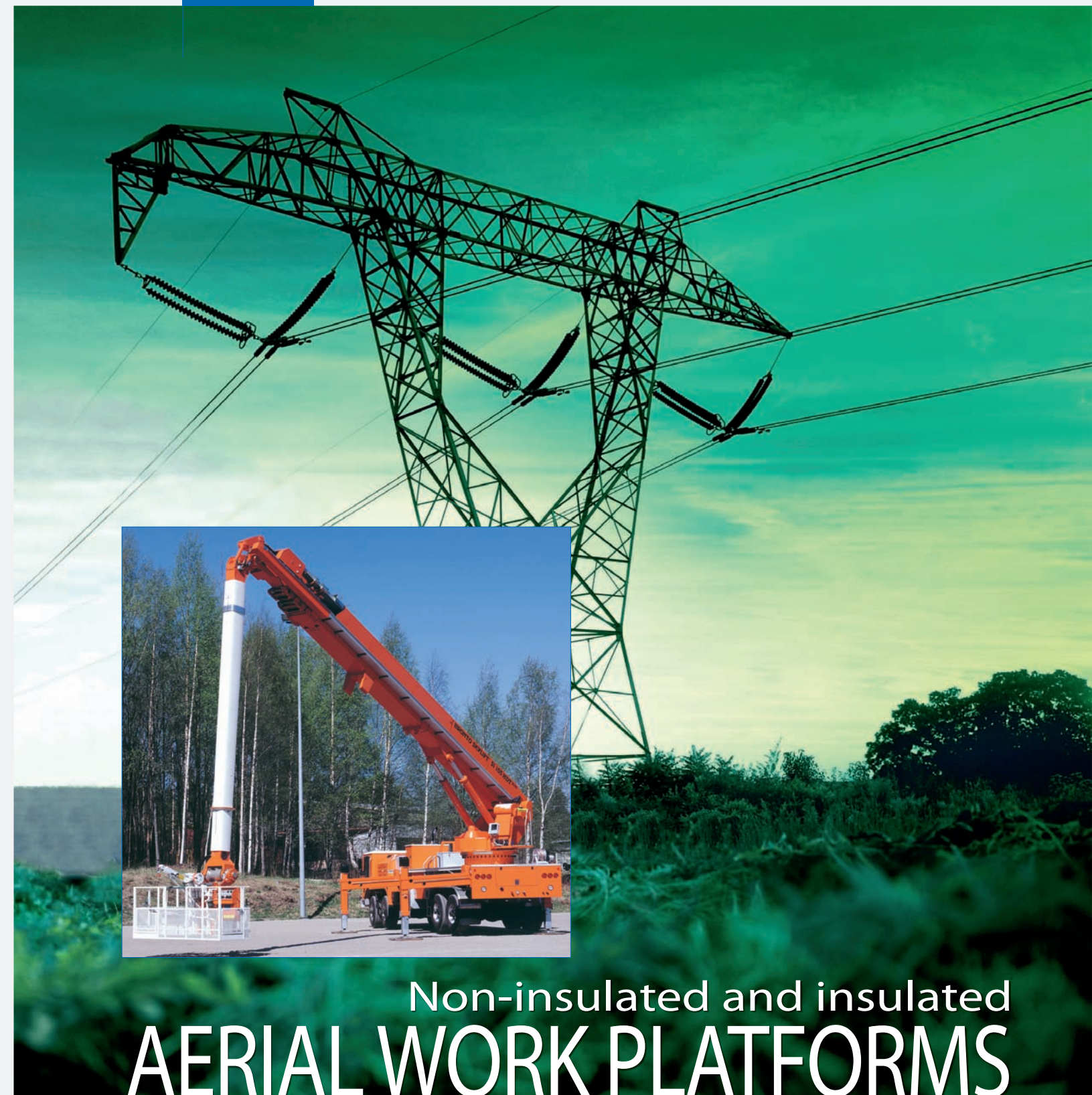
**Insulator washer**  
All Bronto Skylift aerial work platforms can be fitted with an integrated washing head.



**Remote control**  
Live-line insulator washing can be performed by using a remote control.



**Multipurpose vehicle**  
The aerial work platform can be telescoped directly to overhead transmission lines, and is capable of carrying the required personnel, tools and equipment at the same time.



Non-insulated and insulated  
**AERIAL WORK PLATFORMS**  
for electric utilities





**BRONTO SKYLIFT®**

## **Bronto Skylift, the Market Leader**

**by Experience:** over 5800 aerial appliances in operation all over the world

**by Variety:** over 30 different models with working heights from 32 to over 100 meters

**by Technology:** the best weight-height ratio based on advanced plasma welding methods

**by Operational Versatility:** high degree of customization, over 200 optional features available

For over 40 years, operators have trusted Bronto Skylift to provide a safer way to access overhead areas. To date, Bronto has built over 5800 aerial devices, including the world's tallest insulated and non-insulated truckmounted models. Today, Bronto Skylift work platforms are used in utility, petrochemical, construction and industrial markets worldwide. Each Bronto Skylift product is built for operator convenience, dependable performance, increased safety and reduced maintenance. It features proportional controls to smoothly place the platform precisely where it is needed.

Each Bronto Skylift consists of boom sections built to accuracies of 0,1 mm providing increased stability and smoother boom extension and retraction. Bronto Skylifts have a primary and back-up safety device for outreach limitation, boom rotation, platform leveling and all other critical operating functions. They have been designed and built to meet the requirements of a wide variety of commercial-type chassis, enabling easier repair and maintenance with standard parts.



WORKING HEIGHTS FROM 32 TO OVER 100 METERS

## **Bronto Skylift - Aerial Work Platforms**

### **More compactness**

Bronto Skylift aerals are designed for better over-the-road transportation and improved jobsite accessibility. In many cases, Bronto Skylift aerals are up to 20% shorter in overall length and 20% lighter in gross vehicle weight than comparable products.

### **More versatility**

With working heights to 60 m, horizontal outreach to 31,3 m and up to 860 kg platform capacities on some models, Bronto Skylift aerals can reach more places in more overhead locations than any other product available.

### **More maneuverability**

Bronto Skylift aerals are available with 6x4, 6x6, 8x4, 8x6, and 8x8 drive configurations with optional rear steer axles that provide a turning radius as short as 12 m. Optional interlock differentials and no-spin axle assemblies are also available.

### **More productivity**

For rapid deployment, Bronto Skylift offers automatic self-leveling outriggers that level the unit in less than 30 seconds at the touch of a button. During operation, all boom sections extend and retract simultaneously, enabling the boom to be raised or lowered faster.

### **More convenience**

The unique telescoping design of Bronto Skylift aerals require only 8,5 m over-head clearance to set up. Outriggers can also be fully deployed on one side only and the unit can be operated in a reduced work envelope in confined areas.

### **Optional features**

A wide variety of options and accessories are available, including hydraulic, air or electrical powered tools, hydraulic material handler and other productivity-enhancing features.



Non-insulated and insulated  
**AERIAL WORK PLATFORMS**  
for electric utilities

Better access to overhead areas





## NON-INSULATED models


The Bronto Skylift aerial work platform with standard steel boom construction combines safety, compactness, versatility, convenience, maneuverability and productivity in a single package. It provides unparalleled access to any overhead area. All Bronto Skylift work platforms feature a multi-section telescopic main boom and articulated platform boom. On larger models, the platform boom also telescopes for additional

horizontal reach, enabling operation in congested areas. It also enhances safety and increases utilization because one machine can be used to access a wider range of working areas from a single location. Due to the telescoping main boom and articulating platform boom, it also reaches below ground areas for greater versatility.



WORKING HEIGHTS FROM 38 TO 60 METERS

## Technical data

|  | Max. working height | Max. working outreach, approx. | Max. safe working cage load | Transportation height, approx. | Transportation length, approx. | GVW      |
|---|---------------------|--------------------------------|-----------------------------|--------------------------------|--------------------------------|----------|
| S 38 HDT  | 38 m                | 23,4 m                         | 440/200 kg                  | 3,8 m                          | 11,7 m                         | 26000 kg |
| S 38 HDT <sup>ER</sup>  | 38 m                | 31,3 m                         | 440/200 kg                  | 3,9 m                          | 11,7 m                         | 32000 kg |
| S 44 HDT  | 44 m                | 22,6 m                         | 440/200 kg                  | 3,9 m                          | 11,8 m                         | 26000 kg |
| S 44 HDT <sup>ER</sup>  | 44 m                | 29,7 m                         | 440/200 kg                  | 4,0 m                          | 11,8 m                         | 32000 kg |
| S 55 HDT  | 55 m                | 24,0 m                         | 440/200 kg                  | 4,0 m                          | 12,8 m                         | 32000 kg |
| S 60 HDT  | 60 m                | 23,5 m                         | 440/200 kg                  | 4,0 m                          | 14,3 m                         | 35000 kg |

## Features



### Control stations

Identical control stations on the turntable and platform feature electro-hydraulic controls with proportional control valves. The turntable control station provides precise line-of-sight operation at any elevation in full 360-degree rotation.



### Shortjacking capability

All Bronto Skylift aerals can be "short jacked" with outriggers fully deployed on one side only, and safely operated in restricted work areas with no loss of platform capacity or side reach capabilities. This enables set-up and operation in confined areas and reduces the need to close traffic lanes when working alongside highways.



### Platform rotation

Bronto Skylift aerals feature a standard platform rotation of 80-degrees left to 80-degrees right (insulated units 60° left, 60° right), which enables the operator to boom up to the overhead work area, and rotate the platform so that the work area is directly in front of the platform.

# NON-INSULATED models

# Better access to overhead areas





## INSULATED models


Bronto Skylift SI Series aerals feature insulated platform booms and are designed for work at sub-transmission and transmission lines up to 500kV. The heavy-duty telescopic machines enable bare-hand maintenance, inspection and repairs while the system is still energized. Live-line working capability is enabled through a fiber optic control system running inside an appr. 5 m long filament-wound fiberglass boom. The high strength FRP boom features

boom tip deflection of less than 5 cm /500 kg of applied load. Its sealed design prevents internal contamination. Desiccants inside the boom control internal atmospheric humidity. A sharp-edge corona ring around the boom provides consistent voltage gradient along the length of the boom. A separate fiber optic intercom system provides audio communications between the platform and turntable control station.




WORKING HEIGHTS FROM 38 TO 60 METERS

## Range with enhanced combined load capacity

|  | Max. working height | Max. working outreach, approx. | Max. safe working cage load | Max. material handler capacity | Max. total load | Transportation height, approx. | Transportation length, approx. | GVW      |
|---|---------------------|--------------------------------|-----------------------------|--------------------------------|-----------------|--------------------------------|--------------------------------|----------|
| SI 126 HDT-C  | 38 m                | 23,5 m                         | 360 kg                      | 680 kg                         | 860 kg          | 3,9 m                          | 12,5 m                         | 27000 kg |
| SI 140 HDT-C  | 42 m                | 24 m                           | 360 kg                      | 680 kg                         | 860 kg          | 4 m                            | 13 m                           | 28000 kg |
| SI 156 HDT-C  | 47 m                | 24 m                           | 360 kg                      | 680 kg                         | 860 kg          | 4 m                            | 13 m                           | 32000 kg |
| SI 169 HDT-C  | 52 m                | 24 m                           | 360 kg                      | 680 kg                         | 860 kg          | 4 m                            | 13 m                           | 32000 kg |
| SI 196 HDT-C  | 60 m                | 26 m                           | 360 kg                      | 680 kg                         | 860 kg          | 4,1 m                          | 13,5 m                         | 35000 kg |

## Standard range

|  | Max. working height | Max. working outreach, approx. | Max. safe working cage load | Max. total load | Transportation height, approx. | Transportation length, approx. | GVW      |
|---|---------------------|--------------------------------|-----------------------------|-----------------|--------------------------------|--------------------------------|----------|
| SI 125 HDT  | 38 m                | 24,5 m                         | 450 kg                      | 450 kg          | 4,0 m                          | 11,8 m                         | 30000 kg |
| SI 155 HDT  | 47 m                | 21,5 m                         | 680 kg                      | 680 kg          | 4,0 m                          | 13,5 m                         | 32500 kg |
| SI 178 HDT  | 54 m                | 22,0 m                         | 450 kg                      | 450 kg          | 4,0 m                          | 13,5 m                         | 32500 kg |
| SI 197 HDT  | 60 m                | 23,0 m                         | 450 kg                      | 450 kg          | 4,1 m                          | 14,4 m                         | 35000 kg |



**Leakage detector**  
Boom Leakage Detector indicates the actual current experienced by the platform personnel and FRP boom. Although ANSI and IEC standards allow up to 1.0µA/kV line-to-ground current leakage, Bronto SI Series units typically exhibit a maximum current leakage of less than 0.2 µA/kV.



**Remote control**  
Optional radio remote control system enables the operator to position the platform onto the energized conductor from the ground, enabling a better view of the platform's position while completely isolating the operator from the vehicle.



**Corona ring**  
A sharp edge corona ring provides a consistent voltage gradient along the length of the FRP boom and acts as an electrical stress relief device at the upper section by preventing potentially damaging positive corona activity on or near the FRP boom surface.

# INSULATED models


## Better access to overhead areas



|                                 |           |
|---------------------------------|-----------|
| PLATFORM CAPACITY               | 1000 LBS  |
| MAX. WIND SPEED                 | 31 MPH    |
| OUTRIGGER WIDTH C/C             | 228 INCH  |
| STABILIZING CHASSIS WEIGHT MIN. | 26000 LBS |
| CROSS VEHICLE WEIGHT MIN.       | 70000 LBS |

|                  |
|------------------|
| PRELIMINARY      |
| USA,GVW 32000 kg |

|                             |  |
|-----------------------------|--|
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| OUTREACH DIAGRAM            | This document, which is our exclusive intellectual property, shall be treated as strictly private and confidential and shall neither be copied nor communicated to any third person without our written consent. |
| ARBEITSDIAGRAM              | BRONTO SKYLIFT OY AB   |
| DIAGRAMA DE TRABAJO         | Tampere Finland  |
| RABO~AQ SHEMA               |  |
| HANDLING ON CAD SYSTEM ONLY |  |

|   |                           |       |            |                |
|---|---------------------------|-------|------------|----------------|
| 1:225   | BRONTO SI 178 HDT         |       |            |                |
| (A3)  | OUTREACH DIAGRAM          |       | Tek.       | KKe 1996-09-11 |
| CODE:   | SAFE WORKING LOAD 1000lbs |       | Hyv.       |                |
| O   |                           |       |            |                |
|  |                           | PIIR. | DWG NUMBER | REV            |
| BRONTO SKYLIFT OY AB FINLAND  |                           |       | F0007570   | a              |
|   |                           |       | BRONTOCAD  |                |

