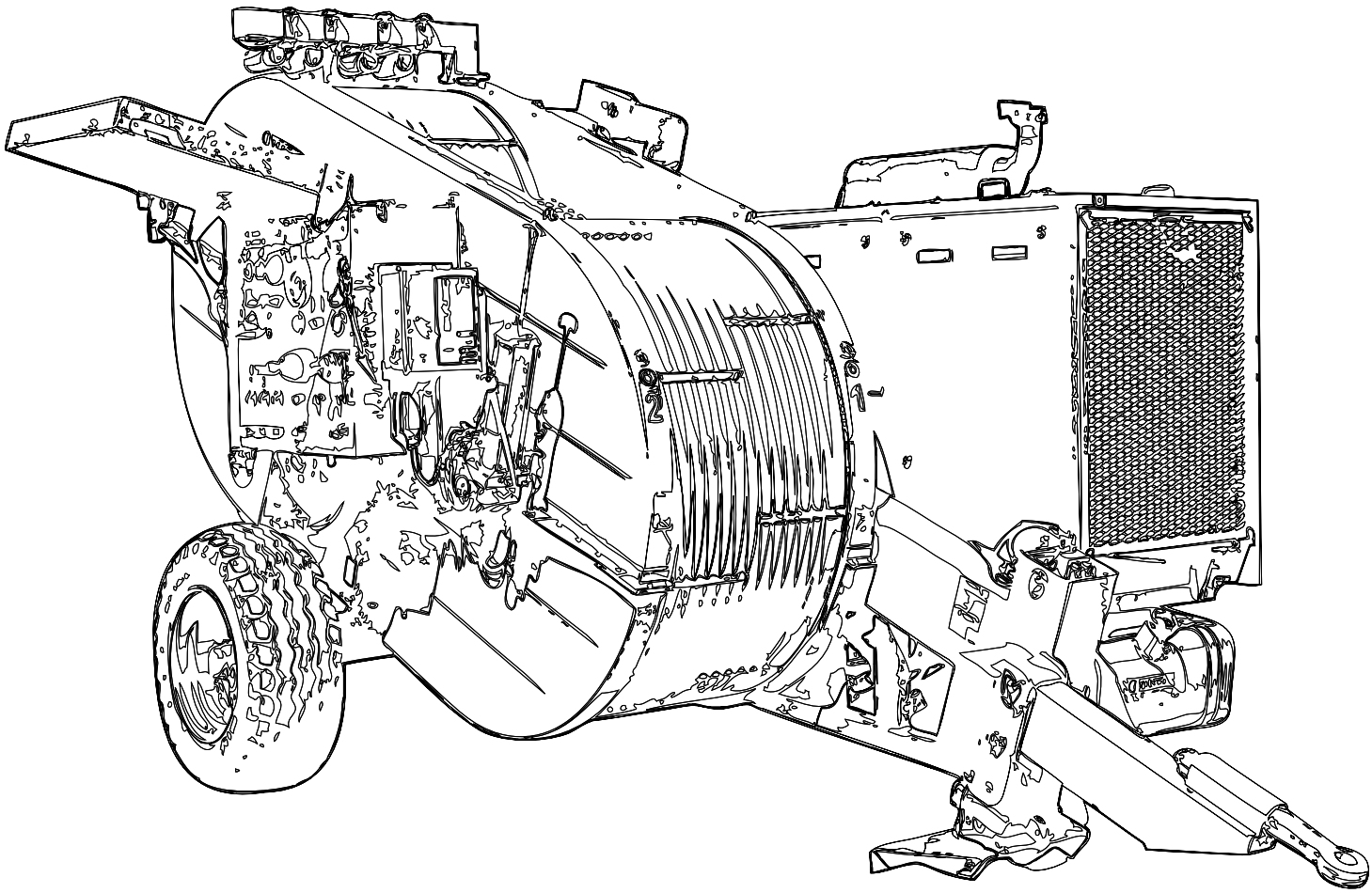
PULLER - TENSIONERS



enia
energy networks & industrial applications

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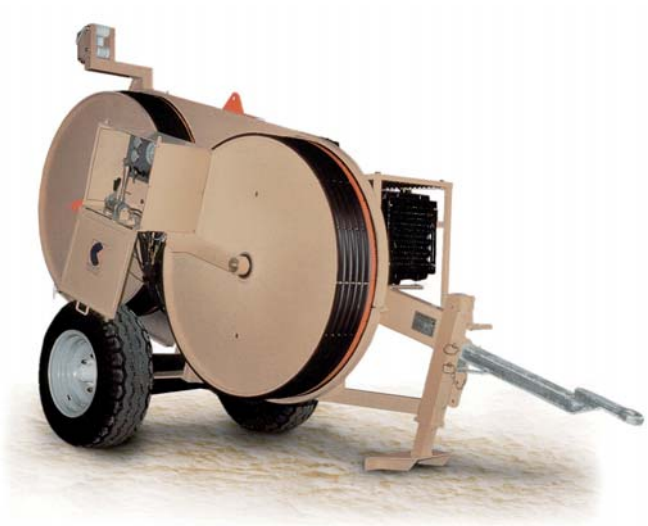
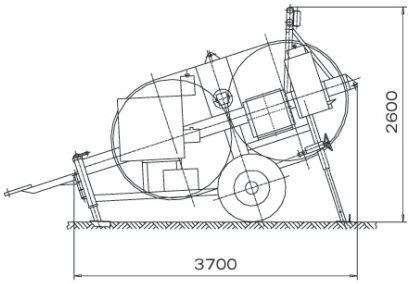
HYDRAULIC PULLER-TENSIONERS
AFS 301
AFS 303

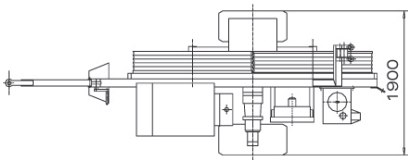
The machine is suitable to string one rope or one conductor.
The bull-wheel grooves are made up of high resistance interchangeable nylon sectors



Certified Quality System ISO 9001:2008

CE





Mod. AFS 301

PULLER PERFORMANCE

Max pull	25 kN
Speed at max pull	1.3 km/h
Max speed	4 km/h
Pull at max speed	8 kN

TENSIONER PERFORMANCE

Max tension	25 kN
Max speed	5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	36 mm
Max rope diameter	10 mm
Mass	2300 kg

ENGINE

Diesel	25 kW (34 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit that allows stepless speed variation in both rotating directions.
This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

Negative self-acting hydraulic brake

Hydraulic dynamometer with set-point and automatic control of maximum pull

Hydraulic oil cooling system

Mechanical meter counter

Control instruments for hydraulic system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control 1 drum stand with hydraulic motor or 1 reel winder

Gearbox with 3 operating positions:
- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (1 ÷ 5 kN)
- nominal tension position

Equipment for electronic stringing parameter recorder

Grounding device on board

ADDITIONAL DEVICES

005 Hydraulic power take off to power a hydraulic press

037 Preheating device for use up to -30° C

DLR 300 Electronic pull and speed recorder

Special Version Mod. AFS 303

With electronic control and 34 kW (46 hp) engine

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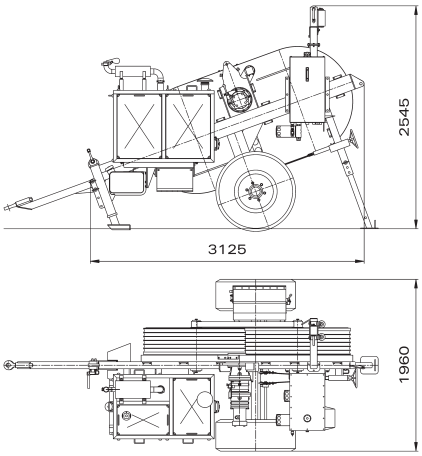
HYDRAULIC PULLER-TENSIONER AFS 411

The machine is suitable to string one rope or one conductor.
The bull-wheel grooves are made up of high resistance interchangeable nylon sectors

Certified Quality System ISO 9001:2008

CE



PULLER PERFORMANCE

Max pull	35 kN
Speed at max pull	2.6 km/h
Max speed	4.5 km/h
Pull at max speed	20 kN

TENSIONER PERFORMANCE

Max tension	35 kN
Max speed	4.5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1200 mm
Max conductor diameter	34 mm
Max rope diameter	13 mm
Mass	2200 kg

ENGINE

Diesel	48 kW (64 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit that allows stepless speed variation in both rotating directions.
This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

Negative self-acting hydraulic brake

Hydraulic dynamometer with set-point and automatic control of maximum pull

Hydraulic oil cooling system

Mechanical meter counter

Control instruments for hydraulic system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control 1 drum stand with hydraulic motor or 1 reel winder

Gearbox with 3 operating positions:
- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (1 ÷ 6 kN)
- nominal tension position

Equipment for electronic stringing parameter recorder

Mechanical actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

037 Preheating device for use up to -30° C

DLR 300 Electronic pull and speed recorder

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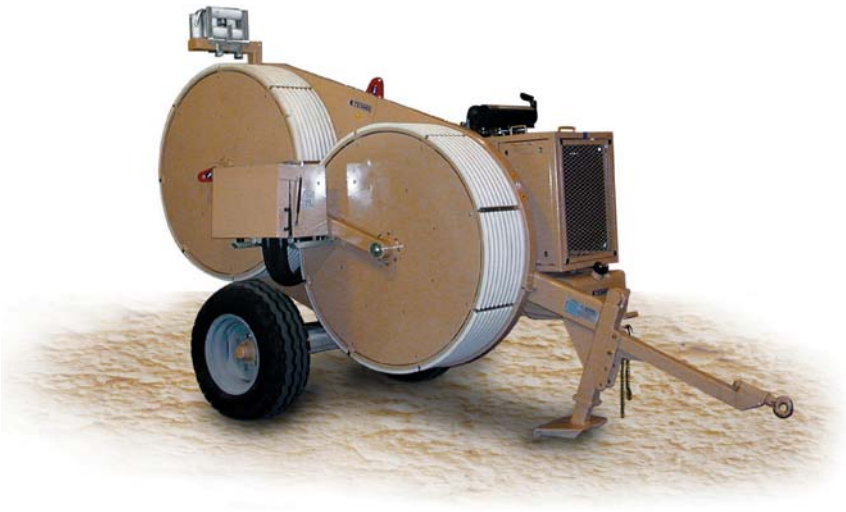
HYDRAULIC PULLER-TENSIONER AFS 404

The machine is suitable to string one or two ropes or bundled conductors.
The bull-wheel grooves are made up of high resistance interchangeable nylon sectors.
The machine is completely electronically controlled

Note: The machine is also available with:

- bull-wheel grooves made of wear-proof thermally and chemically treated steel

- bull-wheel grooves of 1200 mm made with both solution, nylon and steel



Certified Quality System ISO 9001:2008

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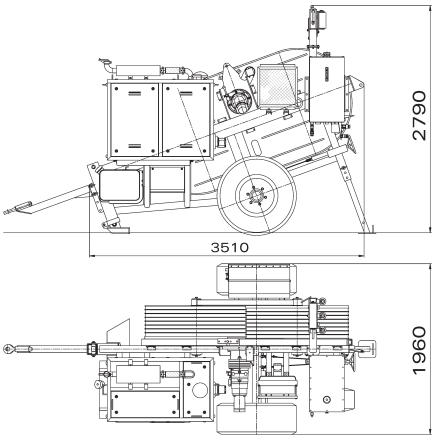

PULLER PERFORMANCE

Max pull	45 kN
Speed at max pull	2.7 km/h
Max speed	5 km/h
Pull at max speed	25 kN

TENSIONER PERFORMANCE

Max tension	45 kN
Max speed	5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	34 mm
Max rope diameter	16 mm
Mass	3000 kg

ENGINE

Diesel	63 kW (85 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit that allows stepless speed variation in both rotating directions.
This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

Negative self-acting hydraulic brake

Hydraulic dynamometer with set-point and automatic control of maximum pull

Hydraulic oil cooling system

Digital meter counter

Control instruments for hydraulic system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control 2 reel stands with hydraulic head or 2 reel winders

Gearbox with 3 operating positions:
- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (1 ÷ 7 kN)
- nominal tension position

Equipment for electronic stringing parameter recorder

Hydraulically actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

005 Hydraulic power take off to power a hydraulic press

037 Preheating device for use up to -30° C

051 Equipment for remote control via cable (max. L. 15 m)

059 Equipment for radio control

071 1 or 2 hydraulically actuated pulling rope/conductor clamps for reel/drum change operation

DLR 300 Electronic pull and speed recorder

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350 g

HYDRAULIC PULLER-TENSIONER AFS 507

The machine is suitable to string one or two ropes or bundled conductors.
The bull-wheel grooves are made up of high resistance interchangeable nylon sectors.
The machine is completely electronically controlled

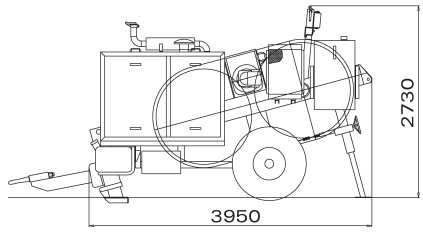
Note: The machine is also available with:

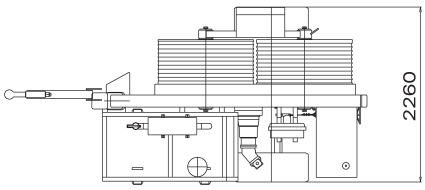
- bull-wheel grooves made of wear-proof thermally and chemically treated steel

- bull-wheel grooves of 1200 mm made with both solution, nylon and steel

Certified Quality System ISO 9001:2008

CE





PULLER PERFORMANCE

Max pull	90 kN
Speed at max pull	2.4 km/h
Max speed	5 km/h
Pull at max speed	44 kN

TENSIONER PERFORMANCE

Max tension	90 kN
Max speed	5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	40 mm
Max rope diameter	18 mm
Mass	4600 kg

ENGINE

Diesel	104 kW (140 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit for stepless speed variation in both rotating directions.
This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

Negative self-acting hydraulic brake

Hydraulic dynamometer with set-point and automatic control of maximum pull

Hydraulic oil cooling system

Electronic meter counter

Control instruments for hydraulics system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control up to 2 reel stands with hydraulic head or 2 reel winders

Equipment for electronic stringing parameter recorder

Hydraulically actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

005 Hydraulic power take off to power a hydraulic press

037 Preheating device for use up to -30° C

051 Equipment for remote control via cable (max. L. 15 m)

059 Equipment for radio control

071 1 or 2 hydraulically actuated pulling rope/conductor clamps for reel/drum change operation

084 Gearboxes with 3 operating positions:
- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (6 ÷ 22 kN)
- nominal tension position

089 Connection of multiple machines and electronic speed synchronizing system

DLR 300 Electronic pull and speed recorder

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372 g

HYDRAULIC PULLER-TENSIONER AFB 506

The machine is suitable to string one or two ropes or bundled conductors with two pairs of bull-wheels with completely independent controls.
The bull-wheel grooves are made of wear-proof nylon sectors.
The machine is completely electronically controlled

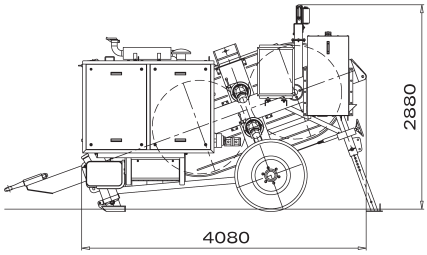
Note: The machine is also available with:

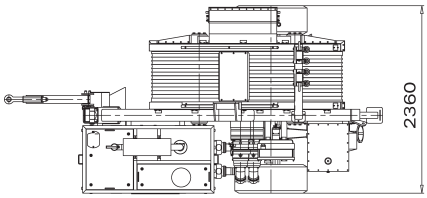
- bull-wheel grooves made of wear-proof thermally and chemically treated steel

- bull-wheel grooves of 1200 mm made with both solution, nylon and steel

Certified Quality System ISO 9001:2008

CE





PULLER PERFORMANCE

Max pull		2 x 45 kN
	or	1 x 90 kN
Speed at max pull		2.4 km/h
Max speed		5 km/h
Pull at max speed		2 x 22 kN
	or	1 x 44 kN

TENSIONER PERFORMANCE

Max tension		2 x 45 kN
	or	1 x 90 kN
Max speed		5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	40 mm
Max rope diameter	18 mm
Mass	6200 kg

ENGINE

Diesel	104 kW (140 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

2 closed hydraulic circuits for stepless speed variation in both rotating directions. This machine is provided with 2 pull pre-setting systems that maintain the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

2 negative self-acting hydraulic brakes

2 hydraulic dynamometers with set-point and automatic control of maximum pull

Hydraulic oil cooling system

2 digital meter counters

Control instruments for hydraulic system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control up to 2 reel stands with hydraulic head or 2 reel winders with independent controls

1 gearbox with 3 operating positions:
- neutral position (with free bull-wheels for conductor loading and unloading)
- low tension position (3 ÷ 14 kN)
- nominal tension position

Synchronising mechanism

Equipment for electronic stringing parameter recorder (for one rope or conductor)

Hydraulically actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

005 Hydraulic power take off to power a hydraulic press
037 Preheating device for use up to -30° C
051 Equipment for remote control via cable (max. L. 15 m)
059 Equipment for radio control
071 2 hydraulically actuated pulling rope/conductor clamps for reel/drum change operation
084 2nd gearbox with 3 operating positions
089 Connection of multiple machines and electronic speed synchronizing system
DLR 300 Electronic pull and speed recorder

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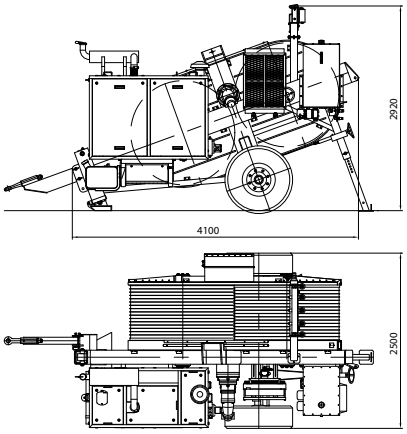
381 h

HYDRAULIC PULLER-TENSIONER AFS 610

The machine is suitable to string one, two, three or four ropes or bundled conductors.
The bull-wheel grooves are made up of high resistance interchangeable nylon sectors.
The machine is completely electronically controlled

Certified Quality System ISO 9001:2008

CE



PULLER PERFORMANCE

Max pull	140 kN
Speed at max pull	1.7 km/h
Max speed	4 km/h
Pull at max speed	60 kN

TENSIONER PERFORMANCE

Max tension	140 kN
Max speed	4 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	40 mm
Max rope diameter	24 mm
Mass	6800 kg

ENGINE

Diesel	129 kW (173 hp)
Cooling system	water
Electrical system	12 V

HYDRAULIC TRANSMISSION

Closed hydraulic circuit that allows stepless speed variation in both rotating directions.
This machine is provided with a pull pre-setting system that maintains the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

Negative self-acting hydraulic brake

Hydraulic dynamometer with set-point and automatic control of maximum pull

Hydraulic oil cooling system

Electronic meter counter

Control instruments for hydraulics system and Diesel engine

Rigid axle for towing at max speed of 30 km/h with mechanical parking brake

Hydraulic power pack to control 4 drum stands with hydraulic motor or 4 reel winders with independent commands

Equipment for electronic stringing parameter recorder

Hydraulically actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

005 Hydraulic power take off to power a hydraulic press

037 Preheating device for use up to -30° C

051 Equipment for remote control via cable (max. L. 15 m)

059 Equipment for radio control

071 1,2,3 or 4 hydraulically actuated pulling rope/conductor clamps for reel/drum change operation

080 Special nylon sectors kit

089 Connection of multiple machines and electronic speed synchronizing system

DLR 300 Electronic pull and speed recorder

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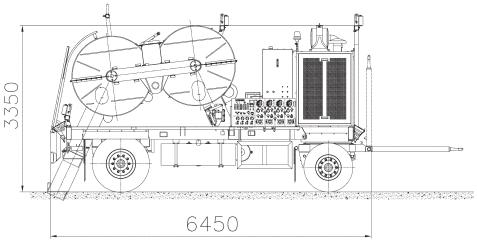
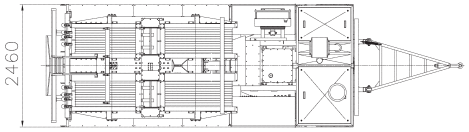
HYDRAULIC PULLER-TENSIONERS
AFQ 705
AFQ 703

The machine is suitable to string one, two, three or four ropes or bundled conductors with four pairs of bull-wheels with completely independent controls.
The bull-wheel grooves are made of wear-proof thermally and chemically treated steel.
The machine is completely electronically controlled

Certified Quality System ISO 9001:2008

CE





Mod. AFQ 705
PULLER PERFORMANCE

Max pull		4 x 45 kN
	or	2 x 90 kN
	or	1 x 180 kN
Speed at max pull		1.7 km/h
Max speed		5 km/h
Pull at max speed		4 x 10 kN
	or	2 x 20 kN
	or	1 x 40 kN

TENSIONER PERFORMANCE

Max tension		4 x 45 kN
	or	2 x 90 kN
	or	1 x 180 kN
Max speed		5 km/h

Note: the basic machine performance is calculated at 20°C and at sea level

CHARACTERISTICS

Bull-wheel diameter	1500 mm
Max conductor diameter	40 mm
Max rope diameter	24 mm
Mass	14950 kg

ENGINE

Diesel	209 kW (280 hp)
Cooling system	water
Electrical system	24 V

HYDRAULIC TRANSMISSION

4 closed hydraulic circuits for stepless speed variation in both rotating directions. This machine is provided with 4 pull pre-setting systems that maintain the pre-set pulling value (also when the speed is reduced to "0") by automatically adjusting the operation speed according to the friction and unexpected loads which may develop along the line

CONFIGURATION

4 negative self-acting hydraulic brakes

4 hydraulic dynamometers with set-point and automatic control of maximum pull

Hydraulic oil cooling system

4 mechanical meter counters

Control instruments for hydraulic system and Diesel engine

Suspension axles for towing at max speed of 80 km/h with mechanical parking brake

Pneumatic brake system

Lighting system for the trailer

Hydraulic power pack to control up to 4 drum stands with hydraulic motor or 4 reel winders with independent controls

Triple tension synchronising mechanism

Hydraulically actuated front plough stabiliser

Grounding device on board

ADDITIONAL DEVICES

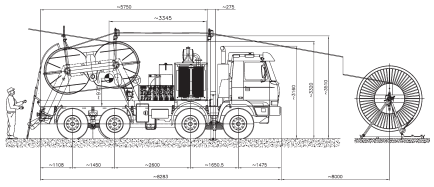
005 Hydraulic power take off to power a hydraulic press
037 Preheating device for use up to -30° C
051 Equipment for remote control via cable (max. L. 15 m)
059 Equipment for radio control
062 ABS kit for pneumatic brake system
071 4 hydraulically actuated pulling rope/conductor clamps for reel/drum change operation
089 Connection of multiple machines and electronic speed synchronizing system

Special Version Mod. AFQ 703

Truck mounted

MASS

Upper structure	13000 kg
Total	25400 kg



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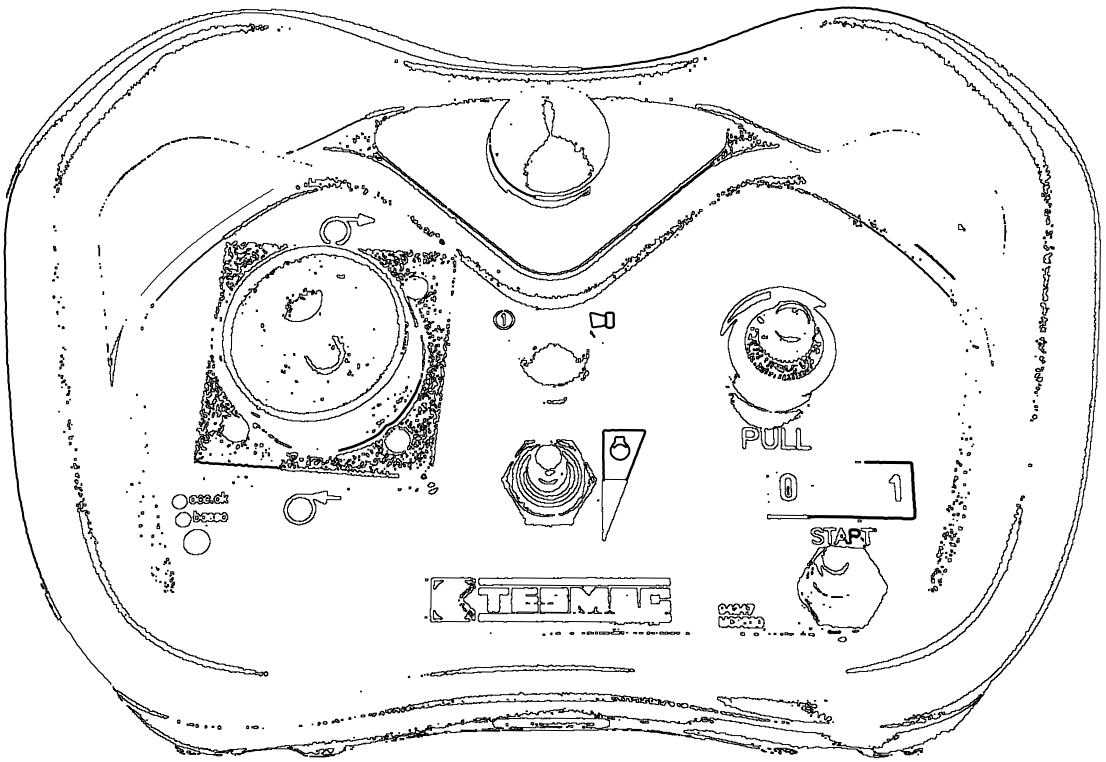
ADDITIONAL DEVICES



REMOTE CONTROLS
AX

The control devices allow to operate same controls of the machine in a different position compared to the control panel.
In particular the following controls are granted:

- setting of the pull/tensioning value
- control of direction and speed rotation of the bull wheels
- control of Diesel engine rpm
- stop all the functions of the machine

AXC 006

AXC - Cable remote control

TECHNICAL CHARACTERISTICS

These devices have the capacity to operate until a maximum distance of 15 meters.
The box is in a special anti-shock plastic and has a proof grade IP65

MASS

4.5 kg

Mod. AXC 005

This is a single cable control with the following devices:

- potentiometer for the pull regulation;
- electric joy-stick to control the bull wheels rotation;
- electric joy-stick to control the Diesel engine rpm;
- emergency stop button

Mod. AXC 006

This is a twin cable control device with the following devices:

- 2 potentiometers for the pull regulation
- 2 electric joy-sticks to control the bull wheels rotation
- electric joy-stick to control the Diesel engine rpm
- emergency stop button
- selector for the use as single/twin

AXH - Radio remote control

TECHNICAL CHARACTERISTICS

These devices have the capacity to operate until a maximum distance of 150 meters.
The box is in a special anti-shock plastic and has a proof grade IP65

MASS

2.1 kg

Mod. AXH 007

Single radio control without display and with the following devices:

- potentiometer for the pull regulation;
- electric joy-stick to control the bull wheels rotation;
- electric joy-stick to control the Diesel engine rpm;
- emergency stop button

Mod. AXH 008

This is a twin radio control without display and with the following devices:

- 2 potentiometers for the pull regulation;
- 2 electric joy-sticks to control the bull wheels rotation;
- electric joy-stick to control the Diesel engine rpm;
- emergency stop button;
- selector for the use as single/twin

Available also for three and four independent hydraulic circuits machines

TESMEC S.p.A.

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Manufacturing facilities
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ELECTRONIC PULL AND SPEED RECORDER
DLR 300

NEW

Electronic device that allows the monitoring of stringing operations by collecting characteristics data:

- applied pull, with the exceeding control of a limit value;
- stringing speed;
- stringing length

Certified Quality System ISO 9001:2008

CE

The unit can register the following information for any single laying:

- date and hour of monitoring start;
- value for the limiting control value;
- sampling distance time;
- date and hour of monitoring end

In addition there is a printer for monitoring printing, either in real time or later on; it is also possible to print a qualitative graphic of the carried out monitoring.
It is possible to connect the unit to the PC for downloading the data or to download data on external Pen drive by using USB port on the unit.
The recorder is equipped by a rigid box for transport, connecting cables, software disk for PC connection and protecting case in PVC, electrical power adapter and adapter plugs for the machine connection

TECHNICAL CHARACTERISTICS

Voltage	10 ÷ 28 V
Display	2 rows with 16 digits

APPLICABILITY

The unit can be connected to all Tesmec machines preset with additional device 053

DIMENSIONS

345 x 200 x 65 mm

MASS

1,5 kg

ADDITIONAL DEVICES

DLK 101 Stand support recorder

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