

MACHINES FOR SPECIAL APPLICATIONS





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DETACHABLE MACHINES

CODE	RANGE	LAYOUT	BULL WHEEL DIAMETER	GROOVES NUMBER	ENGINE POWER	
ARS710	180 kN	Single	625 mm	10	129 kW	2.10
ARS711	180 kN	Single	588 mm	10	210 kW	2.10
ARS919	360 kN	Single	800 mm	11	209 kW	2.10
FRB600	2X75 kN	Twin	1500 mm	10x2	48 kW	2.15
FRB816	2x140 / 1x280 kN	Twin	1900 mm	8x2	119 kW	2.15
PT009	40 / 2x20 kN	Twin	1500 mm	-	68 kW	2.15

TRUCK & TRAILER MOUNTED MACHINES

CODE	RANGE	LAYOUT	BULL WHEEL DIAMETER	GROOVES NUMBER	ENGINE POWER	
ARS803	200 kN	Single	600 mm	10	209 kW	2.20
ARS912	280 kN	Single	960 mm	10	328 kW	2.20
AFT615	3x45 / 1x90+2x45 / 1x135 kN	Triple bundle	1500 mm	6x3	210 kW	2.20
AFQ706	4x45 / 2x90 / 1x180 kN	Quad Bundle	1500 mm	6x4	210 kW	2.25
AFQ708	4x45 / 2x90 / 1x180 kN	Quad Bundle	1600 mm	6x4	209 kW	2.25
AFQ709	4x45 / 2x90 / 180 kN	Quad Bundle	1600 mm	6x4	210 kW	2.25

LARGE DIAMETER MACHINES

CODE	RANGE	LAYOUT	BULL WHEEL DIAMETER	GROOVES NUMBER	ENGINE POWER	
ARS802	240 kN	Single	800 mm	10	280 kW	2.30
ARS907	280 kN	Single	960 mm	10	328 kW	2.30
FRB806	280 / 2x140 kN	Twin	1900 mm	9x2	119 kW	2.30
AFS618	140 kN	Single	2000 mm	9	129 kW	2.35
AFB710	180 / 2x90 kN	Twin	2000 mm	8x2	272 kW	2.35
AFS804	200 kN	Single	2400 mm	9	129 kW	2.35

HELICOPTER MACHINE

CODE	RANGE	LAYOUT	BULL WHEEL DIAMETER	GROOVES NUMBER	ENGINE POWER	
TN1216	30 / 45 kN	Single	1800 mm	6	48 kW	2.40

MACHINES FOR SPECIAL APPLICATIONS

Customized Stringing solutions for every challenge

Tesmec, as a worldwide leader in stringing solutions for the last 60 years, has developed, designed, and manufactured a range of several machines to face any work conditions.

In this section, we summarize the most innovative, efficient, and successful solutions split in four families.



MACHINES FOR SPECIAL APPLICATIONS: OUR VALUE PROPOSITION



DETACHABLE MACHINES

Design revolution.

Detachable machines are the best solution in case of difficult access conditions.

The modular structure allows an easy transportation of all the parts to the site, and a simple and efficient assembly and use of the machines on the jobsite thanks to:

- + Small and light weight single part.
- + Standard twist lock connection on main frame for easier truck loading & locking.
- + Quick coupling connections for hydraulic hoses and electrical cables.
- + Different solutions according to helicopter size (single units up to 1200 or 3500 kg).



LARGE DIAMETER MACHINES

Innovation for New Trends.

Tesmec was the first company to introduce to the market a range of tensioners and puller-tensioners with a minimum bull-wheel diameter of 1500 mm as a standard.

This range today includes several models having bull-wheel diameters up to 1800 mm.

Furthermore, to install HTLS or traditional oversized conductors, many stringing machines with bull-wheel diameters up to 2400 mm have been designed over the years.



TRUCK & TRAILER MOUNTED MACHINES

Efficient logistic.

In 1984, Tesmec manufactured the first truck-mounted puller-tensioner in the world.

Today, we develop the most advanced Technology of Controlling & Monitoring granted by:

- + Modular designing for truck/stringing upper structure.
- + Monitoring system with full view for the operator.
- + Extendable working platforms for easy operations.

Other than truck-mounted, we design many machines trailer-mounted and approved to be towed on public roads. This solution saves truck space, load/unload operations, and cuts jobsite set up time.



**PATENTS
APPROVED**



HELICOPTER MACHINE

Fast and Safe.

The new tensioner TN1216 with its drum stand model CVR827, while ensuring the best performance in the "direct stringing" by helicopter, where the puller is replaced by the chopper, is the most advanced Tesmec laboratory in terms of safety with 3 registered patents:

- + Unit for winding and unwinding cables of a cable-laying machine.
- + Cable-laying apparatus provided with a safety system and method for stopping said cable-laying apparatus safely.
- + Safety device for a cable stretching machine, corresponding method and stretching machine using said device.

Fjord Crossing

Ørsta – Ålfoten
across Hundvikfjorden

+ SAFETY

+ PROJECT ADVISORY

+ RELIABILITY

+ SPECIAL MODULAR MACHINES

+ PARTNERSHIP

+ TECHNICAL EXPERT SERVICE

3152 m / SPAN
LENGHT

420 kV / HIGH
VOLTAGE

57 mm / CONDUCTOR
DIAMETER



SPECIAL SERVICES GIVEN

- + Technical consulting on fjord crossing stringing operations.
- + Calculation of pull values about fjord crossing stringing operations.
- + Study and manufacturing of all machines and tools needed to stringing operations.
- + Direct support of Tesmec operators on job site.
- + After sales and customer service till to the end of operation.



EQUIPMENT SUPPLIED BY TESMEC

- + ARS919 Detachable.
- + ARS708 Detachable.
- + ARS710 Detachable.
- + AFS804 Bull-wheel huge diameter.
- + Large Diameter Special Blocks.



ARS710

HYDRAULIC PULLER


MAX PULL
180 kN

MODULAR UNITS
5

ROPE DIAMETER
25 mm

Bull-wheel diameter	625 mm
Total weight	3200 Kg
Module max weight	1200 Kg
Diesel	129 kW (174 hp)
Suitable for	1 rope
Layout	Single



ARS711

HYDRAULIC PULLER


MAX PULL
180 kN

MODULAR UNITS
3

ROPE DIAMETER
24 mm

Bull-wheel diameter	600 mm
Total weight	7300 Kg
Module max weight	2950 Kg
Diesel	210 kW (286 hp)
Suitable for	1 rope
Layout	Single



ARS919

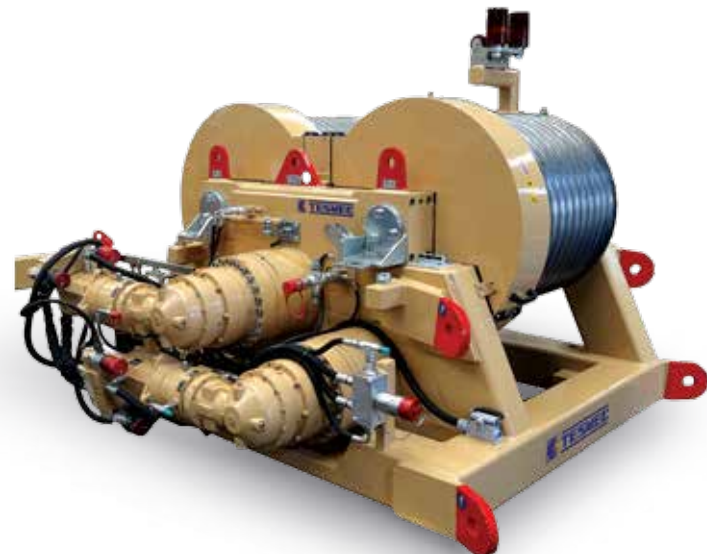
HYDRAULIC PULLER


MAX PULL
360 kN

MODULAR UNITS
5

ROPE DIAMETER
35 mm

Bull-wheel diameter	800 mm
Total weight	6035 Kg
Module max weight	3200 Kg
Diesel	209 kW (280 hp)
Suitable for	1 rope
Layout	Single





FRB600

HYDRAULIC TENSIONER



MAX
TENSION

2x75 kN



MODULAR
UNITS

3



CONDUCTOR
DIAMETER

16 mm

Bull-wheel diameter	1500 mm
Total weight	6550 kg
Module max weight	3000 kg
Diesel	48 kW (64 hp)
Suitable for	4 conductors
Layout	Twin



FRB816

HYDRAULIC TENSIONER



MAX
TENSION

2x140 kN



MODULAR
UNITS

2



CONDUCTOR
DIAMETER

54 mm

Bull-wheel diameter	1900 mm
Total weight	12000 kg
Module max weight	3200 kg
Diesel	119 kW (160 hp)
Suitable for	4 conductors
Layout	Twin



PT009

HYDRAULIC PULLER TENSIONER



MAX
PULL / TENSION

2X2000 daN



MODULAR
UNITS

5



CONDUCTOR
DIAMETER

48 mm

Bull-wheel diameter	1500 mm
Total weight	4000 kg
Module max weight	850 kg
Diesel	68 kW (92 hp)
Suitable for	2 ropes / conductors
Layout	Twin

ARS803

HYDRAULIC PULLER


MAX PULL
200 kN

MAX SPEED
4,5 km/h

ROPE DIAMETER
25 mm

Bull-wheel diameter	600 mm
Upper structure weight	10500 kg
Diesel	209 kW (280 hp)
Speed at max pull	2 km/h
Suitable for	1 rope
Layout	Single



ARS912

HYDRAULIC PULLER


MAX PULL
280 kN

MAX SPEED
5 km/h

ROPE DIAMETER
38 mm

Bull-wheel diameter	960 mm
Upper structure weight	14500 kg
Diesel	328 kW (440 hp)
Speed at max pull	2,2 km/h
Suitable for	1 rope
Layout	Single



AFT615

HYDRAULIC PULLER TENSIONER


MAX PULL / TENSION
3x45 kN

MAX SPEED
4,5 km/h

CONDUCTOR DIAMETER
40 mm

Bull-wheel diameter	1500 mm
Weight	16500 kg
Diesel	210 kW (286 hp)
Speed at max pull/tension	1,7 km/h
Suitable for	3 ropes / conductors
Layout	Triple



Pictures & drawings can be different according to technical specifications - updating programme variations without notice are possible.

Certified Quality System
ISO 9001:2015

Certified Environmental System
ISO 14001:2015

Certified Health & Safety System
ISO 45001:2018



AFQ706

HYDRAULIC PULLER TENSIONER



MAX
PULL / TENSION
4x45 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
48 mm

Bull-wheel diameter	1500 mm
Weight	19200 kg
Diesel	210 kW (286 hp)
Speed at max pull/tension	1,7 km/h
Suitable for	4 ropes / conductors
Layout	Quad Bundle



AFQ708

HYDRAULIC PULLER TENSIONER



MAX
PULL / TENSION
4x45 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
45 mm

Bull-wheel diameter	1600 mm
Upper structure weight	14000 kg
Diesel	209 kW (280 hp)
Speed at max pull/tension	1,7 km/h
Suitable for	4 ropes / conductors
Layout	Quad Bundle



AFQ709

HYDRAULIC PULLER TENSIONER



MAX
PULL / TENSION
4x45 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
45 mm

Bull-wheel diameter	1600 mm
Weight	16500
Diesel	210kW (286 hp)
Speed at max pull/tension	1,7 km/h
Suitable for	4 ropes / conductors
Layout	Quad Bundle

ARS802

HYDRAULIC PULLER



MAX PULL

240 kN



MAX SPEED

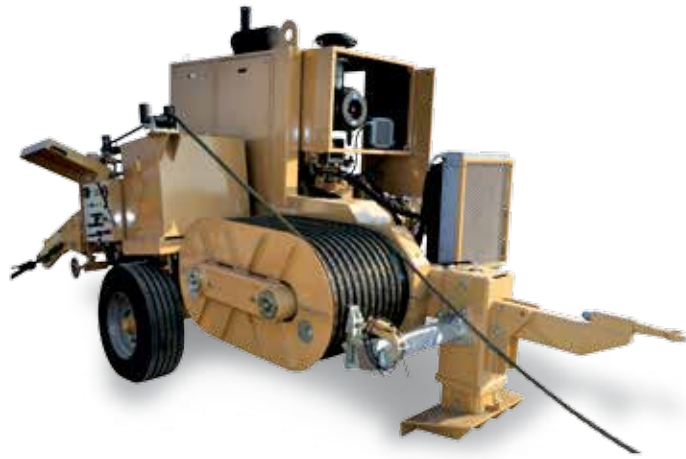
4,5 km/h



ROPE DIAMETER

32 mm

Bull-wheel diameter	800 mm
Weight	9500 kg
Diesel	280 kW (375 hp)
Speed at max pull	2,5 km/h
Suitable for	1 rope
Layout	Single



ARS907

HYDRAULIC PULLER



MAX PULL

280 kN



MAX SPEED

5 km/h



CONDUCTOR DIAMETER

38 mm

Bull-wheel diameter	960 mm
Weight	13500 kg
Diesel	328kW (440 hp)
Speed at max pull	2,2 km/h
Suitable for	1 rope
Layout	Single



FRB806

HYDRAULIC TENSIONER



MAX TENSION

2x140 kN



MAX SPEED

5 km/h



CONDUCTOR DIAMETER

54 mm

Bull-wheel diameter	1900 mm
Weight	17500 kg
Diesel	119 kw
Speed at max tension	0,5 km/h
Suitable for	4 conductors
Layout	Twin



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Certified Quality System
ISO 9001:2015

Certified Environmental System
ISO 14001:2015

Certified Health & Safety System
ISO 45001:2018



AFS618

HYDRAULIC PULLER TENSIONER



MAX
PULL/TENSION
140 kN



MAX
SPEED
4,8 km/h



CONDUCTOR
DIAMETER
57 mm

Bull-wheel diameter	2000 mm
Weight	10500 kg
Diesel	129 kW (173 hp)
Speed at max pull/tension	2,1 km/h
Suitable for	1 rope / conductor
Layout	Single



AFB710

HYDRAULIC PULLER TENSIONER



MAX
PULL/TENSION
180kN



MAX
SPEED
4,5 km/h



CONDUCTOR
DIAMETER
57 mm

Bull-wheel diameter	2000 mm
Upper Structure Weight	13000 kg
Trailer weight	5500 kg
Diesel	272 kW
Speed at max pull/tension	2,2 km/h
Suitable for	4 ropes / conductors
Layout	Twin



AFS804

HYDRAULIC PULLER TENSIONER



MAX
PULL/TENSION
200 kN



MAX
SPEED
5 km/h



CONDUCTOR
DIAMETER
60 mm

Bull-wheel diameter	2400 mm
Weight	16000 kg
Diesel	129 kW (173 hp)
Speed at max pull/tension	1,3 km/h
Suitable for	1 rope / conductor
Layout	Single



PATENTS APPROVED

TN1216 / CVR827

HYDRAULIC TENSIONER



MAX TENSION
30 kN



MAX SPEED
25 km/h



CONDUCTOR DIAMETER
51 mm

NEW TESMEC DIGITAL HMI:
7" color display.
Radio remote control.
Remote Diagnostic with GPS.
Data Recorder.
Detachable in two parts.
Designed to work joined with CVR827.



PERFORMANCE

Max tension	30 kN
Intermittend speed	25 km/h
Max speed at pull back	1 km/h
Max pull back	45 kN

HYDRAULIC TRANSMISSION

Hydraulic open circuit that provides very sensitive tensioning control and negligible deviations of tension in case of speed change.

CHARACTERISTICS

Bull-wheel diameter	1800 mm
Bull-wheel material	NYLON
Max conductor diameter	51 mm
Weight of power unit	800 kg
Weight of working unit	3200 kg
Weight of trailer	600 kg
Total (with fluid)	4600 kg
Number of grooves	6
Suitable for	1 rope
Layout	Single

ENGINE

Diesel	48 kW (65 hp)
Emission level	tier4i / Stage IIIA
Cooling system	WATER
Electrical system	24 V

CONFIGURATION

Negative self-acting hydraulic brake.
Control instruments for hydraulic system and Diesel engine.
Rigid axle 30 km/h.
Hydraulic power pack to control a reel stand with hydraulic motor.
Grounding connection point.
Radio control.

AVAILABLE DEVICES

- ALL037** Preheating device for use up to -30°C.
- ALL071** Hydraulic rope clamp for reel change operations.

CVR827 PERFORMANCE

Max tension @ 2500 mm external reel diameter	1,3kN
Max tensioning speed	25 km/h
Max recovering speed	1,5 km/h
Max tension in emergency mode @1500 mm average reel diameter	5 kN

REEL DIMENSION AND MASS

External diameter	From 600 mm to 2500 mm
Width	From 570 mm to 2400 mm
Total mass	7500 kg



7" COLOR DISPLAY



RADIO REMOTE CONTROL

