



DAL POZZO VERRICELLI WINCHES

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Company profile

The company DAL POZZO VERRICELLI has been manufacturing winches for more than 40 years and its only aim is producing and selling bronze worm wheel and worm screw winches.

Since the beginning of its activity, the company has taken its place at the top of the European markets thanks to the high quality of raw materials and to its wide range of products. Furthermore it has always tried to meet the needs of different sectors of the international market and the requests of customers.



TECHNICAL PRESENTATION OF THE WINCHES

DAL POZZO VERRICELLI winches are manufactured only with high-quality materials and in compliance with the European Directive 2006/42/EC (ex 98/37/EC) relating to machinery and following amendments.

All winches are equipped with a reduction unit consisting of HIGH RESISTANCE BRONZE WORM WHEEL AND WORM SCREW IN HARDENED AND GROUND STEEL. Thanks to our reduction unit, reverse motion is possible only by pulling on the operating lever. Therefore no brakes are needed.



This system guarantees maximum operational safety. If compared to others types of reduction unit - such as ordinary reduction gears or epicyclical gears -, the advantage of our bronze worm wheel and worm screw system is that it IS NEVER SUBJECT TO ACCIDENTAL REVERSE MOTION.

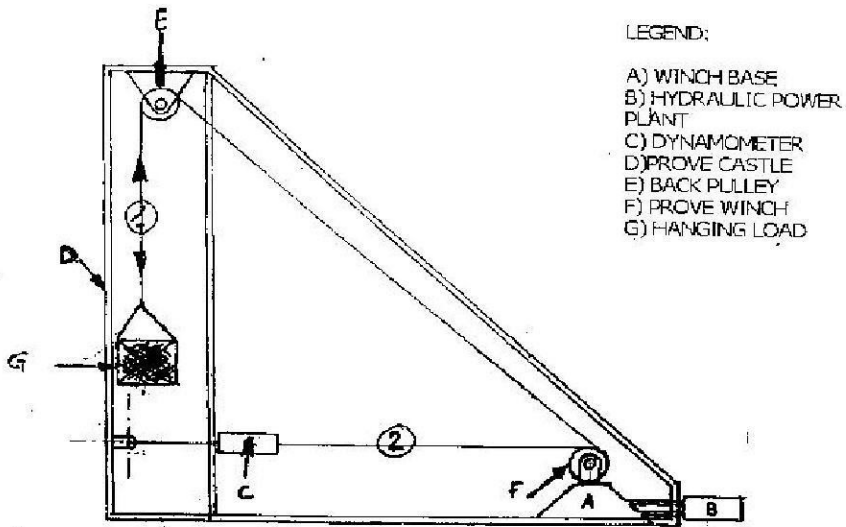
QUALITY CONTROL

The pulling capacity and the safety of our winches are checked by our company by means of a test bed equipped with a **hydraulic dynamometer**. This allows us to verify either the fatigue and the pull of all winches.

Two types of quality control are carried out:

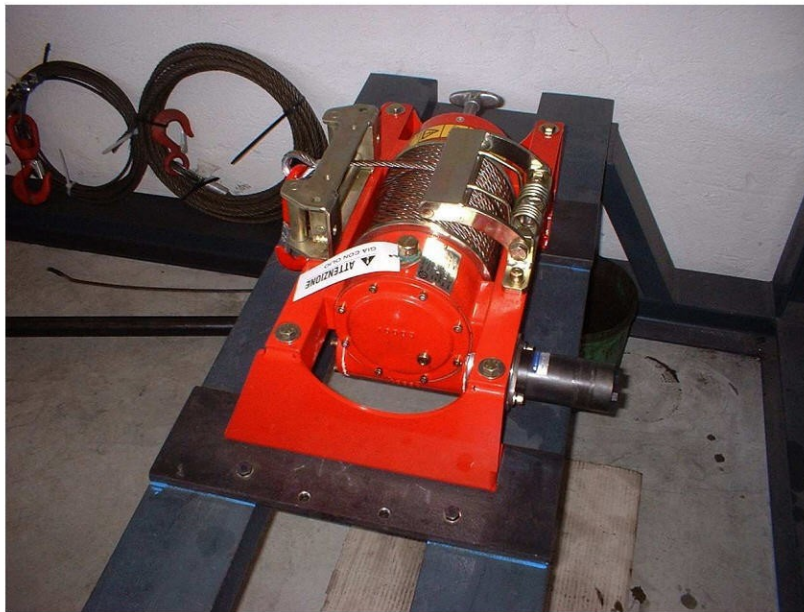
- 1- Control of resistance and wear and tear of the conical couple;
- 2- Pulling test aimed at checking all the components.

Please find in the next page a figure representing the tests carried out.



- WITH N. 1 WE MAKE THE PROVE OF WEAR AND TEAR OF CONIC COUPLE

- WITH N. 2 WE MAKE THE PROVE OF CALIBRATION OF DYNAMOMETERS COMPONENTS.



IDENTIFICATION OF THE WINCHES

DAL POZZO VERRICELLI winches can be easily identified thanks to series and models.

For example "Series 8500 mod. DPH" identifies the two main features of the winch:

- 1) – Series 8500 = pull capacity measured by the dynamometer*: 8500 Kg
- 2) – mod. DPH = hydraulic version

* the direct pulling force on a flat surface is about three times as the pulling force measured by the dynamometer
(direct pull measured by dynamometer : direct pull on a flat surface in neutral gear = 1: 3)



RANGE OF PRODUCTS

ELECTRIC WINCHES (DPE)

supplied with direct current (12-24 v)

The model **DPE 1000 12 V** needs a more detailed description because of its particular features :

- a fixing plate allowing an easy and quick installation in any kind of vehicle;
- a 4 wound-field electric motor, specifically of small size, which is particularly powerful and resistant;

Absorption in max. fatigue is about 80 A

- an external covering made of ABS protecting the internal gears;
- a handle allowing the operator to safely and quickly hook and unhook the winch.

Series **2000** and **3000** mod. DPE are only supplied with 12 V current. Therefore they can be fitted on any vehicle which can supply them with 12 V current. The power feeding the winch comes directly from the battery of the vehicle on which it is fitted. The winch allows a safe and quick connection.

Absorption in max. fatigue is about 90 A
(about 2/3 lower than the competition)

Series **3800** and **4800** mod. DPE are only supplied with 24 V current. Therefore they can be fitted on any vehicle equipped with a 24 V battery.

Absorption in max. fatigue is about 45 A
(about 2/3 lower than the competition)

ELECTRIC WINCHES (DPE)
supplied with alternating current
(220 V single-phase and 220/380 V three-phase)

Series **AS 900**, **AS 2700** and **A 2700** mod. DPE can be operated only in a place protected from rain and snow. The power feeding these winches comes from an external 220/380 V electricity source. They must be connected to a standard power supply plug of an electric system complying with safety rules.

They can be easily fitted on car benches, in warehouses to draw ware or in workshops to draw damaged cars etc.

They must be fed with 220 V single-phase current or 380 V three-phase current and have a pulling capacity ranging from 900 Kg to 4500 Kg.

The electrical panel turns the 220 single-phase and 220/380 three-phase mains supply into 24 V low voltage in the control circuits.

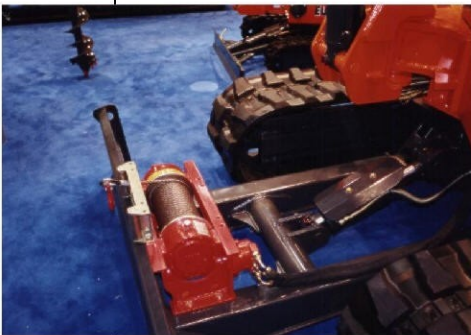
In contrast to electric motors supplied with direct current, these motors are self-cooling, therefore they do not overheat.

HYDRAULIC WINCHES (DPH)

All the DPH winches are equipped with hydraulic motors and can be connected to a hydraulic power system.

The connection of the hydraulic motor to the hydraulic power supply shall be carried out by the person responsible for the installation, who shall use standardized pipes and couplings able to stand the operating pressures.

Hydraulic winches series **1000**, **1500**, **2000**, **2400**, **3000** and **3700** mod. DPH can be easily fitted to agriculture machines (agriculture cars or little tractors), as well as to car assistance vehicles, little trucks, mini excavators and mini loaders that are equipped with a hydraulic circuit.



Series **4000**, **4700** and **5700** can be easily fitted to tractors, trailers, wheel loaders, backhoe loaders, mini excavators and agriculture machines from 50/60 HP.

Series **6700**, **8000**, **9500**, **10000** and **13000** can be easily installed on trailers and semi-trailers, tractors from 60 HP, vehicles, forestry machines, big tyred and tracked excavators for special loading.



MECHANICAL WINCHES (DPM)

Mechanical winches (DPM) are operated directly by the mechanical linkage of the winch reduction gear, which is keyed on to the shaft by means of a wedge.

Mechanical winches ranging from 1000 to 3700 can be connected to the P.T.O. of agriculture machines and of off-road vehicles that are not equipped with any hydraulic system (such as agriculture cars or little tractors).

The following mechanical winches have a higher pulling capacity:

4000- 1/CI
8500- 2/CI
10000- 3/CI

They are usually installed with mechanical reverse gear/overdrive on caterpillar tractors from 60 HP and are used to collect wood.

DPA WINCHES: Agriculture and forestry machines

Series 4000, 7000 FR , 8000 and 10000 mod. DPA were developed for AGRICULTURE and FORESTRY and are mainly employed to haul logs on hilly grounds.

These machines can be connected only to agricultural tractors equipped with a three-point universal joint. They are run by the power take-off of the tractor by means of a propeller shaft combined with a torque limiting device.

