



World Standard of Swaging



WIRETEKNIK ROLLER DIES

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We replace brute force with rollers

Portable Roller Swagers

Wireteknik AB was founded 1980. It all began with the sail yacht market. It was the increasing demand for a faster, more cost effective and high mobility solution for attaching terminals to wire rope for standing rigging.

A machine that did away with convention. All previous concepts of fitting terminals onto full-steel wire rope and solid rod were turned upside down. Further, the terminal was also straight, not curved as was usual hitherto.

The principle is simple. The terminal itself drives the roller dies. The machine works with a freely rotating pair of rollers, driven when the terminal is drawn between them. It is a simple and robust design with the minimum of movable parts, making it reliable both in the field and in rational production.

Development was quick. In many fields, the need for high strength swaged terminals is considerable. The machines perform quality effectively on solid rod as they do on full-steel wire rope. The breaking load is as high as that of the rod or wire.

Electricity, Air or Manpower

A big advantage with our swagers is their portability. One man can do the job, whether he uses a manual pump, an electric motor or compressed air. Due to the portability, a permanent on site solution can be achieved in all circumstances. The range is wide, and the capacity is from 1,6 mm – 40 mm, rod or wire rope.

Spelter Sockets and Sleeves Replaced

Our technique provides an alternative to sleeves, spelter sockets and the joining of non weldable materials.

LLOYD'S Certificate

Evidence of the strength and reliability of our technique is the approval from Lloyd's Register of Shipping.

Our customers

Among the companies placing their confidence in us are Atlas Copco, NATO, Seldén Mast AB, Spine Robotic, US Navy, Swedish Forest industry, the Commercial Fishing Navy, Certex AB, Kirby Building Systems, Pfeiffer GmbH, Midstate traffic control Inc., Blue Systems AB, Robert Lindemann KG, Millennium Dome/Spencer Rigging Ltd., Capital Safety Inc., Bridge & Co, Pro-Boat Ltd., Hayn Enterprises, Carl Stahl, the majority of the world yacht riggers and the University of Stuttgart.



Our policy

Our policy is one of the continual development of safe, reliable and functional fastenings for cables, wires and rod, together with further development of our patented terminal presses.



1. STRUCTURAL RIGGING FOR THE SUVARNABHUMI AIRPORT BANGKOK. TENS OF THOUSANDS SWAGED ENDS WAS MADE FOR THIS PROJECT BY A SEVERAL OF OUR CUSTOMERS.



2. HANDRAIL, STOCKHOLM ARCHIPELAGO VILLA.
3. YACHT RIGGING, DETAIL.
4. ROAD SAFETY BARRIER.

Endless Possibilities

With our swaging technique you can make creative wire solutions in a wide range of applications.

Support structures for sail roofs, road safety barriers, rigging for sailing yachts, glass facades, balustrades, crane ropes, architectural rigging or any other imaginable area. The extreme portability of the Wiretechnik swaging machines makes it easy to perform your task directly at the job site, regardless of the nature of your project.

It's only your imagination that sets limits to what can be done with our solution for swaging wire rope.





1. A100 FITTED WITH HAND PUMP P19L.

The Bantam Machine

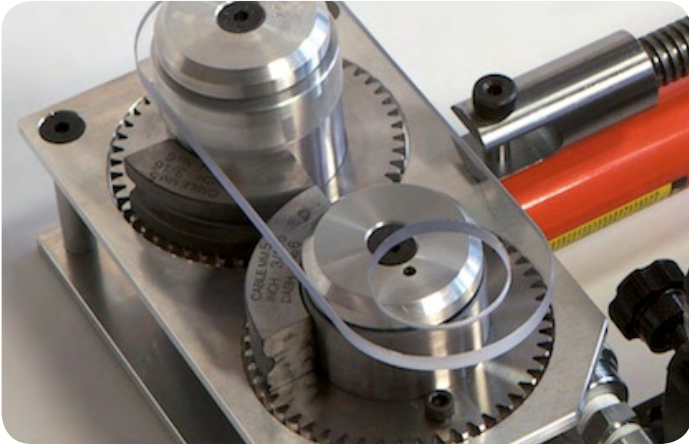
A perfect machine for swaging on-site. Low weight and small outer dimensions makes it extremely portable.

Typical applications:

- Architectural, like balustrades and railing.
- Scenographic use at theaters for hanging and supporting set pieces.
- Onboard joining of towing lines for

NATO's aviation practice targets.

- Shop fitters use it to make spectacular product displays for their customers.
- Standing rigging for sailing dinghies and lifelines on yachts.
- Structural rigging for hang-gliders and ultra-light airplanes.



2. A100 FITTED WITH HYDRAULIC PUMP PUH1.

3. A100 DETAIL.

Swaging range:

1,6-5 mm (1/16"-3/16")

Dimensions:

L=440 mm (17 1/2")

W=300 mm (11 3/4")

H=135 mm (5 1/4")

Weight:

11 kg (24 lbs) Without Handpump.

13 kg (29 lbs) with Handpump P19L.



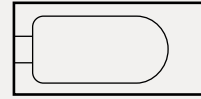
ART.NO: CHL-6,
STRAIGHT AND BENDED LINK



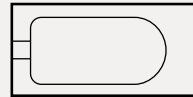
ART.NO: CHL-10,
STRAIGHT AND BENDED LINK



ART.NO: NUT A100
M5 1/4" - M6 5/16"
M8 3/8" - M10



ART.NO: SP9.5, STUD PULLER



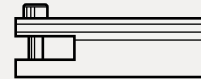
ART.NO: SP6.5, STUD PULLER



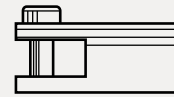
ART.NO: PP6.2, FORK
PULLER SMALL



ART.NO: PP10, FORK PULLER
MEDIUM



ART.NO: F2, FORK SMALL
PIN DIAM 6MM



ART.NO: F3, FORK MEDIUM
PIN DIAM 10MM

THESE PULLING TOOLS ARE INCLUDED.



1. A200.

Our Most Sold Machine

A perfect machine for swaging on-site. Low weight and small outer dimensions makes it extremely portable.

Typical applications:

- Standing rigging and lifelines for sailboats. The Swedish Navy uses it for making railing.
- Architectural, like balustrades and railing.
- Scenographic use at theaters for hanging and supporting set pieces.
- Extensively used for on-site swaging of wire fall protection systems on roofs and buildings.
- Structural rigging for hang gliders and ultra-light airplanes.
- Anchoring of weather balloons.
- Oceanographers uses it for swaging winch wire ropes for their surveying instruments.
- Lifting strops for fuel rods at nuclear power plants.
- Structural rigging for sail-roofs and sail-shades.



2. A200 FITTED WITH HYDRAULIC PUMP PUH1.

3. HAND PUMP P59L FOR THE A200.

Swaging range:

1,6-8 mm (1/16"-5/16")

Weight:

19,5 kg (42 lbs)

Dimensions:

L=500 mm (19 3/4")

W=300 mm (11 3/4")

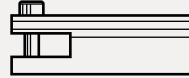
H=140 mm (5 1/2")



ART.NO: CHL-6,
STRAIGHT AND BENDED LINK



ART.NO: CHL-10,
STRAIGHT AND BENDED LINK



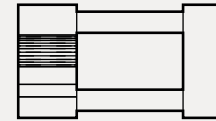
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PIN DIAM 6MM



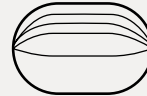
ART.NO: PP6.2, FORK
PULLER SMALL



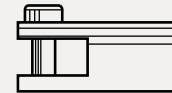
ART.NO: PP10, FORK PULLER
MEDIUM



ART.NO: BP4-8,
BALL PULLER 4-8 MM



ART.NO: OLIVES
MM UNF
M10-M5 1/4"-7/16"
M12-M6 3/8"-9/16"
M14-M8 1/2"-5/16"
M16 5/8"
R.H



ART.NO: F3, FORK MEDIUM
PIN DIAM 10MM

THESE PULLING TOOLS ARE INCLUDED.



1. THE A270, EXTREME VERSATILITY MADE PORTABLE.

Big Job - Small Machine

A perfect machine for swaging on-site. Low weight and small outer dimensions makes it extremely portable. Rigging screws can be swaged assembled.

Typical applications:

– Standing rigging and lifelines for

sailboats.

– Architectural, like balustrades and railing.

– Often used to build support structures for membrane roofs and tents.

– Structural rigging for sail-roofs and sail-shades.



2. A270 DETAIL.
3. A270 REAR VIEW.

Swaging range:
2,5-12 mm (3/32"-1/2")

Dimensions:
L=750 mm (29 1/2")
W=420 mm (16 1/2")
H=177 mm (7")

Weight:
51 kg (113 lbs)

**Shipping Dimensions
for Transport Box:**
L=800 mm (31 1/2")
W=600 mm (23 5/8")
H=420 mm (16 9/16")



ART.NO: CHL-6,
STRAIGHT AND BENDED LINK



ART.NO: CHL-10,
STRAIGHT AND BENDED LINK



ART.NO: OLIVES MM M10-
M5, M12-M6, M14-M8 M16
R.H UNF 1/4"7/16", 3/8"-
9/16", 1/2"-5/16", 5/8"



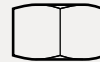
ART.NO: PP6.2, FORK
PULLER SMALL



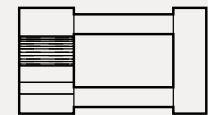
ART.NO: PP10, FORK PULLER
MEDIUM



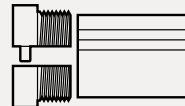
ART.NO: PP20, FORK
PULLER LARGE



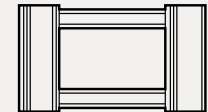
ART.NO: NUT
UNF 3/4"
7/8"
1"
R.H



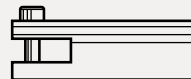
ART.NO: BP4-8, BALL PULLER
4-8 MM



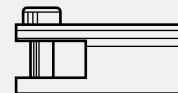
ART.NO: BP10-12,
BALL PULLER 10-12 MM



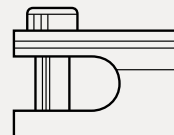
ART.NO: MP1, MULTIPURPOSE
PULLING TOOL



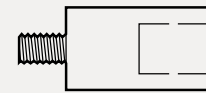
ART.NO: F2, FORK SMALL
PIN DIAM 6MM



ART.NO: F3, FORK MEDIUM
PIN DIAM 10MM



ART.NO: F4, FORK LARGE
PIN DIAM 16MM



ART.NO: M12/M20 ADAPTOR

THESE PULLING TOOLS ARE INCLUDED.



1. A350, SWAGE ASSEMBLED TURNBUCKLES.

The Production Line Machine

A perfect machine for line production, the low weight and small outer dimensions still makes it extremely portable. Rigging screws can be swaged assembled.

Typical applications:

- Standing rigging and lifelines for sailboats.
- Safety wire for windmill blades.

- Architectural, like balustrades and railing.
- Good for medium size glass facade projects.
- Often used to build support structures for membrane roofs and tents.
- Structural rigging for sail-roofs and sail-shades.



2. A350 FITTED WITH HYDRAULIC PUMP PUH1.

3. A350 SIDE VIEW.

Swaging range:

2,5-16 mm (3/32"-5/8")

Dimensions:

L= 1117 mm (44")

W=370 mm (14 3/4")

H=210 mm (8 1/4")

Weight:

66 kg (146 lbs)

**Shipping Dimensions
for Transport Box:**

L=800 mm (31 1/2")

W=600 mm (23 5/8")

H=420 mm (16 9/16")



ART.NO: CHL-6,
STRAIGHT AND BENDED LINK



ART.NO: CHL-10,
STRAIGHT AND BENDED LINK



ART.NO: OLIVES MM M10-
M5, M12-M6, M14-M8 M16
R.H UNF 1/4"/7/16", 3/8"-
9/16", 1/2"-5/16", 5/8"



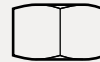
ART.NO: PP6.2, FORK
PULLER SMALL



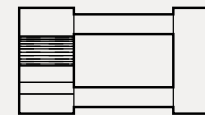
ART.NO: PP10, FORK PULLER
MEDIUM



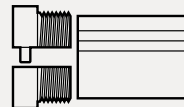
ART.NO: PP20, FORK
PULLER LARGE



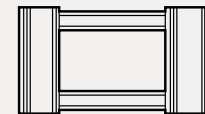
ART.NO: NUT
UNF 3/4"
7/8"
1"
R.H



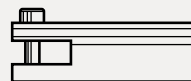
ART.NO: BP4-8, BALL PULLER
4-8 MM



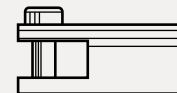
ART.NO: BP10-12, BALL
PULLER 10-12 MM



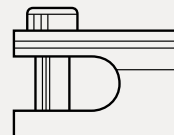
ART.NO: MP1, MULTIPURPOSE
PULLING TOOL



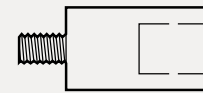
ART.NO: F2, FORK SMALL
PIN DIAM 6MM



ART.NO: F3, FORK MEDIUM
PIN DIAM 10MM

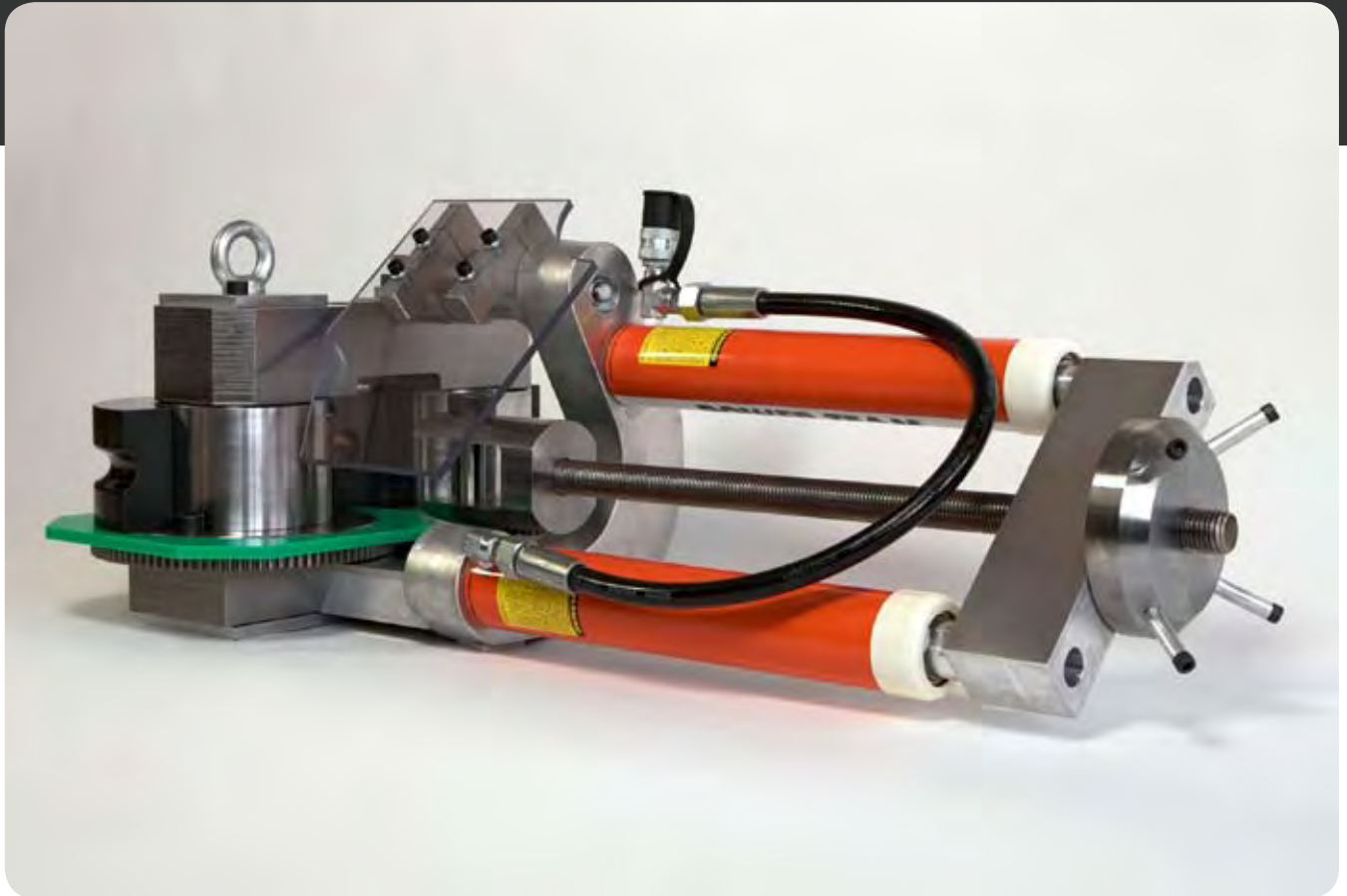


ART.NO: F4, FORK LARGE
PIN DIAM 16MM



ART.NO: M12/M20 ADAPTOR

THESE PULLING TOOLS ARE INCLUDED.



1. POWERFUL, YET PORTABLE.

The Ultra Compact Machine for up to 28 mm Wire Rope

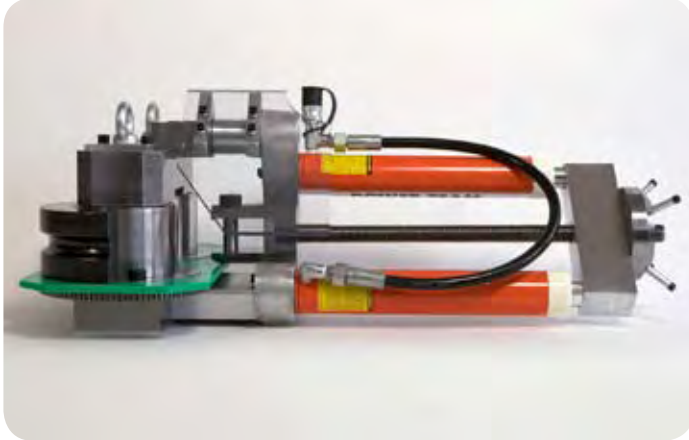
A perfect machine for swaging on-site. Low weight and small outer dimensions makes it extremely portable. Rigging screws can be swaged assembled.

Typical applications:

- Standing rigging and lifelines for larger sailboats and yachts.
- Used for on-site production of road

safety barrier systems.

- Architectural, like balustrades, railing and hanging bridges.
- Good for big size glass facade projects.
- Often used to build support structures for membrane roofs and tents.
- Structural rigging for sail-roofs and sail-shades.



- 2. A400, HUGE CAPACITY DESPITE SMALL DIMENSIONS.
- 3. A400, OPEN DESIGN FOR EASY OPERATION.

Swaging range:

8-28 mm (5/16"-1 1/8")

Dimensions:

L=990 mm (39")

W=530 mm (20 7/8")

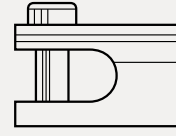
H=370 mm (14 1/2")

Weight:

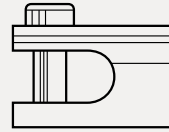
142 kg (313 lbs)



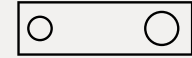
ART.NO: PP20, FORK PULLER LARGE



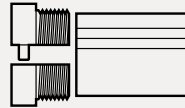
ART.NO: F4, FORK LARGE PIN DIAM 16MM



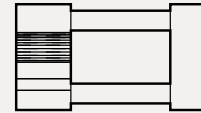
ART.NO: F5, FORK XL PIN DIAM 24MM



ART.NO: PPA400, PULLING PLATE



ART.NO: BP10-12, BALL PULLER 10,12 MM



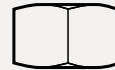
ART.NO: SPA400, STUD PULLER



ART.NO: NUT A400

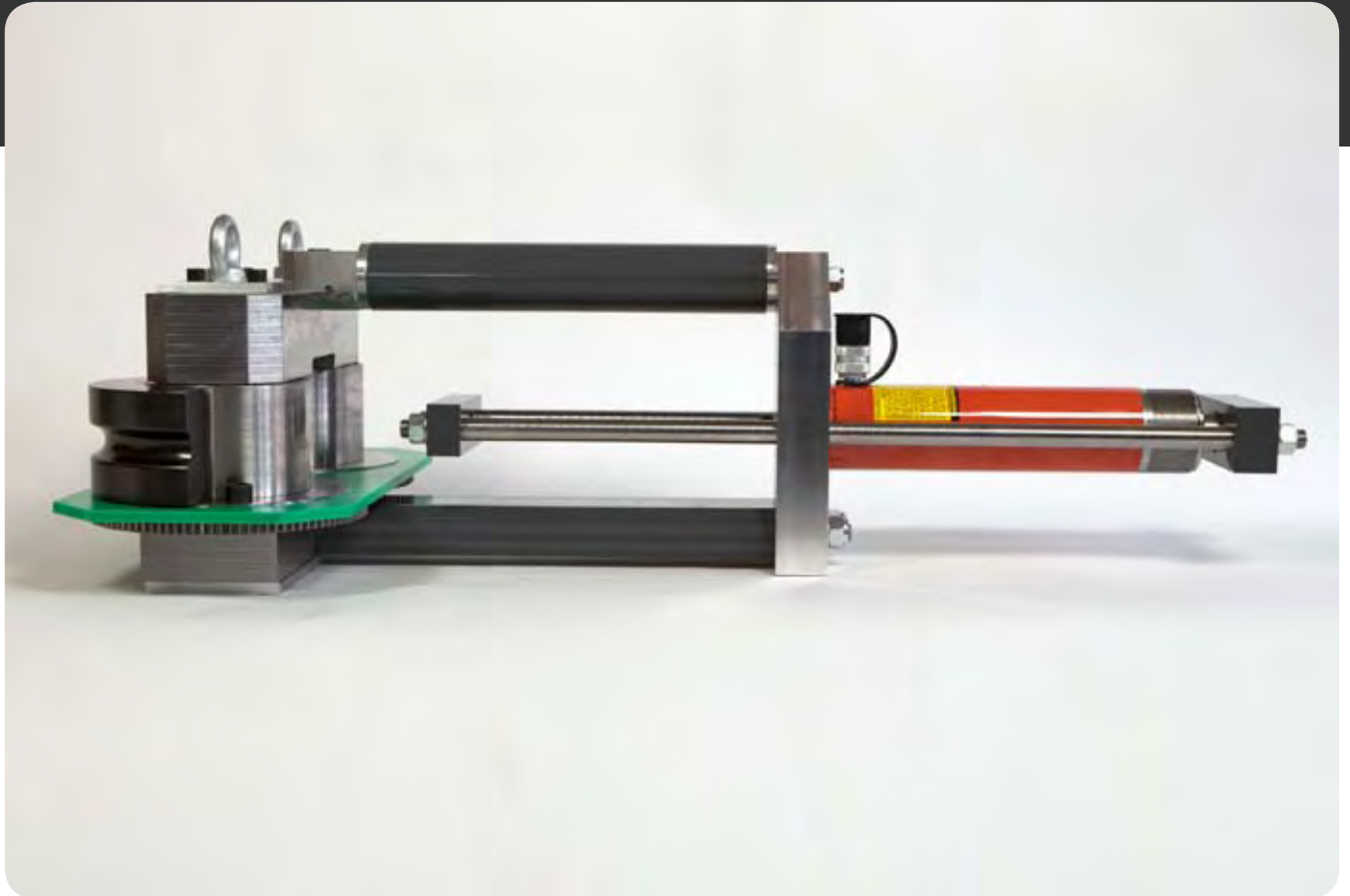


ART.NO: CHL-13, STRAIGHT AND BENDED LINK



ART.NO: M24 NUT

THESE PULLING TOOLS ARE INCLUDED.



1. A400RS, COMPACT AND ROBUST.

The Road Safety Barrier Specialist

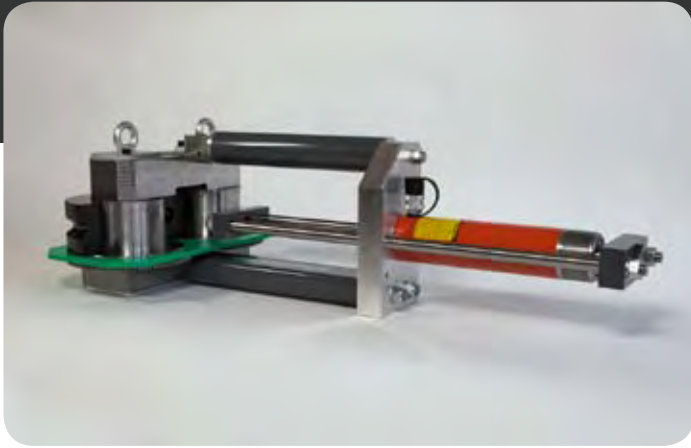
A perfect machine for swaging on-site.

Low weight and small outer dimensions makes it extremely portable.

Swaging Range: Special design for 19 mm wire rope.

Typical applications:

– Special machine made for swaging road safety barrier wire ropes, on-site.



- 2. A400RS, OPEN DESIGN FOR EASY ACCESS.
- 3. A400RS, FAITHFUL PARTNER ALONG THE ROAD.

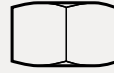
**Custom Road Safety
Barrier Machine**

Dimensions:

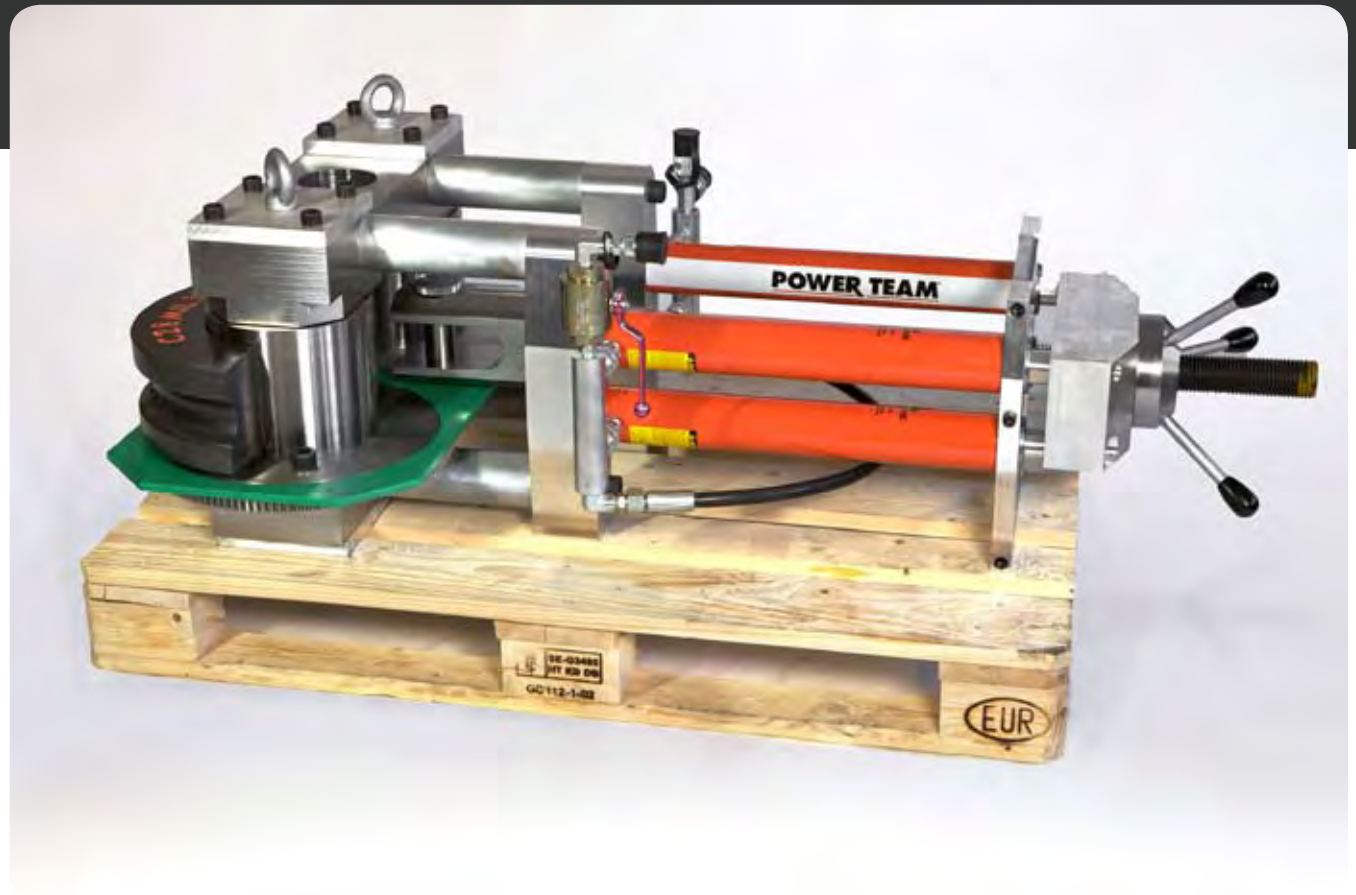
L=1150 mm (45 1/4")
W=530 mm (20 7/8")
H=350 mm (13 3/4")

Weight:

158 kg (348 lbs)



ART.NO: M24 NUT



1. A500, LARGE PROJECTS FITS ON A PALLET.

“The Bronto” our Largest Machine

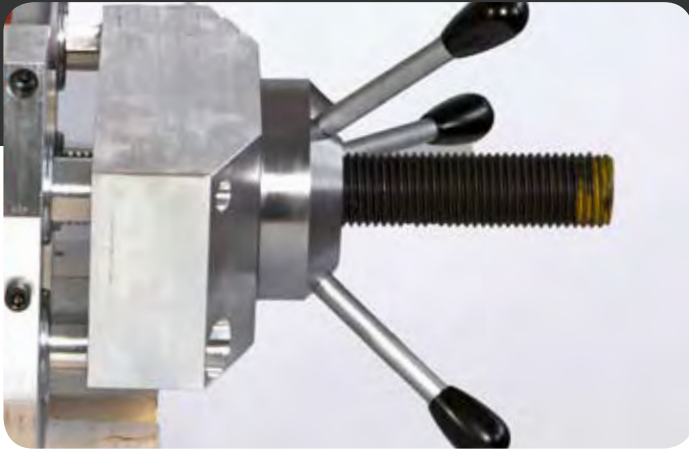
A perfect machine for swaging on-site. Low weight and small outer dimensions makes it extremely portable.

Typical applications:

- Architectural, like balustrades, railing and hanging bridges.
- Often used to build support structures

for membrane roofs and tents.

- Good for big size glass facade projects.
- Structural rigging for sail-roofs and sail-shades.
- Standing rigging and lifelines for larger sailboats and yachts.



2. A500, ADJUSTMENT WHEEL.

3. A500, HEAD DETAIL.

Swaging range:

16-40 mm (5/8"-1 1/2")

Weight:

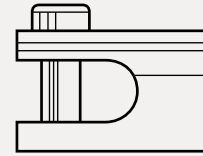
392 kg (864 lbs)

Dimensions:

L=1380 mm (54 1/4")

W=780 mm (30 3/4")

H=490 mm (19 1/4")



ART.NO: F6, FORK XXL
PIN DIAM 40MM

OTHER PULLING
TOOLS CUSTOM
MADE BY REQUEST.



HYDRAULIC PUMP RANGE.

Hydraulic pump range

To operate the Wiretechnik swaging machines, we have a series of well proven hydraulic pump units to choose from. A hand pump, or the PUH1 with a cordless

drilling machine, is the perfect choice when working far from electrical power. Our range of electro hydraulic power units, are available in single or three-phase configuration.



HAND PUMP P59L

L: 535 mm W: 125 mm H: 180 mm Weight: 3.9kg



KA22/KAW22

L: 230 mm W: 170 mm H: 340 mm Weight: 14kg



PUH1

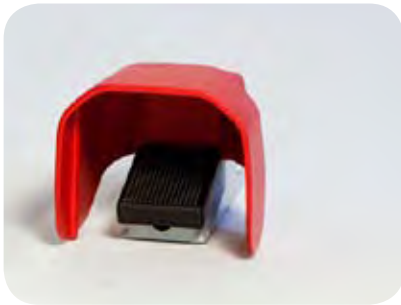
FITTED TO
SWAGING MACHINE MAX SIZE OF WIRE

A200	8 mm
A250	10 mm
A270	10 mm
A300	12 mm
A350	14 mm

Swaging speeds vary depending on type of cordless drilling machine.

Typically a mid size machine with 1500 Rpm will give about 10 mm/second of swage-speed on a Wireteknik A200 Swager.

L: 230 mm W: 200 mm H: 125 mm Weight: 4,4kg



FOOT PEDAL

For operating hydraulic pump units HC4, KA22 and KAW22, this foot pedal is included.

L: 260 mm W: 150 mm H: 140 mm Weight: 1,5kg



HC4

L: 230 mm W: 230 mm H: 420 mm Weight: 23kg

PROPERTIES OF KA22/KAW22/HC4

TYPE OF SWAG NG MACHINE	HYDRAL C PUMP	VOLTAGE	SWAG NG SPEED
Single Phase			
A200, A250, A270	KAW22	230V/50Hz	9,0 mm/s
A300, A350	KAW22	230V/50Hz	6,5 mm/s
Three Phase			
A200, A250, A270	KA22	400V/50/60Hz	25 mm/s
A300	KA22	400V/50/60Hz	19 mm/s
A350	KA22	400V/50/60Hz	13 mm/s
A400	HC4	400V/50/60Hz	12 mm/s
A500	HC4 x 2	400V/50/60Hz	12 mm/s



An example of the hydraulic pump PUH1 fitted to swaging machine A200. The cordless drilling machine is optional equipment.

Swage Dimensions



WIRESIZE	DIAMETER BEFORE SWAGING	DIAMETER AFTER SWAGING
1.6	4.06/3.94	3.50/3.40
2.5	5.53/5.41	4.82/4.7
3	6.35/6.22	5.56/5.44
4	7.54/7.42	6.35/6.23
5	9.12/9.00	7.95/7.83
5.5	10.84/10.72	9.50/9.35
6	12.54/12.42	11.12/10.95
7	14.30/14.18	12.70/12.50
8	16.13/16.01	14.30/14.07
9-10	17.85/17.73	15.90/15.70
11	19.83/19.63	17.47/17.27
12	21.44/21.32	19.05/18.82
12E	20.08/20.00	17.80/17.60
14	25.00/24.88	22.23/22.00
16	28.17/28.05	25.40/25.15
19	34.52/34.40	31.75/31.44
22	40.46/40.21	36.50/36.20
25	46.02/45.77	41.28/40.97
28	50.0	44/44.5
32	58.0	51.0/51.5
36	65.0	57.0/57.8
38-40	72.0	63.2/64.0

WIRESIZE	DIAMETER BEFORE SWAGING	DIAMETER AFTER SWAGING
1/16	.160/.155	.138/.133
3/32	.218/.213	.190/.185
1/8	.250/.245	.219/.214
5/32	.297/.292	.250/.245
3/16	.359/.354	.313/.308
7/32	.427/.422	.375/.368
1/4	.494/.489	.438/.431
9/32	.563/.558	.500/.492
5/16	.635/.630	.563/.554
3/8	.703/.698	.625/.618
7/16	.781/.773	.688/.680
1/2	.844/.839	.750/.741
9/16	.984/.979	.875/.866
5/8	1.109/1.104	1.000/.990
3/4	1.359/1.354	1.250/1.238
7/8	1.593/1.583	1.437/1.425
1	1.812/1.802	1.625/1.613
11/8	1.968	1.732/1.751
11/4	2.284	2.007/2.028
13/8	2.559	2.244/2.275
11/2	2.835	2.488/2.519
13/4	2.952	2.598/2.640



1 Choose the pair of roller dies that corresponds to the cable diameter, and slip them onto the cogwheel synchronizing pins. The arrows on the dies should always be in the swaging direction.



2 Attach the terminal to the attachment fixture on the drawbar, and adjust the length so the roller dies meet the terminal shank at desired position.



3 Apply just enough hydraulic pressure so that the roller dies holds the terminal firmly. Then mark and insert the cable into the bottom of the terminal throat.



4 Move the transparent protective shield into position. Apply hydraulic pressure to draw the terminal between the roller dies.



5 When the roller dies rotate, they will press the terminal shank onto the wire rope.



6 Measure the diameter of the terminal after swaging, and compare with the swage dimensions list.

Note

The swager is designed to reduce the terminal shank to required diameter in one pass. However dimension variations of terminals, cables or material hardness could make it necessary to pass the terminal twice.

Note: When swaging solid rods, a special swaging compound must be used. After swaging wipe off the roller dies and swaging machine, and apply a corrosion preventative.

Note: The machines are designed to swage full steel wire rope or rod only.

OUR POLICY IS CONTINUAL
DEVELOPMENT OF SAFE,
RELIABLE AND FUNCTIONAL
FASTENINGS FOR
CABLES, WIRES AND ROD,
TOGETHER WITH FURTHER
DEVELOPMENT OF OUR
PATENTED TERMINAL
SWAGING MACHINES
THAT ARE DESIGNED AND
ADAPTED TO MEET THE
REQUIREMENTS OF OUR
CUSTOMERS.



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