



SAS ENGINEERING & PLANNING SRL
Via A. Volta, 5 23867 - Suello (LC) - Italy
Tel. +39.031655593 Fax: +39.031657223
Partita IVA 00264440132
E-mail: info@sas.it Web site: www.sas.it

Suello (LC), 20.06.2012

M/ s

BROWN EUROPE SAS

FRANCE

Attn.: Mr. Gilles Roussilhe

OFFER No. 171/12

N°1 TWO-ROLLS STRAIGHTENING M/C RL60



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With reference to your kind request, we are pleased to provide you our best offer for:

***** N°1 TWO-ROLLS STRAIGHTENING M/C RL60 *****

As per our description

MACHINE PRICE: EUR 390.000,00

Machine Option:

- *Centrifuge for Oil Cleaning* EUR 15.000,00
- *No. 1 set of spare rolls (2 rolls)* EUR 30.000,00

Completed with bearings and holders

Visual Straightness Control Device: EUR 35.000,00

DELIVERY: 5 months from your order receipt

TRANSPORT: Ex-works our factory Suello (LC), Italy

PAYMENT: 30% at order

70% by L/C irrevocable & confirmed by primary Italian Bank to be opened by 1 month from the order, which will be cash-in by SAS as follow:

- 60% at transport document delivery
- 10% 90 days from transport document delivery

OFFER VALIDITY: 30 days

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1. TECHNICAL DATA

- Range: Round: $\varnothing 10 \div 35$ mm
- Material: titanium and nickel alloy
- Bars' entry condition: titanium: peeled and drawn
Nickel and alloy: in cold worked condition

S.no	Parameter	Unit	Data
1	Maximum Round Drawn Size	Dia (mm)	35
2	Minimum Round Drawn Size	Dia (mm)	10
3	Size Tolerance	IT	IT9
4	Maximum Bars' Length	M	9.0
5	Minimum Bars' Length	M	3.0
7	Ovalization	Tolerance on diameter	1/2
8	Round Straightness achievable	DIN	According to



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2. COMPOSITION

- 1) **LOADER WITH SELECTOR**
- 2) **TWO-ROLL STRAIGHTENING & POLISHING MACHINE ENTRY CHANNEL**
- 3) **TWO-ROLL STRAIGHTENING & POLISHING MACHINE ENTRY PINCH ROLL**
- 4) **TWO-ROLL STRAIGHTENING & POLISHING MACHINE RL60**
- 5) **TWO-ROLL STRAIGHTENING & POLISHING MACHINE EXIT PINCH ROLL**
- 6) **RIGHT/LEFT UNLOADING CHANNEL**
- 7) **COLLECTING CRADLE WITH BELTS**
- 8) **BARS' ALIGNMENT**
- 9) **ELECTRICAL EQUIPMENT**

Machine Option:

- **Centrifuge**

- **No. 1 set of spare rolls (2 rolls)**

Completed with bearings and holders

Visual Straightness Control Device:



3. MACHINE DESCRIPTION

1) LOADER WITH SELECTOR

2) TWO-ROLL STRAIGHTENING & POLISHING MACHINE ENTRY CHANNEL

Consisting of a steel-section structure, fixed to the floor, it supports a mobile structure made of suitably sound proofed boxed steel sections containing the tubes for guiding the bar.

3) TWO-ROLL STRAIGHTENING & POLISHING MACHINE ENTRY PINCH ROLL

4) TWO-ROLL STRAIGHTENING & POLISHING MACHINE RL60

This consists of a sturdy structure made of electrowelded, normalised steel. It supports the upper and lower straightening rolls constructed in high-strength steel alloy.

The profile of the rolls makes it possible to optimize operation in the prescribed application fields obtaining excellent results in the final product.

The working angles of the straightener's rolls are adjustable manually and their position is indicated on a graduated scale.

The vertical position of the lower roll is fixed while the position of the upper roll is adjustable by means of a geared motor in accordance with the diameter of the wire being worked.

The position of the roll is measured by a linear encoder and is shown on the relevant display.

The upper roll is supported by a system of cup springs to eliminate any clearance or give. The bars are guided laterally by guides made of scratchproof material with great resistance to wear; the guides can be adjusted manually by the operator depending on the diameter of the material being worked.

5) TWO-ROLL STRAIGHTENING & POLISHING MACHINE EXIT PINCH ROLL

It helps the bars exit from the two-roll straightening & polishing machine and sends them to the unloading table.

A bar braking system fastened to the frame is provided. This consists of a nylon hold-down roll operated by a pneumatic cylinder that stops the bar in the unloading position.

6) RIGHT/LEFT UNLOADING CHANNEL

7) COLLECTING CRADLE WITH BELTS

8) BARS' ALIGNMENT

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3. INSTALLATION & START-UP

Installation and commissioning

N°1 Mechanical operator

N°1 Electrical operator

Time : N°2 weeks (6 working days/ week, 8 hours/ d ay)

Traning

N°1 Supervisor

N°1 Electronical operator

Time: N°1 weeks after commissioning (6 working da ys/ week, 8 hours/ day)

Return Flight Tickest Biglietti from Milan, Italy – Customer office At Customer charge

Local transports (from/ to hotel to/from Factory) At Customer charge

Room & board At Customer charge

Price for Installation, Commissioning & Training

EUR 40.000,00



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4. EXCLUSION

- ❖ *Transport*
- ❖ *Installation & Commissioning*
- ❖ *Mounting & Training*
- ❖ *Workforce for installation*
- ❖ *Civil works*
- ❖ *Foundations, foundation frames, pipes to be inserted into foundations, housing for cables from the exit of foundations to the boarding boxes*
- ❖ *Covers and guards for pits and openings in floor*
- ❖ *Complete tooling*
- ❖ *Put into security/ Safety barriers and guards for factory building*
- ❖ *Risk analysis*
- ❖ *THD – Total Harmonic Distortion*
- ❖ *Fishers for anchorage*
- ❖ *Lubricants and oil*
- ❖ *Power feed and connections to main cabinets*
- ❖ *Tension selection into the cable tranche*
- ❖ *Power feed and connection to the pneumatic locations required*
- ❖ *Special safety measurement required by local authorities*
- ❖ *Off-loading of the machines from containers*
- ❖ *Machines moving inside the buyer's plant in order to put them in line*
- ❖ *Crane, tools and other material required for on-site assembly and installation*
- ❖ *Trash removal and plant clean up*
- ❖ *All the rest not expressly indicated at our charge in this document.*



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5. LITERATURE

- ◆ Machine literature in Italian or in English (in the case the Buyer need another language, it will be invoiced separately). It includes:
 1. Instruction and uses
 2. Maintenance
- ◆ Recommended spare parts list
- ◆ Electrical schemes
- ◆ Pneumatic schemes
- ◆ Hydraulic schemes
- ◆ Foundation lay out with machine and services position
- ◆ Electrical lay out with electrical cabinets, panels and derivation box position in order to define tube and cable holder track.
- ◆ Cables list

Note: Constructive as well as framework drawing can not be supplied. Only spare and wear parts drawing can be supplied but has to be keep strictly confidential.



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7. WARRANTY

12 months from the final acceptance, a period no longer than 15 months from the shipment.

The item with defects will be replaced under warranty. During this period SAS will take care of the broken spare parts supply (except the wear parts) in real time, free of charge.

The Purchaser will take care of transport, disassembly and re-assembly.

In case some of our technicians should be needed, the cost will be quoted at the moment of the event.

Pieces broken because of wrong handling and bad maintenance will not be considered under warranty.