

Lovön Samverkan AB

E4 Stockholm Bypass Project - Contracts FSE302 & FSE308
Vianini Lavori SpA - C.M.C. di Ravenna

Stockholm, November 9th, 2016

LETTER OF INTENT

between

Lovon Samverkan AB, lawfully incorporated and existing according to the Swedish laws (hereinafter referred to as the "**Contractor**" or "**LSAB**"), duly represented by Maurizio Urso in his capacity of Chairman of the Board of Directors, duly empowered to sign this act, on one part

and

MEM Soc. Generale Macchine Edili S.p.A., lawfully incorporated and existing according to the Italian laws (herein after referred to as the "**Supplier**" or "**MEM**"), duly represented by Alberto Bruzzi in his capacity of General Manager, duly empowered to sign this act, on the other part

Hereinafter individually referred to as the "Party" and collectively referred to as the "Parties".

RECITALS:

Whereas Travikverket (hereinafter the "**Client**") has awarded to the Joint Venture between Vianini Lavori and CMC di Ravenna (hereinafter the "**JV**") the tenders FSE 308 Sodra-Lovo, case number TRV 2015/18784, and FSE 302 Norra-Lovo, case number TRV 2015/18779, for the execution of road tunnels under Lovon Island as part of the project E4 Forbifart Stockholm Bypass (hereinafter the "**Works**");

Whereas the JV on the 2nd August 2016 has signed the Contracts FSE 308 Sodra-Lovo case number TRV 2016/27402 and FSE 302 Norra-Lovo case number TRV 2016/27419 (hereinafter the "**Main Contracts**") for the execution of the Works;

Whereas the JV has established a Swedish entity named Lovon Samverkan AB (LSAB or the Contractor) and have jointly determined to execute the Works through this Swedish Entity;

Whereas the Client has accepted the JV's request to execute the Works through the above Swedish entity LSAB;

Whereas LSAB is willing to purchase nr. 2 crushing plants and nr. 2 conveyor belts with intermediate stockpiling (hereinafter the "**Supply**") which are required for the execution of the Works;

Whereas the Supplier is a company specified in the design and fabrication of the Supply and has submitted its relevant technical and commercial proposal for the Supply (hereinafter the "**Proposal**" in annex 1);

The Parties hereto agreed as follows:

1. Scope of the Supply and Technical Details

Supply, for each of the two sites FSE 302 e FSE 308, of:

- Nr. 1 crushing plant with nominal capacity of 800 t/h;
- Conveyor belts with nominal capacity of 800 ton/h to convey the muck from the crushing chamber to the temporary pier;
- Nr. 1 intermediate stockpiling with tripper and automatic feeder whose capacity is about 19.000 m³ gross (about 8000 m³ net);

Details of the Scope of the Supply and Technical specification are as per attached Proposal with the following amendments:

- The capacity of the crushing plant in site FSE 302 shall be 800 ton/h, the same capacity of the crusher to be installed in site FSE 308;
- Boxes for control switchboards shall be included in the Scope of the Supply;
- Any joint between two sections of the conveyor belt shall be completely closed, insulated and sound proof as per typical detailed sketches in annex 2);
- Final section of the conveyor belt shall be equipped with load cells in order to keep record (and print) of the weight of all the muck material discharged on the ships;

2. Time Schedule

The Contractor and the Supplier have entered into this LOI to allow the Supplier to start immediately the Design of the Supply.

The supply is aware and fully accept that:

- the Design of the Supply shall be submitted to and approved by the Client;
- with specific reference to the Stockpiling, the Design shall be also submitted to and approved by the Authority/Municipality which has to issue the relevant applicable building permit.
- the above submittal and approval time shall be taken into consideration by the Supplier in his planning.

The Supplier shall start the design of the Supply immediately upon signature of this LOI; the delivery of the Supply will be as follows :

- FSE 308 – Crushing Plant : 1st February 2017
- FSE 302 – Crushing Plant : 20th February 2017
- FSE 308 – Conveyor Belt – Stockpiling (Tripper, etc.) : 27th February 2017
- FSE 302 – Conveyor Belt – Stockpiling (Tripper, etc.) : 6th March 2017
- FSE 308 – Conveyor Belt – From Stockpiling to Port : 6th March 2017
- FSE 302 – Conveyor Belt – From Stockpiling to Port : 20th March 2017
- FSE 308 – Conveyor Belt – From Stockpiling to Crushing Chamber : 15th August 2017
- FSE 302 – Conveyor Belt – From Stockpiling to Crushing Chamber : 30th August 2017

All the above milestones are date of delivery Ex Work at MEM factory in Segrate (Milano Italy) ready for inspection and for shipment.

All items part of the Supply to be shipped to the site shall be duly packed according to the LSAB directions.

In case the Supply agreement is signed later than 45 days from the signature of this LOI and/or in case the downpayment foreseen at point 4) is received by the Supplier later than the 9th December 2016 the above times for delivery shall be all extended accordingly.

In circumstances where the Supplier is responsible for a delay with regard to any of the above milestone the Supplier shall pay Liquidated Damages (LD) equal to the 1% of the Supply Price for each week of delay on any of the above milestones.

It is mutually agreed by the parties that, in case the Supplier receives the advance payment at point 4 after 30th November 2016, with reference to the milestones concerning the delivery of the crushing plants only, LD will be applied after a period of grace of one week.

The overall LD paid by the Supplier shall, in any case, not exceed the 10% of the Contract Price and cover any other claim for additional damages related to the above delay.

3. Price

For the agreed scope of supply to be provided by the Supplier the overall lump-sum fixed Contract Price amounts to € 4.000.000 (namely four million/00 Euro) split as follows :

- FSE 302 Crushing Plant : 1.000.000 € (namely one million Euro)
- FSE 308 Crushing Plant : 1.000.000 € (namely one million Euro)
- FSE 302 Conveyor Belt : 800.000 € (namely eight hundred thousand Euro)
- FSE 308 Conveyor Belt : 1.200.000 € (namely one million and two hundred thousand Euro)

The following are specifically included in the above Contract Price :

- Provision of full time supervision on site (nr. 2 qualified technicians: nr. 1 mechanic and nr. 1 electrician) during the whole installation of the Supply (to be performed by the Contractor), cost of lodging in Sweden at customer's charge.
- Provision of an experienced technician (mechanic) for the first three months after commissioning, cost of lodging in Sweden at customer's charge;
- Provision of mayor and minor spare parts on consignment stock on site at no charge for stocking fee;

Discount of 15% on the spare parts and consumables price list in annex 3 shall be applied.

4. Terms of payment

The Payment schedule shall be as follow :

- 20% of the Contract Price upon signature of the LOI against downpayment bank guarantee to be provided by the Supplier in accordance with the for in annex 4
- 40% : upon inspection at the factory/ready for shipment
- 30% : 30 (thirty) days after commissioning or, in any case, not later than 90 (ninety) days after ready for shipment;
- 10% : after completion of 300 meter excavation of the access tunnel or, in any case, not later than 5 months after commissioning;

For the sole purpose of the payment the price of the Conveyor Belt in the above chapter 3 is split as follows :

- FSE 302 Conveyor Belt Stockpiling : 25%
- FSE 302 Conveyor Belt From the Stockpiling to the Port : 35%
- FSE 302 Conveyor Belt From the Stockpiling to the Underground Chamber : 40%
- FSE 308 Conveyor Belt Stockpiling : 15%
- FSE 308 Conveyor Belt From the Stockpiling to the Port : 70%
- FSE 308 Conveyor Belt From the Stockpiling to the Underground Chamber : 15%

The above schedule refers to the Supplier's right to issue the relevant invoice; such invoice shall be paid within 30 (thirty) days from the date of issuance.

The shareholders of LSAB will provide the Supplier with parent company guarantees according to their respective shares of participation in LSAB for the overall amount due after ready for shipment

of Eur. 3.200.000 (Say: Three Million Two Hundred Thousand/00 Euro) (hereinafter the "Total Guaranteed Amount"). Such parent companies guarantees shall be received by to the Supplier before the shipment of the Supply.

5. Tax and Duties

Supplier to provide for each shipment the Certificate of Origin and any other documents required for export/import purposes in Sweden and Italy.

Invoices to be issued in accordance with the VAT regulation between CE countries.

6. Buy Back Option

The Contractor has the right to exercise a buy back option (the "**Buy Back**"); if such options is activated by the Contractor the Supplier is then obliged to Buy Back the Supply.

The Buy Back option may be exercised by the Contractor for the Supply as a whole or for certain parts of the Supply only as determined by the Contractor is his request for Buy Back.

In case the Contractor exercised the Buy Back option within 36 months after commissioning, the Buy Back price to be paid by the Supplier is fixed at 20% of the price of the Supply for which the option has been activated (whole or part of it).

In case the Contractor exercised the Buy Back option within 48 months after commissioning, the above buy back price to be paid by the Supplier is fixed at 15% of the price of the Supply for which the option has been activated (whole or part of it).

The above prices refer to the Supply, or part of it, delivered DAP Segrate (Milano Italy) and subject to the equipment being in clean and serviceable condition and in working order, normal fair wear and tear accepted.

7. Miscellaneous

- a) Design of the Supply shall be up to the standard required in order to get the relevant approval by the Client and permit issued by the concerned Authorities/Municipality and to allow construction and installation (constructive level).
- b) With reference to the Stockpiling, the Supplier shall provide all details required to apply for the above approval and permit; the overall indicative dimension drawing in 3D shall be delivered not later than the 5th November 2016
- c) Design and all other documents to be provided by the Supplier shall include but not limited to: method statement (including the instructions for both installation and removal phase), HSE assessment, Operation and Maintenance Manuals, structural calculations, quality control plans, the construction and installation drawings, the instructions for use and maintenance, the quality certificates, the As Built drawings and in general all information, data and reports on the Supply required in the Main Contract documents (Main Contract documents for information, data and reports required on the Supply will be attached to the Supply Agreement).
- d) The engineering documents and, in general, all the technical documents that the Supplier must provide shall be in general subject to the Client. Without prejudice to the aforesaid provision for the Client's approval, the Supplier shall submit to the Contractor the documents elaborated by it for review and/ or preliminary approval. The review and/or approval by the Contractor and the Client of any document and/or material submitted/proposed by the Supplier shall not in any way be considered a transfer of any liability of the Supplier to the Contractor or the Client and will not relieve the Supplier of its responsibility to execute the Supply in accordance with the provisions of the Contract and the Laws.
- e) The documents provided by the Supplier (such as, by way of example, the structural calculations) shall be signed by a profession qualified in the proper speciality.

- f) All documents provided by the Supplier shall be in double language (English and Swedish).
- g) The Supplier's documents shall be provided in digital format, with files in PDF format and in the original editable format in which the document was produced (Word, Excel, Autocad etc., unprotected).
- h) Supplier is responsible to timely provide all details required to finalize the design of the temporary piers;
- i) Supplier shall timely provide all details and information (e.g. loads, etc.) required in order to design the belt and stockpiling concrete foundation to be built by the Contractor.
- j) Supplier shall timely provide all details and information (electrical loads, etc.) required in order to design the power supply system to be realized by the Contractor.
- k) Supplier acknowledged receipt of all applicable Main Contract requirements, and hereby confirm that the Supply fully comply with such requirements (Main Contract requirements applicable to the Supply will be attached to the Supply Agreement).
- l) Supplier hereby confirm that the Supply fully complies with all applicable HSE requirements.
- m) Supplier hereby confirm that the Supply fully complies with all applicable laws and regulations, including but not to limited to EN 1090. In this regard, both parties acknowledge that some components of the conveyor belt are manufactured before July 2014 (date of entering into force of the EN 1090) and that these components comply with all applicable rules and regulations in force at the date of manufacturing. This does not limit Supplier's responsibility to deliver a fit for purpose Supply that complies with all applicable CE standards and regulations.
- n) Additional and unforeseen measure which may be required in order to further reduce dust and/or noise emissions of the Supply are not included in the Contract Price;
- o) The Supply shall be fully guaranteed for a period of minimum 12 (twelve) months after commissioning.
- p) Machinery lifetime cycle shall be at least 10 years.
- q) The Supplier shall comply with the requirements and templates that will be provided by the Contractor with reference to documents coding, format, transmission and archiving and the updates thereof.
- r) Italian Law applies to the Contract. The Court having jurisdiction for all the disputes under the Supply contract is the Court of Ravenna, in Italy.

Attachments:

Annex 1 : The Proposal (annex 1.1, 1.2 and 1.3)

Annex 2 : Sketch of the joint between two section of the Conveyor Belt

Annex 3 : Spare parts and consumables price list

Annex 4 : Downpayment Bank Guarantee Form

The Contractor

Maurizio Urso – Chairman of the Board of Directors

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The Supplier

Alberto Bruzzi – General Manager

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MEM Soc. Gen. Macchine Edili S.p.A.

Sede e stabilimento / Offices and factory / Sièges et usines
20090 SEGRATE (Milano) - ITALIA
Via Raffaello Sanzio n. 18/20
Tel 02 2189521
Fax 02 2136435
E-mail info@memitally.com
Internet www.memitally.com



Messrs

CMC
Coop. Muratori Cementisti Ravenna
Via Trieste, 76
48100 Ravenna

SEGRATE, 02/08/2016

Object: Sweden jobsite - Offer for belt conveyors supply to convey crushed material from cave 308 to the ships loading point; intermediate storage of about 19.000 m³ (about 8000 m³ useful) with tripper and feeders under tunnel to relaunch the material

Ref. attached drawing C-8450

Referring to your request, please find here below the technical description of MEM belt conveyors supply suitable to convey up to 800 t/h of crushed material from the tunnel in size 0-150 mm (screen with punched plate or wire mesh with 180 mm holes) coming from crushing staged with primary and secondary groups installed in the cave 308 as per our attached drawing n. C-8450.

BELT CONVEYORS:

Pos. 1) Belt conveyor MEM mod. NT 800 x 141,2 m

(Belt conveyor to be installed in the tunnel)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-150 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 141,2 m (70 m in the tunnel)

Difference of level (positive): about 27 m

Belt speed: 3 m/s

Installed power: 2 x 55 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 860 mm.

Motorization with gear motor.

Supporting drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 630 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweigh idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

framework (inside the tunnel) constituted by side panels and cross beams, modular frameworks (outside the tunnel) with bolted elements.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm. 1 m distance between rollers.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 800 – type A – EN 14973/2015 (antistatic and flame proof)

Covering to avoid dust dispersion in the external area (about m. 117).

Sealing of the transferring points.

One side service gangway in the external area (about m. 117).

Alignment system with pre-alarm and alarm.

Belt conveyor rpm check.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Pos. 2) Belt conveyor MEM mod. NT 800 x 65,4 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 65,4 m

Difference of level (positive): about 18 m

Belt speed: 3 m/s

Installed power: 75 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 630 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 320 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102

Covering to avoid dust dispersion for all the length (removable for inspection and maintenance).

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Pos. 5) Belt conveyor MEM mod. NT 800 x 79,6 m

(Belt conveyor to be installed under the stockpile to relaunch the material)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 79,6 m

Difference of level (negative): about 2 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 520 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway in the external area (15 m).

Pos. 6) Belt conveyor MEM mod. NT 800 x 907 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 907 m

Difference of level: 8 m

Belt speed: 3 m/s

Installed power: 2 x 90 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 860 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 400 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 630 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway in external area (25 m).

Pos. 7) Belt conveyor MEM mod. NT 800 x 442,3 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 442,3 m

Difference of level: 6 m

Belt speed: 3 m/s

Installed power: 75 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 630 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 320 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway in external area (25 m).

Pos. 8) Belt conveyor MEM mod. NT 800 x 302,2 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Lenght between drums: about 302,2 m

Difference of level: 7 m

Belt speed: 3 m/s

Installed power: 75 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 630 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 320 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway in external area (53 m).

Pos. 9) Belt conveyor MEM mod. NT 800 x 47 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Lenght between drums: about 47 m

Difference of level: 3 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Covering to avoid dust dispersion for all the length.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Conveyor belts total import pos. 1-2-5-6-7-8-9 Euro 1.134.000,00

STEEL WORKS to complete the belt conveyors system

Belt conveyors stands designed and produced for the belt conveyors profile and way accordingly to the features in your request of offer and in your drawings.

Stands for conveyor belt NT 800 x 141,2 m (pos. 1), on the ground in the tunnel and then with fitting stands.

Transfer tower between NT pos. 1 and pos. 2 with service platform.

Stands for conveyor NT 800 x 65,4 m (pos. 2)

Stands for conveyor NT 800 x 79,6 m (pos. 5), on the ground in the tunnel and then with fitting stands.

Transfer tower between NT pos. 5 and pos. 6 with service platform.

Stands for conveyor NT pos. 6 – 7 – 8 - 9 and their exchange towers.

Steel works for conveyor belts - total weight: about 39 t.

Total import steel works Euro 90.000,00

Pos. 3) Belt conveyor MEM mod. NT 800 x 58 m (Tripper)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 58 m

Difference of level: 0 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 520 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Tripper consists of:

complete drum Ø 500 mm.

counter drum Ø 400 mm.

Gear motor - 4 Kw

Tripper Conveyor belt (pos. 3) stands:

-Towers and fittings stands

-Discharging chute

Total weight of stands steel works: about 18,5 t

Price of Tripper conveyor belt (pos. 3) and steel works stands Euro 131.000,00

Pos. 10) Belt conveyor MEM mod. NT 800 x 7 m (rotating)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 7 m

Belt speed: 3 m/s

Installed power: 18,5 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 500 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Rotating system electric motor: 3,0 kW

Motorized winch - Kw 5,5

Rotating belt conveyor stands (pos. 9) consists of:

-Tower and fittings stands

-Discharging chute

Total weight of stands steel works: about 4 t

Price of rotating conveyor belt (pos. 9) and steel works stands Euro 43.000,00

Pos. 4) N. 6 Vibrating Feeders ALVI 80/15

Vibrating body in electro-welded steel plates.

Complete with two electro mechanical vibrators KW 1,6 – 4 poles each and suspensions.

The body is hanged to the frame, pre-hopper is supplied as standard.

Vibrating body dimensions: 800 x 1500 mm

Electro-vibrators speed : 1500 rpm

Standard motor: 2 x KW 1,6 - 4 poles

Machine weight: ~ Kg 900

Total price N. 6 ALVI 80/15

Euro 27.000,00

ELECTRICAL PLANT with PLC and automation

Complete electrical plant, PLC system included and emergency pull stop and panic-stop.

Total installed power: about 650 kW

List of power lines:

1. Conveyor belt	800 mm x 141,2 m	KW 2x55	inverter
2. Conveyor belt	800 mm x 65,4 m	KW 75	inverter
3. Conveyor belt	800 mm x 58 m	KW 22 + 2x3 KW	inverter
4. Feeders ALVI 80/15	6 x	KW 3,2/each	inverter
5. Conveyor belt	800 mm x 79,6 m	KW 30	inverter
6. Conveyor belt	800 mm x 907,6 m	KW 2x90	inverter
7. Conveyor belt	800 mm x 442,3 m	KW 75	inverter
8. Conveyor belt	800 mm x 302,2 m	KW 75	inverter
9. Conveyor belt	800 mm x 47 m	KW 30	inverter
10. Conveyor belt	800 mm x 7 m	KW 18,5+3+5,5	inverter

Electrical supply consists of:

Electrical switchboard 1 to control belt conveyors pos.1 + pos.2 + pos.3 (placed near the head of the conveyor belt NT 800 x 370,5 m)

Electrical switchboard 2 for the local control of Tripper conveyor belt

Electrical switchboard 3-4 for the control of the feeders ALVI 80/15 and for conveyor belts pos.5 + pos.6 + pos.7 + pos.8 + pos. 9 + pos.10 (placed near the head of the conveyor belts pos.6 - 8)

PLC dedicated to all the power lines.

Software for the management of the whole plant.

Visualization of partial and total counters, thermic releases, machines power consumption, maintenance services, alignment system status, conveyor belt rpm, emergency status, etc.

Switchboard with touch-screen.

Indication of the conditions for all the machines:

LED switch-off = not working machine

LED green = working machine

LED red flash = machine breakdown

Page with manual commands:

For each machine one pushbutton is dedicated to manually start and stop.

Page with working hours counter, for each machine whether partial and total.

It's possible to decide the service interval.

Set-point page:

Technical documentation.

Emergency pushbuttons dislocated in the strategic points of the plant.

Local pushbuttons for maintenance.

Electrical cables from switchboards to the machines.
Material and accessories to complete the cabling.

Total import for electrical plant Euro 270.000,00
TOTAL IMPORT OF THE SUPPLY (all new) Euro 1.695.000,00 + iva

Supply with some second hand MEM components MEM, reconditioned and with warranty

(year of production 2014 with same features as per new components – premium brand)

Conveyor belts import pos. 1-2-5-6-7-8-9(partially used)	Euro 780.000,00
Steel works total import (partially used)	Euro 82.000,00
Tripper Conveyor import pos. 3 + stands (all new)	Euro 131.000,00
Rotating conveyor import pos. 10 + stands (all new)	Euro 43.000,00
Import for N. 6 ALVI 80/15 (partially used)	Euro 20.000,00
Electrical plant import (partially used)	Euro 234.000,00

TOTAL IMPORT OF THE SUPPLY with partially used components

Euro 1.290.000,00 + iva

SALES CONDITIONS

Delivery site: ex-works Segrate factory

Delivery time: 60-90 days from the order receipt and anyway to be agreed according to your operative programs in the jobsites.

Payments: to be agreed

Offer validity: 90 days prior to sale for the proposal with used components.

Exclusions

All civil works, foundations plates and their calculations

Mechanical and electrical installation, lifting machines and equipment

Weights devices

Aspiration and filtering system

Generator / transformation cabin and collecting cables to switchboard

Grounding

Lighting / plugs

Everything that is not clearly indicated in the offer

Warranty conditions

12 (twelve) months from the start-up of the plant for max. a 10 hours shift/day and no more than 15 (fifteen) months from the invoice date. MEM guarantee the good quality of the materials used in the construction and during the installation, MEM guarantee the materials comply to the standards and to the in force laws regarding the good quality of the products, also the correct designing and the good processing of what is part supply.

During the warranty period MEM commits itself to execute all the interventions for mounting, repairing and supplying free of the charge the defective pieces and those parts in case of defects for bad quality of the material or defects of manufacturing or defects of designing excluded labour cost, cost of trip, board and lodging. It is not included in the mechanical warranty the damages due to normal wear, operator mistakes, overload, performances and stresses beyond the contractual specifications, acknowledged force major. The wearing parts, those in contact with the material to be processed are excluded from the mechanical warranty period. For the components produced by third companies the warranty terms are those of the manufactures. For the repairing operations the buyer will give free of charge to the seller its maintenance personnel and its handy working tools. In any case it is excluded any claim for further damages.

We remain at your complete disposal for any clarification.

Best regards

MEM. SOC. GEN. MACCHINE EDILI S.p.A.



MEM Soc. Gen. Macchine Edili S.p.A.

Sede e stabilimento / Offices and factory / Sièges et usines

20090 SEGRATE (Milano) - ITALIA

Via Raffaello Sanzio n. 18/20

Tel 02 2189521

Fax 02 2136435

E-mail info@memitaly.com

Internet www.memitaly.com



Messrs

CMC

Coop. Muratori Cementisti Ravenna

Via Triestre, 76

48100 Ravenna

SEGRATE, 02/08/2016

Object: Sweden jobsite - Offer for belt conveyors supply to convey crushed material from cave 302 to the ships loading point; intermediate storage of about 19.000 m³ (about 8000 m³ useful) with tripper and feeders under tunnel to relaunch the material

Ref. attached drawing C-8448/1

Referring to your request, please find here below the technical description of MEM belt conveyors supply suitable to convey up to 800 t/h of crushed material from the tunnel in size 0-150 mm (screen with punched plate or wire mesh with 180 mm holes) coming from crushing staged with primary and secondary groups installed in the cave 302 as per our attached drawing n. C-8448/1.

BELT CONVEYORS:

Pos. 1) Belt conveyor MEM mod. NT 800 x 370,5 m

(Belt conveyor to be installed in the tunnel)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-150 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 370,5 m (250 m in the tunnel)

Difference of level (positive): about 60 m

Belt speed: 3 m/s

Installed power: 2 x 110 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 860 mm.

Motorization with gear motor.

Supporting drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 630 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

framework (inside the tunnel) constituted by side panels and cross beams, modular frameworks (outside the tunnel) with bolted elements.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm. 1 m distance between rollers.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 800 – type A – EN 14973/2015 (antistatic and flame proof)

Covering to avoid dust dispersion in the external area (about m. 117).

Sealing of the transferring points.

One side service gangway in the external area (about m. 117).

Alignment system with pre-alarm and alarm.

Belt conveyor rpm check.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Pos. 2) Belt conveyor MEM mod. NT 800 x 25 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 25 m

Difference of level (positive): about 2 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 520 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Covering to avoid dust dispersion for all the length (removable for inspection and maintenance).

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Pos. 5) Belt conveyor MEM mod. NT 800 x 155 m

(Belt conveyor to be installed under the stockpile to relaunch the material)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 155 m

Difference of level (negative): about 6 m

Belt speed: 3 m/s

Installed power: 37 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area (about 87 m).

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway (87 m).

Pos. 6) Belt conveyor MEM mod. NT 800 x 95 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Lenght between drums: about 95 m

Difference of level: 0 m

Belt speed: 3 m/s

Installed power: 22 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drum lined with 65 shore rhomboidal grooved rubber, anti-clogging.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with gear.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Counterweight idler.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 630 – YK DIN 22102 – anti abrasive rubber (premium brand)

Covering to avoid dust dispersion in the external area (about 87 m).

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.
Pull stop wire and emergency push-buttons in adequate areas.
Belt conveyor rpm check.
One side service gangway (93 m).

Pos. 7) Belt conveyor MEM mod. NT 800 x 36,5 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.
Tunnel crushed material in size 0-180 mm.
Specific weight (bulk density) of the material: 1,8 t/m³
Belt width: 800 mm
Lenght between drums: about 36,5 m
Difference of level: 0 m
Belt speed: 3 m/s
Installed power: 22 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.
Shaft-drum joint trough expansion connection.
Motorized drums: Ø 500 mm.
Drum shaft supports with ball bearings complete with greasers.
Motorization with electric motor and gear motor with orthogonal axles in oil bath.
Direct drive.
Supporting drum: Ø 250 mm.
Belt scraper in anti-wear material.
Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.
Shaft-drum joint trough expansion connection.
Idle drum: Ø 400 mm.
Drum shaft supports with ball bearings complete with greasers.
Screw turn buckle.
Feeding hoppers with interchangeable rubber skirts.
Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Covering to avoid dust dispersion in the external area (about 87 m).

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Pos. 8) Belt conveyor MEM mod. NT 800 x 47,4 m

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 47,4 m

Difference of level: 2 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Motorized drums: Ø 500 mm.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Covering to avoid dust dispersion for all the length.

Sealing of the transferring points and arranged for dust aspiration and filtering system.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Total import - Belt Conveyors items 1-2-5-6-7-8

Euro 526.000,00

STEEL WORKS to complete the belt conveyors system

Belt conveyors stands designed and produced for the belt conveyors profile and way accordingly to the features in your request of offer and in your drawings.

Stands for conveyor belt NT 800 x 370 m (pos. 1), on the ground in the tunnel and then with fitting stands.

Exchange tower between NT pos. 1 and pos. 2 with service platform.

Stands for conveyor NT 800 x 25 m (pos. 2)

Stands for conveyor NT 800 x 155 m (pos. 5), on the ground in the tunnel and then with fitting stands.

Exchange tower between NT pos. 5 and pos. 6 with service platform.

Stands for conveyor NT pos. 6 – 7 – 8 and their exchange towers.
Steel works for conveyor belts - total weight: about 43,1 t.

Total import steel works Euro 103.000,00

Pos. 3) Belt conveyor MEM mod. NT 800 x 58 m (Tripper)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Length between drums: about 58 m

Difference of level: 0 m

Belt speed: 3 m/s

Installed power: 30 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 520 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Alignment system with pre-alarm and alarm.

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Tripper consists of:

complete drum Ø 500 mm.

counter drum Ø 400 mm.

Gear motor - 4 Kw

Tripper Conveyor belt (pos. 3) stands:

-Towers and fittings stands

-Discharging chute

Total weight of stands steel works: about 18,5 t

Price of Tripper conveyor belt (pos. 3) and steel works stands Euro 131.000,00

Pos. 9) Belt conveyor MEM mod. NT 800 x 7 m (rotating)

Hot galvanized belt conveyor, CE certificated.

Technical data

Capacity up to 800 t/h.

Tunnel crushed material in size 0-180 mm.

Specific weight (bulk density) of the material: 1,8 t/m³

Belt width: 800 mm

Lenght between drums: about 7 m

Belt speed: 3 m/s

Installed power: 18,5 kW

Technical description

Driving drum complete with:

head carpentry in hot galvanized steel.

Motorized drums: Ø 500 mm.

Shaft-drum joint trough expansion connection.

Drum shaft supports with ball bearings complete with greasers.

Motorization with electric motor and gear motor with orthogonal axles in oil bath.

Direct drive.

Supporting drum: Ø 250 mm.

Belt scraper in anti-wear material.

Protection carter for moving parts.

Idle head complete with:

head carpentry in hot galvanized steel.

Shaft-drum joint trough expansion connection.

Idle drum: Ø 400 mm.

Drum shaft supports with ball bearings complete with greasers.

Screw turn buckle.

Feeding hoppers with interchangeable rubber skirts.

Cleaning belt plough.

Protection carter for moving parts.

Frame structure consists of:

Modular framework constituted by welded side panels and bolted cross beams.

Heavy duty impact rollers in charging points Ø 108 mm.

Heavy duty upper rollers Ø 108 mm.

Bottom rollers medium-heavy duty Ø 102 mm.

Closest stations in loading points, with rubberized rollers.

Rubber belt class 500 – YK DIN 22102

Side protection carters for moving parts.

Pull stop wire and emergency push-buttons in adequate areas.

Belt conveyor rpm check.

One side service gangway.

Rotating system electric motor: 3,0 kW

Motorized winch - Kw 5,5

Rotating belt conveyor stands (pos. 9) consists of:

-Tower and fittings stands

-Discharging chute

Total weight of stands steel works: about 4 t

Price of rotating conveyor belt (pos. 9) and steel works stands Euro 43.000,00

Pos. 4) N. 6 Vibrating Feeders ALVI 80/15

Vibrating body in electro-welded steel plates.

Complete with two electro mechanical vibrators KW 1,6 – 4 poles each and suspensions.

The body is hanged to the frame, pre-hopper is supplied as standard.

Vibrating body dimensions: 800 x 1500 mm

Electro-vibrators speed : 1500 rpm

Standard motor: 2 x KW 1,6 - 4 poles

Machine weight: ~ Kg 900

Total price N. 6 ALVI 80/15

Euro 27.000,00

ELECTRICAL PLANT with PLC and automation

Complete electrical plant, PLC system included and emergency pull stop and panic-stop.

Total installed power: about 440 kW

List of power lines:

1. Conveyor belt	800 mm x 370,5 m	KW 2x110	inverter
2. Conveyor belt	800 mm x 25 m	KW 30	inverter
3. Conveyor belt	800 mm x 58 m	KW 22 + 2x3 KW	inverter
4. Feeders ALVI 80/15	6 x	KW 3,2/each	inverter
5. Conveyor belt	800 mm x 155 m	KW 37	inverter
6. Conveyor belt	800 mm x 95 m	KW 22	inverter
7. Conveyor belt	800 mm x 36,3 m	KW 22	inverter
8. Conveyor belt	800 mm x 47,4 m	KW 30	inverter
9. Conveyor belt	800 mm x 10 m	KW 18,5+3+5,5	inverter

Electrical supply consists of:

Electrical switchboard 1 to control belt conveyors pos.1 + pos.2 + pos.3 (placed near the head of the conveyor belt NT 800 x 370,5 m)

Electrical switchboard 2 for the local control of Tripper conveyor belt

Electrical switchboard 3 for the control of the feeders ALVI 80/15 and for conveyor belts pos.5 + pos.6 + pos.7 + pos.8 + pos. 9 (placed near the head of the conveyor belt NT 800x155 m)

PLC dedicated to all the power lines.

Software for the management of the whole plant.

Visualization of partial and total counters, thermic releases, machines power consumption, maintenance services, alignment system status, conveyor belt rpm, emergency status, etc.

Switchboard with touch-screen.

Indication of the conditions for all the machines:

LED switch-off = not working machine

LED green = working machine

LED red flash = machine breakdown

Page with manual commands:

For each machine one pushbutton is dedicated to manually start and stop.

Page with working hours counter, for each machine whether partial and total.

It's possible to decide the service interval.

Set-point page:

Technical documentation.

Emergency pushbuttons dislocated in the strategic points of the plant.

Local pushbuttons for maintenance.

Electrical cables from switchboards to the machines.

Material and accessories to complete the cabling.

Total import for electrical plant Euro 195.000,00

TOTAL IMPORT OF THE SUPPLY (all new) Euro 1.025.000,00 + iva

Supply with some second hand MEM components MEM, reconditioned and with warranty

(year of production 2014 with same features as per new components – premium brand)

Conveyor belts import pos. 1-2-5-6-7-8 (partially used) Euro 393.000,00

Steel works total import (partially used) Euro 66.000,00

Tripper Conveyor import pos. 3 + stands (all new) Euro 131.000,00

Rotating conveyor import pos. 9 + stands (all new) Euro 43.000,00

Import for N. 6 ALVI 80/15 (partially used) Euro 20.000,00

Electrical plant import (partially used) Euro 167.000,00

TOTAL IMPORT OF THE SUPPLY with partially used components

Euro 820.000,00 + iva

SALES CONDITIONS

Delivery site: ex-works Segrate factory

Delivery time: 60-90 days from the order receipt and anyway to be agreed according to your operative programs in the jobsites.

Payments: to be agreed

Offer validity: 90 days prior to sale for the proposal with used components.

Exclusions

All civil works, foundations plates and their calculations

Mechanical and electrical installation, lifting machines and equipment

Weights devices

Aspiration and filtering system

Generator / transformation cabin and collecting cables to switchboard

Grounding

Lighting / plugs

Everything that is not clearly indicated in the offer

Warranty conditions

12 (twelve) months from the start-up of the plant for max. a 10 hours shift/day and no more than 15 (fifteen) months from the invoice date. MEM guarantee the good quality of the materials used in the construction and during the installation, MEM guarantee the materials comply to the standards and to the in force laws regarding the good quality of the products, also the correct designing and the good processing of what is part supply.

During the warranty period MEM commits itself to execute all the interventions for mounting, repairing and supplying free of the charge the defective pieces and those parts in case of defects for bad quality of the material or defects of manufacturing or defects of designing excluded labour cost, cost of trip, board and lodging. It is not included in the mechanical warranty the damages due to normal wear, operator mistakes, overload, performances and stresses beyond the contractual specifications, acknowledged force major. The wearing parts, those in contact with the material to be processed are excluded from the mechanical warranty period. For the components produced by third companies the warranty terms are those of the manufactures. For the repairing operations the buyer will give free of charge to the seller its maintenance personnel and its handy working tools. In any case it is excluded any claim for further damages.

We remain at your complete disposal for any clarification.

Best regards

MEM. SOC. GEN. MACCHINE EDILI S.p.A.



MEM Soc. Generale Macchine Edili S.p.A.

Sede e stabilimento / Office and factory / Siège et usines
20090 SEGRATE (Milano) – ITALIA

Via Raffaello Sanzio n. 18/20

Tel 02 2189521

Fax 02 2136435

Azienda Certificata N. 01 100 027449



Messrs

CMC

Coop. Muratori Cementisti Ravenna

Via Trieste, 76

48100 Ravenna

SEGRATE, 27/07/2016

OGGETTO: Gruppo di frantumazione da installare in tunnel (cave 308 – Sweden)

Referring to our recent meeting nearby your offices and to the mailing referring to the materials to be crushed, please find herebelow our revised technical-economical proposal; the revision has been done taking in consideration the following data:

Ref. attached drawing C-8449

-Feeding material size 0-600 mm. (about); 0-150 mm between 30-35%, 150-300 mm between 30-35% and 300-600 mm between 30-40%.

-Product size coming from primary group 1300: about 0-250 mm.

-Product size after secondary crushing stage: about 0-150 mm.

-Total production: up to 800 t/h (anyway depending on the feeding material product curve).

-Feeding hopper capacity: 40 m³

-the hopper can be loaded whether from the lateral side (6 m width) or from the rear side.

-Scalping screening in size 200-250 mm to send to the primary jawcrusher BRH 130 only the oversize +200/250 mm in order to balance both crushing stations.

-12,6 m² screening area, punched plate or wire mesh with 180 mm square holes to get a more precise selection as per your buyer request.

-Addition of a second jaw granulators FR125; both crushers will be adjusted to guarantee a product size below 150 mm.

Referring to the drawing C-8449 our proposal is the following:

Pos. 1) Primary crushing group set up:

N. 1 APRON FEEDER mod. 1400x17.000

Framework in electrowelded steel section metal prepared to install the feeding hopper.
Track is composed by steel plates coupled to driving chains with sliding sheaves.

Transmission device consisting of steel wheels assembled on guides and equipped with idlers. The drive unit consists of steel wheels coupled to the main shaft, main reduction unit with oil-cooled pinion/ring gear, countershaft, secondary oil-cooled reduction unit, pulleys/belts, electric motor.

Screw adjusting tensioning and aligning system.

Track width: mm 1400

Interaxle between wheels: ~ mm 17.000

Electric motor with inverter: Kw 30

Indicative weight: ~ 37.500 Kg.

N. 1 Fines belt conveyor (under the feeder)

Belt width: 1200 mm.

Length between drums: ~ 17 m.

Electric motor: 5,5 kw

Rubber belt class 315 – 3 plies - 4 + 2

Rollers type Ø 102 mm., distance between rollers m.1

Side protection carters. Pull stop wire.

N. 1 VIBRATING SCALPING SCREEN ESPRE 1400 X 5000

Vibrating body in electrowelded steel sheet and sections.

Unidirectional vibration is given by the counter rotating movement of two electro motor vibrators.

Vibrators have adjustable eccentric masses.

Double deck execution with a first blind section and then a anti-blinding grizzly scalping section, bars aperture ~ 250 mm. Second deck with 180 mm punched plate holes.

Complete with n. 2 electro vibrating motors (1500 rpm) - Kw 13/each.

Machine weight: ~ Kg 8800

N. 1 – JAW CRUSHER MOD. BRH 130

Single toggle type.

Welded and heat treated Fe 430-B steel plate body.

Body side walls.

Jaw holder in cast Fe G 520 steel.

Eccentric shaft in alloy steel 39 NCD 3 mounted on heavy duty first quality roller bearings.

The jaws (in two pieces) in manganese steel XG 120 are toothed and reversible.

Side walls in manganese steel XG 120. Flywheels in cast iron G25.

Toggle in cast iron G25 with evolving profiles, no lubrication is required.

Flywheels in cast iron G25

Adjustment of the discharge opening by steel plates with various thicknesses, with the aid of a hand-operated hydraulic jack.

Upper mouth opening: ~1300 x 900 mm

Electric motor standard: 160 kW - 4 poles

CSS range: 110-250 mm

Weight approx.: 42000 Kg.

STEEL WORKS for crushing primary group includes:

- Open feeding hopper with lateral feeding side, capacity ~ 40 m³.
15 mm thickness with external reinforcements in HEB100 and IPE 100
 - Sliding stand for apron feeder, stand-alone from the rest of the primary group
 - Steel structure on skid for ESPRE scalping screen and for jaw crusher BRH 130, complete of hopper under the scalping screen ESPRE to send the product size 0-150 mm. on belt conveyor pos. 6
 - Chute to send the product size 150-300 mm on belt conveyor pos. 2
 - Hopper to link feeder-scalping screen-jaw crusher with 15 mm thickness, reinforced in the more critical points.
 - Feeding hopper for jaw crusher with 20 mm thickness, reinforced in the more critical points.
 - Service platform around feeder and scalping screen ESPRE with handrails.
 - Service stairs.
 - Protection carters for all transmission parts.
- Indicative total carpentry weight: ~ 38 t.

Total price for primary group pos. 1) Euro 598.000,00 + iva

Pos. 3) Secondary crushing group includes:

N 1 – PRIMARY SCREEN VON ROLL 2100 x 6000 – 1 deck

Vibrating body in electro welded steel sheets and sections, laying on the base frame through dampers.
Steel unbalanced masses to create the vibration.
Shaft in alloy steel 39 NCD 3
Screening deck dimension: mm 2060 x 6000
One deck, punched plate with rhomboidal holes to get 0-150 mm.
Electric motor: KW 30
Weight: ~ Kg 8200

N. 2 – JAW GRANULATORS MOD. FR 125

Single toggle jaw crusher.
Body in welded steel Fe 430-B, heat treated - walls thickness mm 50
Jaw stock in cast iron FeG 520.
Shaft in alloy steel 39 NCD 3
Reversible jaw plates, toothed, in manganese steel XG 120
Swinging jaw in cast + welded steel Fe 430-B, heat treated
Flywheels in cast iron G25
Toggle in cast iron G25 with evolving profiles, no lubrication is required.
Setting adjustment by means of hydraulic jack – hand operated.
Mouth opening: mm 1250 x 405
Electric motor: KW 75 - poli 4/each
Weight: ~Kg 17.500 each

Pos. 4) N.1 Belt Conveyor 1000 x 9 m. (about)

Belt width: 1000 mm.
Lenght between drums: ~ 9 m.
Motorized drum with rubber for a better grip
Cleaning plough, protection carters.
Conveyor scraper with widia or polyurethane blade
Electric motor: n. 1 Kw 11 motor
Rubber belt type K - class 500 – 3 plies - 5 + 2
Rollers Ø 108 mm., 1 m distance between rollers,
closest in loading points and with rubbed rollers.
Side protection carters. Pull stop wire. Rpm control.

STEEL WORKS for secondary crushing group includes:

- Screen 2100 steel structure complete with discharging hopper 0-150 mm., box between screen and two crushers FR105, service platform with stairs and handrails.
 - Steel structure on skid for n. 2 jaw granulators FR125 complete with dischraging chute, service platform and stairs
 - protection carters for all transmission parts.
- Total indicative weight of group carpentry: ~ 25 t.

Total price for secondary group pos. 3) Euro 307.000,00 + iva

Pos. 2) N.1 Belt conveyor 1000 x 35 m. (about)

Belt width: 1000 mm.
Lenght between drums: ~ 35 m.
Motorized drum with rubber for a better grip
Cleaning plough, protection carters.
Conveyor scraper with widia or polyurethane blade
Electric motor: n. 1 Kw 30 motor
Rubber belt type K - class 500 – 3 plies - 5 + 2
Rollers Ø 108 mm., 1 m distance between rollers,
closest in loading points and with rubbed rollers.
Side protection carters. Pull stop wire. Rpm control.

Price Euro 46.000,00 + iva

Pos. 5) N.1 Belt conveyor 1000 x 20 m. (about)

Belt width: 1000 mm.
Lenght between drums: ~ 20 m.
Motorized drum with rubber for a better grip
Cleaning plough, protection carters.
Conveyor scraper with widia or polyurethane blade
Electric motor: n. 1 Kw 18,5 motor
Rubber belt type K - class 500 – 3 plies - 5 + 2
Rollers Ø 108 mm., 1 m distance between rollers,

closest in loading points and with rubbed rollers.
Side protection carters. Pull stop wire. Speed control.

Price Euro 22.000,00 + iva

Pos. 6) N.1 Belt conveyor 800 x 34,5 m. (about)

Belt width: 800 mm.
Lenght between drums: ~ 34,5 m.
Motorized drum with rubber for a better grip
Cleaning plough, protection carters.
Conveyor scraper with widia or polyurethane blade
Electric motor: n. 1 Kw 15 motor
Rubber belt type K - class 500 – 3 plies - 5 + 2
Rollers Ø 108 mm., 1 m distance between rollers,
closest in loading points and with rubbed rollers.
Side protection carters. Pull stop wire. Speed control.

Price Euro 32.000,00 + iva

ELECTRICAL PLANT includes:

Electrical switchboard and cables (installed power about 480 Kw)
Cabinet complete of all the instrumentation for the electrical starting, stopping and security of the electric motors actuating the machines offered.
Control type through PLC.
Manual operation (during maintenance and emergency) or semi-automatic with sequences (normal operation).
General switch. Ammeter/voltmeter
Working and thermic releasing warning lights
Emergency signal for all belt conveyors.
Connecting cables between electrical switchboard and motors included.
Accessories for cabling included.
Grounding excluded.
Cables between electrical switchboard and main electrical power line excluded.

Electrical plant price Euro 85.000,00 + iva

Total Import Euro 1.090.000,00 + iva

Sales conditions

Delivery site: ex-works our factory in Segrate (Mi)

Delivery time: estimated 90 days from the order receipt

Payment: to be agreed

Offer validity: 90 days

Exclusions

All civil works, foundations plates and their calculations

Eventual de-dusting and aspiration plant

Eventual covering for belt conveyors

Generator / transformation cabin and collecting cables to switchboard

Grounding

Lighting in the tunnel

Everything that is not clearly indicated in the offer

Warranty conditions

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MEM. SOC. GEN. MACCHINE EDILI S.p.A.



Air movement lets dust escape

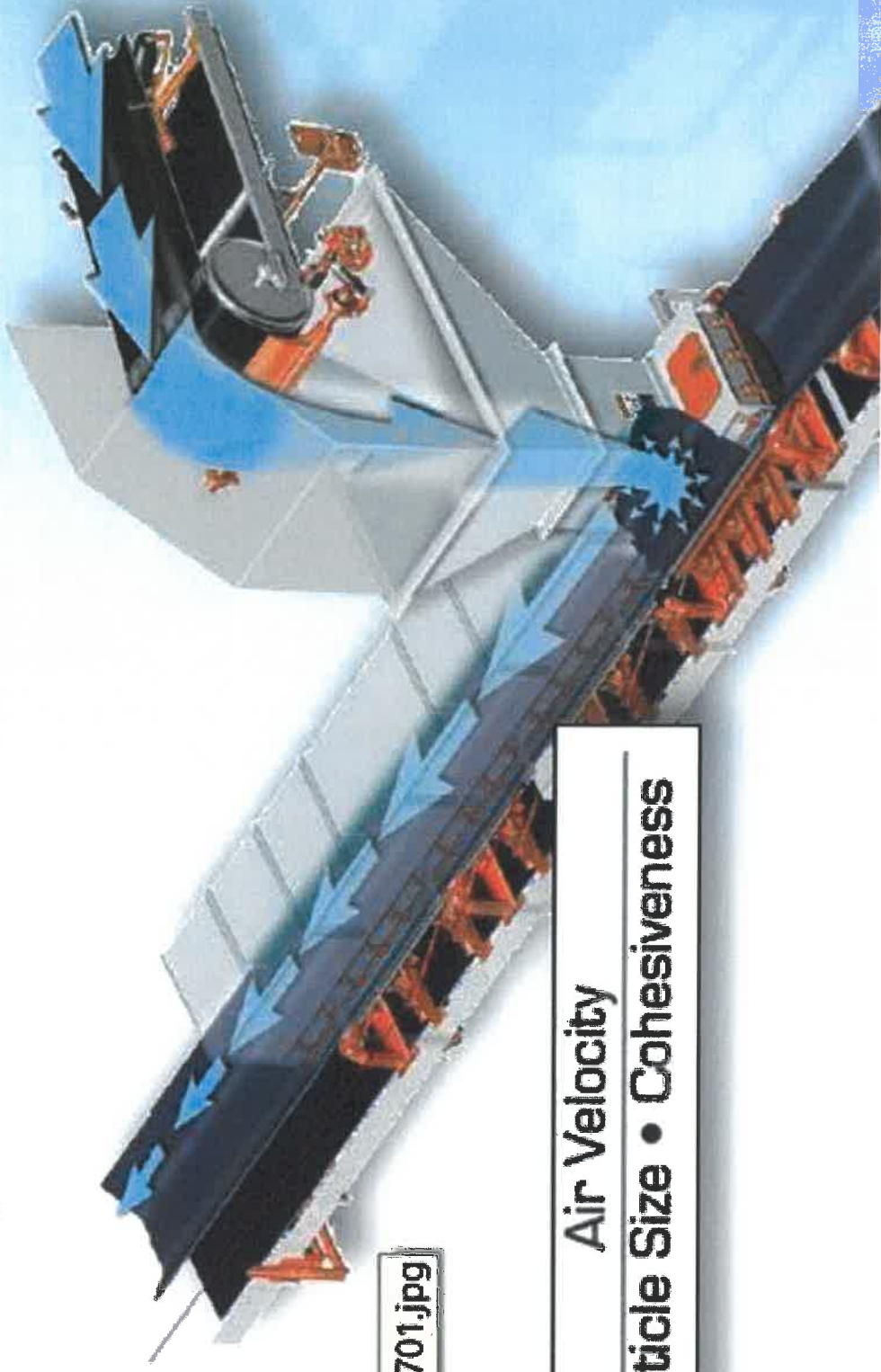
To reduce escape of fugitive dust, manage air movement.

Types of

Air Movement

- Displaced air
- Induced air
- Generated air

0701.jpg



Dust α Air Velocity

Generated α Particle Size • Cohesiveness

B

Handwritten mark

MEM Soc.Gen. Macchine Edili SpA

Via R. Sanzio n. 18/20 - 20090 Segrate / Milano
tel. 0039 02 2189521 - Fax 0039 02 3136435

02.11.2016

LOVON SAMVERKAN AB - SVEZIA

spare parts and consumable price list

Annexe n. 3

item	Q.ty	DESCRIPTION	UNIT PRICE
for apron feeder 1400x17000			
1	1	Catenary plate	€ 1.640,00
2	1	Pin for catenary plate	€ 91,00
3	1	Driving wheel	€ 1.760,00
4	1	Idler wheel	€ 1.630,00
5	1	Driving shaft	€ 2.280,00
6	1	Idler shaft	€ 1.840,00
7	1	Countershaft	€ 1.790,00
8	1	Set of bushing for shaft	€ 2.860,00
for vibrating scalping feeder ESPRE 1400			
9	1	Electric vibrators	€ 7.120,00
10	1	Grate bar with bolts	€ 10.500,00
11	1	Rubber pad	€ 240,00
12	1	Perforated steel plate	€ 440,00
per frantoio primario MEM/BRH/130			
13	1	Fixed jaw	€ 5.200,00
14	1	Mobile jaw	€ 5.500,00
15	1	Protection plate for jaw-holder	€ 1.550,00
16	1	Bolt fixing plate	€ 134,00
17	1	Wedge fixing fixed jaw	€ 560,00
18	1	Wedge fixing mobile jaw	€ 560,00
19	1	Upper panel	€ 1.150,00
20	1	Lower panel	€ 910,00
21	1	Toggle	€ 3.960,00
22	1	Toggle cushion	€ 2.180,00
23	1	Wear plate for toggle cushion	€ 363,00
24	1	Spring	€ 1.050,00
25	1	Tie rod	€ 864,00
26	1	Bolt fixing fixed / mobile jaw	€ 205,00
27	1	Bolt fixing mobile jaw	€ 326,00
28	1	Spring washer for bolt fixing jaws	€ 10,10
29	1	Cup for spring	€ 190,00
30	1	Cup for spring	€ 190,00
31	1	Set of Vee-belts	€ 600,00
for vibrating screen VON ROLL 2100x6000			
32	1	Set of steel plate openings 150 mm	€ 2.190,00
33	1	mt. rubber gasket	€ 10,70
34	1	Set pin for masses with spring	€ 2.133,00
35	1	Bearing	€ 1.850,00
36	1	Spring for case	€ 196,00
37	1	Special vee-belt	€ 850,00
per frantoio granulatore MEM/FR-125			
38	1	Fixed jaw	€ 2.200,00
39	1	Mobile jaw	€ 2.300,00
40	1	Right panel	€ 520,00
41	1	Left panel	€ 520,00
42	1	Right wedge looking mobile jaw	€ 310,00
43	1	Left wedge looking mobile jaw	€ 310,00
44	1	Bolt fixing mobile jaw	€ 187,73
45	1	Bolt fixing lateral panel	€ 66,00
46	1	Toggle	€ 2.215,00
47	1	Toggle cushion	€ 972,00
48	1	Tie rod	€ 355,00
49	1	Spring for tie rod	€ 470,00
50	1	Cup for spring	€ 137,00
51	1	Cup for spring	€ 137,00
52	1	Set vee-belts	€ 540,00
for conveyor belts			
53	1	Gear box + electric motor kW 90	€ 14.200,00
54	1	Gear box + electric motor kW 75	€ 13.700,00
55	1	Gear box + electric motor kW 55	€ 13.000,00
56	1	Gear box + electric motor kW 30	€ 5.400,00
57	1	Gear box + electric motor kW 22	€ 3.940,00
58	1	Gear box + electric motor kW 18,5	€ 3.650,00
59	1	Roller D. 102x323	€ 18,00
60	1	Roller D. 102x473	€ 19,10
61	1	Roller D. 108x323 rubbered	€ 37,10
others			




62	1	Electric motor kW 30	€ 1.820,00
63	1	Electric motor kW 15	€ 988,00
64	1	Electric motor kW 11	€ 891,00
65	1	Electric motor kW 5,5	€ 510,00

Prices ex our works at Segrate / Milan
Discount on the a.m. prices: 15%
Price validity: until 31.12.2017



Beneficiary.
LOVON SAMVERKAN AB
(inserire indirizzo completo)

DOWNPAYMENT GUARANTEE NR.....

We have been informed that..... (hereinafter called the "Supplier") has entered into Contract n.....dated (hereinafter called the "Contract") with you, the Beneficiary, for the supply of NR. 2 CRUSHING PLANTS AND NR. 2 CONVEYOR BELTS WITH INTERMEDIATE STOCKPILING for a total price of EUR 4,000,000.00 (Say: Four Million Euro/00). (hereinafter called the "Price").

We have also been informed that the Contract provides that a down payment corresponding to the 20% of the Price, equal to EUR 800,000.00 (Say: Eight Hundred Thousand Euro/00), is due to the Supplier against submission of a Bank Guarantee.

At the request of the Supplier, we(name of Guarantor).... hereby irrevocably and unconditionally undertake to pay you, the Beneficiary, any sum or sums not exceeding in total the amount of EUR 800,000.00 (Say: Eight Hundred Thousand Euro/00) (hereinafter called the "Guaranteed Amount"), without cavil or arguments, upon receipt by us of your demand in writing and your written statement indicating in what respect the Supplier has failed to honor its obligation(s) under the Contract.

This guarantee shall become effective at the date of its issuance and remain valid until September 30th, 2017 (hereinafter called the "Expiry Date"), but any claim or payment under this guarantee is subject to the receipt by the Supplier of the advance payment referred to above into his account IBAN no. _____ held with INTESA SANPAOLO SpA - _____ Branch (BIC BCITITMM).

Any demand for payment must be received by us INTESA SANPAOLO SpA - Branch (address) ... (the "Place of Presentation") on or before the Expiry Date and must be made:

- in writing by registered mail or courier service; for the purpose of identification Your demand and supporting statement must bear or be accompanied by a signed confirmation of Your bank stating that the same bank has verified Your signature(s) appearing thereon; or
- by authenticated SWIFT message through one of our correspondent banks which has to confirm that the original demand and supporting statement have been forwarded to our _____ Branch by registered mail or courier service and that the same bank has verified Your signature(s) appearing thereon. (the "Form of Presentation").

The maximum amount of this guarantee will be reduced by 20% of the total value of each part-shipment against presentation to us of copies of relevant invoice(s) and transport document(s) - CMR which we shall be entitled to accept as conclusive evidence that such shipment(s) has been effected.

This guarantee shall expire:

- 1) when on the basis of the documents mentioned above presented to us , we have reduced the amount to zero, or
- 2) on the expiry date.

our liability to you under this guarantee will then cease and the guarantee will be of no further effect irrespective of whether the present document is returned to us or not.

This guarantee cannot be transferred or assigned.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC publication nr. 758.