

RW 8206520

Shipping address

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Magna PT S.p.A.
Via dei Ciclamini 4
I-70026 MODUGNO BA

Packing list / Delivery note

No. 820 6520 Date 23. September 2019
Ref. I. Yüce Tel. +41 44 832 2359
Com. 78982

Your order no. Date 25. September 2018
4500527187

Conditions of delivery

Your supplier no. 91000635

DDP Modungo
LKW

| Marks | | | Packing See last page | Size (cm) See last page | Weight net (kg) 12,860.00 | Weight gross (kg) 13,129.00 |
|-------|-----------|--------|---|----------------------------|------------------------------|--------------------------------|
| Pos. | Item No. | Quant. | Description | installed | not installed | |
| 95 | 906161.04 | 1 | <p>Reishauer RZ 160 gear grinding machine</p> <p>Compact high-performance gear grinding machine, specially designed for grinding gears, with two identical workpiece spindles on a rotating turret, used alternatively for grinding and loading.</p> <p>The loading and unloading of the workpiece on the first workpiece spindle, clamping, determination of the gear teeth position and the subsequent alignment for the correct meshing with the grinding wheel take place outside the machine's working area while grinding with the second workpiece spindle.</p> <p>BASIC MACHINE SPECIFICATION:</p> <ul style="list-style-type: none"> -Machine base for mounting the workspindle turret, grinding slide, pneumatics and hydraulic unit -Directly driven grinding spindle (B-axis) with short taper flange, infinitely adjustable spindle speed, spindle temperature-stabilised by means of multiple cooling oil circuits -Balancing unit for automatic balancing of grinding worm -Acoustic emission sensors for automatic | | | |

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| | | | positioning of the dressing tool in relation to the grinding worm and alignment of workpiece gear teeth -CNC shift axis (Y-axis) -CNC swivel axis (A-axis) -CNC infeed axis (X-axis) -Rotatable workpiece spindle support (C3-axis) -Two workspindles (C1 and C2 axes) -CNC axial feed axis (Z-axis) -Meshing device for automatic determination of gear teeth position, and subsequent alignment of pre-ground workpieces for optimum alignment in grinding worm -NC-controlled unit for automatic adjustment of grinding oil nozzle with decreasing grinding worm diameter (P-axis) -Machine housing with operating and service doors, separation of working area from loading area -Hydraulic unit integrated in machine base with switchgear and monitoring equipment mounted on rear of machine for all hydraulic functions -Pneumatic system with all necessary switchgear and monitoring equipment, located on rear of machine -Swivel-mounted control and data input panel with LCD flat screen -External data backup via USB storage medium, Ethernet or direct PC connection -Electrical control cabinet with air-conditioning, to IEC-204-1 recommendation -Siemens 840Ds1 CNC control system -Reishauer MMI for interactive input and management of workpiece and grinding process data and for machine operation -Reishauer Precision Drive to control position of workpiece spindles C1/C2 -Siemens PLC S7 to handle machine's entire switching logic -Ethernet interface for remote maintenance (prerequisite: internet connection on customer's premises) -Warm-up cycle to stabilise machine temperature. | | |
| 2800 | 213718.00 | 1 | Tailstock cover C1 | | |
| 2900 | 213719.00 | 1 | Tailstock cover C2 | | |
| 3500 | 213585.01 | 1 | Grinding worm dressing device RP 121F with variable spindle speed Serial no. 151 | | |
| 4000 | 908204.03 | 1 | Noise level: Operation: max. 75 dBA Standby: max. 72 dBA | | |
| 4100 | 908570.05 | 1 | Language machine labels: Italian/english operator language: Italian/english | | |
| 4200 | 908531.00 | 1 | Complete machine in REISHAUER color concept; - machine base ultramarine blue RAL 5002 | | |

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| | | | - machine hood, building groups, interior, screen auxiliary apparatuses: pure white RAL 9010 | | |
| 4310 | 214449.87 | 1 | Aufstellung RZ 160, 2-spindlig | | |
| 5100 | 905559.01 | 1 | - Power supply : 3 x 400 V 50 Hz - Machine voltage : 3 x 400 V 50 Hz - Control voltage : 1 x 230 V 50 Hz - : 1 x 24 V DC | | |
| 5500 | 908215.02 | 1 | Signal lamp, special version | | |
| 5800 | 908158.06 | 1 | Energy counter PAC 3200 | | |
| 6000 | 213979.00 | 1 | Handle for electrical cabinet | | |
| 10300 | 908211.00 | 1 | special regulations | | |
| 10800 | 905586.45 | 1 | Remote-diagnosis via Internet and Ethernet: Requirements: The customer must provide 2-fixed IP-adresses for each machine. The machine must have connection to the Internet. | | |
| 15300 | 213990.40 | 1 | Hydraulic basic equipment C1P+C2P /MPa for machine with 2 workspindles with separate clamping pressure control including manometer panel and pressure switch Prepared to install together with : - Tank capacity: 40 l - connections as per CETOP 03 - pressure accumulator with safety block - pressure gauge with bar/psi scale | | |
| 15500 | 155969.03 | 1 | Hydraulic unit : Standard Bosch elektro motor IE3: Siemens hydraulic pump : Bosch Rexroth PV7-1X/10-14 return filter : Bosch Rexroth heat exchanger : Bosch Rexroth male coupling : Walther LP-019-2 female coupling : Walther LP-019-0 | | |
| 15900 | 211747.77 | 1 | Pneumatics SL-2, Standard | | |
| 16200 | 211532.17 | 1 | Exhaust valve pneumatic MDH | | |
| 17200 | 211902.48 | 1 | Central lubrication Getrag | | |
| 18100 | 213994.00 | 1 | Retrofit kit additional flushing | | |
| 20100 | 344298.14 | 1 | Special labels it,en | | |
| 20500 | 344310.00 | 1 | Sign plate it,en 8a,4a,4a IEC | | |
| 20750 | 213025.09 | 1 | Special turrets | | |
| 21000 | 344093.01 | 1 | Special signs, fluid it,en Getrag | | |
| 21210 | 344322.20 | 2 | Label 78982 | | |
| 25100 | 908211.00 | 1 | Dokumentation nach Getrag Spezifikation | | |
| 25200 | 908617.21 | 1 | Operating instructions italian Hard copy and CD-ROM (.PDF) | | |
| 25900 | 908211.00 | 1 | Dokumentation englisch auf CD-ROM | | |
| 30100 | 213426.00 | 1 | Oil Mist Separator ELBARON RON/A 2500 DV high tension electrostatic supply voltage : 400V/50Hz | | |

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| 35200 | 155893.31 | 1 | control voltage: 230V/50Hz Automatic CO2 Fire extinguishing system FB 704; maker: Kraft & Bauer; including: - Fire detectors with temperature and infrared sensors - Manual actuator - 1 x 20 kg CO2 bottle with magnetic valve, content monitoring and alarm | | |
| 45300 | 210729.03 | 2 | Meshing sensor for module 1 to 2 | | |
| 50100 | 214090.30 | 2 | Nozzle type 50, form A width 30mm, length 144mm | | |
| 65110 | 908530.03 | 1 | Electrical interface ProfiNet, for loader system; - data exchange machine/loader (Standard) | | |
| 65200 | 908154.05 | 1 | Technical support for the integration of a loading system provided by the customer for the installation at the customer's site (price on request) | | |
| 70100 | 908533.03 | 1 | Electrical interface ProfiNet, for grinding oil filter system - data exchange machine/grinding oil filter system (Standard) | | |
| 70200 | 155970.66 | 1 | Suction belt filter HSF 100 for one machine for filtration and cooling of the grinding oil with air-cooled compressor cooler unit for ambient temperatures up to 40°C - Footprint : 3.8 m x 2.3 m - Tank capacity : 2500 l - Filtration capacity: 200 l/min - Pump unit for grinding/flushing: 11 kW; 160 l/min at 27 bar - Pump unit for machine cooling: 1.7 kW; 40 l/min at 6 bar Cooling System: 1st Circuit for grinding oil cooling: - Cooling capacity: 20 kW 2nd Circuit for spindle cooling: - Cooling capacity: 3 kW - Spindle oil tank capacity: 60 l - Pump capacity: 15 l/min at 9 bar Delivery incl. return pump This suction belt filter cannot be used for grinding of cast iron as well as sintered or carbide-based materials. | | |
| 70300 | 156036.07 | 1 | Return-flow pump, standard version - make: Brinkmann 2.6 kW / IE3 / 50 Hz - ambient temperature: <40°C - operating point: 250 l/min at 1.2 bar - intake/pressure ports Ø75 | | |

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| | | | - additional noise protection, incl. oil drip pan | | |
| 70400 | 155970.93 | 1 | Sludge carriage | | |
| 70500 | 155794.05 | 1 | Collecting pan 2500 lt /HSF 100 | | |
| 70600 | 507215.10 | 60 | Liter spindle oil Velocite 6 | | |
| 70900 | 908188.32 | 1 | Energiezähler PAC3200 | | |
| 71000 | 908188.35 | 1 | Schlauchfangsicherung | | |
| 71100 | 908211.00 | 1 | Mittleres Abwurfblech für Schlammwagen | | |
| 71200 | 908211.00 | 1 | Sintogrind 353 für Vorabnahme verwenden | | |
| 75100 | 421184.00 | 2 | REISHAUER clamping device FH38 quick change chuck centering diameter: ø38 mm support height: 52 mm support diameter: ø112 mm mounted directly on C-Axis with integrated actuating piston with clamping stroke control with lead through for oil (lockable) with lead through for control air Serial no. 218 219 | | |
| 75200 | 421184.25 | 2 | Installation and operating instructions IT | | |
| 78100 | 535924.48 | 2 | mec. clamping arbor your material identification: VSP-250191 | | |
| 78200 | 536455.18 | 2 | fixed support ring your material identification: VAE-251551 | | |
| 78300 | 536493.36 | 2 | Clamping bush ø44.82 your material identification: VHS-253663 | | |
| 78400 | 536217.70 | 1 | control ring Ø45 | | |
| 78500 | 398196.58 | 1 | set of diamond rolls, 1-start; module 2.25; PA 17.5°; with HBR 900/1000 mm KR 1°04'00" x 1.4 mm for 251.1.0449.51 PSA-329547 Serial no. 10 your material identification: PSA-329547 | | |
| 78600 | 416513.53 | 1 | grinding worm 275x160x160 mm A80G8V0167, m 2.25, PA 17.5°, 5-starts engrave: SLA-328374 your material identification: SLA-328374 IST NEU 41652566 | | |
| 78700 | 416513.53 | 1 | grinding worm 275x160x160 mm | | |



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| | | | A80G8V0167, m 2.25, PA 17.5°, 5-starts engrave: SLA-328374 your material identification: SLA-328374 IST NEU 41652566 | | |
| 78800 | 211619.00 | 1 | Flange for mounting grinding tools with a bore diameter of 160 mm and a face width up to 160 mm For grinding wheel dimensions up to 300x160x160 mm your material identification: SLW-251098 | | |
| 80100 | 908211.00 | 1 | special regulations | | |
| 80200 | 906161.41 | 1 | Free-of-charge oil drip pan drawing for machine | | |
| 80300 | 906161.46 | 1 | Vibration Monitoring IMI | | |
| 85100 | 211599.00 | 1 | Pre-acceptance of machine at Reishauer Wallisellen (with 2 types of workpieces, 100 each) (cost of travelling, board and lodging not included) | | |
| 85200 | 901474.03 | 1 | Commissioning (by Reishauer representative) of complete machine and instruction of operators, including travel costs, hotel and meals | | |
| 85300 | 908211.00 | 5 | special regulations | | |
| 85400 | 908230.01 | 1 | Preparation of machine for shipment by truck | | |
| 85500 | 908230.02 | 1 | Preparation of coolant filtration unit for one machine for shipment by truck | | |
| 85600 | 116021.00 | 1 | Freight + insurance | | |
| | | | Payment terms: 60% after proper installation and readiness for operation 35% after proper final acceptance 5% after proper final acceptance against warranty bond Due dates according to the frame contract | | |

Payment Break-Up Summary

| Invoice/Ref# | Ford Ref# | Location | Amount |
|--------------|---------------|----------|--------------|
| 66868 | 9233W0031332B | TC04 | 3,800.00 CHF |

