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| * **REQUEST FOR QUOTATION -**

**Machinery and Equipment (M&E)** |

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| --- |
| **R.f.Q.Nr.:** **2.20636 date:** **08-05-2019****Purchasing Ref.[[1]](#footnote-2)\*.:****date\*** **DD/MM/YY** |

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| --- | --- |
| **ISSUING ENGINEERING DEPARTMENT** | *Manufacturing Engineerin* |
|  | **Place:** | **Torino** | **Date:** | **08/05/19** |
| **Appropriation Request Nr. :****Project-Nr.:** |  | **Machine /** **Facility:** | *Shaving machine* |
|  |  | **Supply type:** |  |
| **Project description** |  | **Part:****Operation Nr.:** | **Input shaft 5 & 6 gear****120-130-140** |

|  |  |
| --- | --- |
| **FINAL DATE FOR SUBMITTAL OF BID** | **14/06/2019** |
| **DELIVERY DATE OF EQUIPMENT TO USER PLANT** | **30/07/2020** |
| **REQUEST DATE FOR MACHINE/EQUIPMENT INSTALLED AND OPERATING AT CUSTOMER PLANT** | **20/08/2020** |
| **START OF PRODUCTION**  | **24/08/2020** |
| **CUSTOMER PLANT** |

|  |
| --- |
| *MIRAFIORI* |

 |
| **PROCESS ENGINEER REFERENCE** | **Name:** **CASALEGNO MARCO** **Tel.:** **011-0038234 / 011-0032614****Fax: -****E-Mail:** **marco.casalegno@fcagroup.com.** |

1. **SUPPLY DESCRIPTION**

**Project characteristics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Quantity of machinery / facilities |  | n° 3 SHAVING MACHINE |
|  | Inventory tag nr.(only for retooled machine/facility) |  | 061210109-911210120-911210121 |
|  | Machine / facility already CE marked(only for retooled machine/facility) |  | **SI-NO-NO** |
|  |
|  | Plant location |  |  MIRAFIORI |
|  | Machine location(building, area, row, floor) |  | UTE 203 |

1. **PRODUCT AND PRODUCTION LOCATION**

**Part to be machined or assembled**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Material |  | 18CrMo4G - 17NiCrMo7G |
|  | Drawing Nr. - Part Nr.  |  | 55245966-55269667-46759422-55207971-46792493 |

**Production characteristics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Process description |  | Shaving operation |
|  | Production capacity(based on 100% efficiency) |  |       | Parts/year |
|  | OEE **(1)** |  |       | [%] |
|  | Nr. hours/year |  |       |  |
|  | Nr. days/week |  | 5 |  |
|  | Nr. shifts/day |  | 3 |  |
|  | Nr. minute/shift  |  | 450 | [min.] |
|  |  Production time rate (at minimum Et%) |  |       | [min./part] |

 **OEE (Overall Equipment Effectiveness)**

 See FPW.MEM028

**SUPPLY REQUIREMENTS**

* 1. **FCA Italy S.p.A.**

**Powertrain Technical Specification**

Set of Technical Specification and FPWMEM028 are available at the following web site address:

            <http://supplierinfo.powertrain.fcagroup.com>



Access need registration.

First access shall be done with this user: *FP\_ME*

                                     First Password to access:                                *Tec\_Spec*

New account shall have as account user the supplier company e-mail address.

Options to be quoted are flagged (\*) below:

|  |  |
| --- | --- |
| [x]  | A - Specification in Force |
| [ ]  | B - Project |

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|  |  |
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| [ ]  | C - Supplier standard |

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(\*) FCA process engineer is in charge to flag the options to be quoted.

* 1. **FPWMEM028**

FPWMEM028 includes the Request for Quote attachments. Supplier is in charge to deliver it jointly with the bid: one copy for each flagged option.

The attachments of each copy shall be coherently and properly filled out to define the relevant option contents.

Attachments are:

* Utility Data
* Installation Sheet
* Safety and Ergonomics
* Project Data
* OEE
* Running Cost
* Vendor List
* Deviation module (if necessary )
* Technical Specification Check List
* Technical Specification Acceptance form
	1. **Ergonomics Specification**

Within Machine Directive limit, FCA requires to design Manual Workplace in compliance with the International Standards, European Norms and Italian laws in force.

In order to achieve this, FCA has created a guideline with the Technical Specification FCA 9.01111 and that the supplier must follow at least not to be contrary to the Italian laws.

The specification is available at following FCA web site:

<https://bestandard.fcagroup.com/index.aspx>

if necessary request access to the above mentioned site



* 1. **Work Safety for Italian Plants**

For each outsourcing contract, subcontract, it must be specifically reported – under penalty of avoidance of contract according to Art. 1418 of Italian Civil Code – the costs of the adopted countermeasures to minimizing or, where it is not possible, reduce as much as possible the risks in terms of work health and safety due to the interferences among the different activities. Such costs are not subjected to reduction (Art. 26 comma 5 D.Lgs. 81/08).

See attached “ART. 26 comma 5 D.Lgs. 81/08”.

* 1. **FCA S.p.A. - Powertrain Process Specification**

|  |  |
| --- | --- |
|  | **References** |
| [ ]  | CD Rom references:      data:DD/MM/YYversion:       |
| [ ]  | Supplementary assistance of # 2 technician during start of production period for # 2 week |
| [ ]  | Attachments list:- …- … |

##

## **ART. 26 comma 5 D.Lgs. 81/08**

 (General Safety clauses)

## APPLICABLE FOR ITALY PLANTS ONLY

**1 – GENERALITIES**

The relations between CLIENT and CONTRACTOR – SELF-EMPLOYED WORKER - SUBCONTRACTOR called upon to perform the jobs at the plants belonging to FGA shall be governed by the contractual regulations provided in the current laws in force on these matters.

**2 - OBSERVANCE OF LAWS AND REGULATIONS**

The companies, hereinafter referred to as "CONTRACTOR", that perform work at the production and organizational units of FG must comply with and respect all the provisions regarding fire prevention and ecology. When applicable, special attention shall be given to respecting the company rules indicated in the Environmental Management System (EMS), the documentation of which is available in the areas involved, on the company's intranet site and may also be requested from the staff member in charge of supervising the jobs. In particular the contractor is responsible for the observance of all provisions, meaning not only the laws and regulations but also good workmanship standards /best practices laid down by the bodies set up for this purpose (I.S.O. - C.E.N. - C.E.N.E.L.E.C. - C.E.I. - U.N.I. - etc.). The contractor shall also be responsible for preparing technical, organizational and procedural measures as well as specific precautions. In any case, for their particular and general relevance we refer you expressly to the provisions of Titolo I, Art. 15-17-18-19-20-22-23-24-26 and Titolo IV of D.Lgs. 81/08 in its current version.

**3 - SELECTION AND INSTRUCTION OF EMPLOYEES**

To perform the work, the persons selected must be adequately capable and suitable, especially for particularly difficult jobs or jobs that must be performed in particular conditions.

Bear in mind that starting 1/9/2007 Art. 6 of Legge 123/07 (currently Art. 26 of D.Lgs. 81/2008) contemplates the obligation to give an identity card (with a photo, the generalities of the worker and the employer/contractor) to all workers employed by any contracting or subcontracting company (including self-employed workers). It is obligatory to show this card and control the contractor’s hierarchies (supervisors/ managers) regarding proper implementation.

The workers must be informed not only about the risks of their own jobs but all the measures/precautions indicated in the DVR (*Risk Assessment Document*).

**4 - BEHAVIOR OF CONTRACTING/SUBCONTRACTING COMPANY'S EMPLOYEES**

In the work environment and at the worksite employees must behave correctly. They must absolutely abstain from any behavior or action that might cause damage to their co-workers or obstruct the regular performance of jobs in the various operative areas.

Workers must not leave their workstation or area assigned to them by their supervisors/foreman without a justification.

In the Company it is prohibited to consume alcoholic beverages. For the purpose of prohibiting the consumption or administration of alcoholic beverages or spirits, see Provvedimento 16 March 2006 which indicates work activities at high risk of work-related accidents, i.e. safety, prevention of injury and protection of the health of third parties.

Unless prevented by causes of force majeure, workers are required to promptly report any accidents, including small injuries occurring during work to themselves, to their employer or supervisors.

**5 – MACHINERY, VEHICLES AND EQUIPMENT**

All machines, vehicles and equipment owned by the contractor must have a license plate indicating the name of the company that owns them. The aforesaid machinery, vehicles and equipment must conform to the provisions of law regarding matters of accident-prevention and work health and be in the necessary conditions of efficiency for the purposes they are required to fulfill and must have suitable certification of CE conformity when required. Moreover these conditions must be maintained throughout time by implementing routine maintenance and overhauls of the same in conformity to all the provisions of the manufacturer’s engineer.

Vehicles requiring inspection and routine controls by public authorities (extendable and overhead cranes, overhead ladders, hoists, pressurized equipment, etc.) must comply with these controls.

It is absolutely prohibited for any contractor or subcontractor (including self-employed workers) to use machinery, plants, equipment owned by the contractee, without prior written authorization from the Department indicated by the contractee.

**6 - ELECTRICAL SYSTEMS AND EQUIPMENT**

Electrical systems and equipment, and all their parts, must be built and installed in compliance with all provisions of law on these matters and accompanied by the required CE certifications and/or Declarations of Conformity.

Including but not limited to:

* D.Lgs. 09/04/2008 – Titolo III – Paragrafo III - Electrical Systems and Equipment
* Legge 1/3/68 n.186;
* Legge 18/10/77 n.791 and D.Lgs. 81/08;
* DD.PP.RR. 675 and 727 of 21/7/82, Legge 17/4/89 n.150 and D.P.R. 23/3/98 n.126;
* D.M. 37/2008
* Detailed CEI standards (CEI 64-8; CEI 11–8; CEI 11-1; CEI EN 60204; CEI EN 60079, etc.)

**7 - JOBS NEAR OR ABOVE ELECTRICAL SYSTEMS**

Any job on electrical lines and systems must be regularly authorized each time by the competent Services Providers indicated by the Client. Every time an electrical line is disconnected or reconnected, the following procedures, established with regard to the environment of each worksite, must be followed.

Bear in mind that all lines and equipment must be considered live until ascertained otherwise with the appropriate control instruments.

The following steps must be taken before performing work on or in the immediate vicinity of high-voltage machines, equipment or cables, unless the voltage is under 1000 V and the above-mentioned precautions have been taken:

A) Cut off the voltage;

B) Make sure the circuit is visibly cut off at the points of possible supply to the plant on which the work is being performed;

C) Put up a warning sign at all maneuvering and control points with the wording "Lavori in corso, non effettuare manovre";

D) Insulate and ground, in all the phases, the part of the plant and the immediate vicinity where the work is being carried out.

When working on high-voltage machinery, equipment and electrical cables in places where the safety measures under letters B) and C) above are not directly controllable by the appointed workers, these workers, before undertaking the work, must first request and receive confirmation that all the above-mentioned safety measures have been taken by their supervisor responsible for the area.

In any event the job must not be started if the appointed workers have not complied with the provisions under letter D) above.

Voltage must not be reconnected to segments cut out for work until after the workers performing the relative maneuvers have received from the CONTRACTOR who did the job, notice that the job has been completed and that the voltage can be applied.

For jobs assigned to one single worker to be done in particularly hazardous conditions on machinery, equipment or electric cables, another person must also be present.

Work must not be performed in proximity to overhead electrical lines at a distance of less than 5 m from the construction or scaffolds unless the Electrical Company is notified and provides adequate protection to prevent accidental contact or dangerous closeness to the cables of the lines.

**8 - CIRCULATION OF VEHICLES INSIDE THE PLANT**

Motor vehicles owned by the contractor must be authorized for use on the premises of the Client.

The employees assigned to drive and maneuver the motor vehicles and operating machinery must have a valid prefectorial license.

On the roadways of the worksite and indoor premises, the circulation of vehicles must occur in strict observance of the Codice della Strada (*Traffic Code*) and the internal regulations marked by the appropriate signaling systems/signage.

In any event, the speed must remain within the limits indicated by the signage and the vehicles must be driven with utmost caution.

It is prohibited to transport people outside the driver's cab on or on the bed of vehicles without a tailgate with the tailgate lowered and on any vehicles designed for the transportation of materials (forklifts and platform lifts, tractors, etc.).

**9 - LIFTING AND TRANSPORTING CARGO**

Lifting and transportation vehicles must be used exclusively by expert employees specially authorized by the contractor.

It is absolutely prohibited to use said vehicles for lifting or transporting people.

Loads must be lifted and transported under scrupulous observance of safety regulations and using the appropriate equipment.

The loads must be harnessed by using suitable equipment to prevent the load from falling or shifting from the original landing position.

The places for loading, unloading and maneuvering the winches, hoists and similar apparatuses must be limited by barriers to prevent standing/parking or transit under the loads or the falling of persons from above.

When loading or unloading the motor vehicles, the driver must assist the relative operations and stay away from the radius of action of the loading process and away from the vehicle used in the operation. If these operations are carried out by the contracting/subcontracting company with its own vehicles/equipment and workers, the drivers must limit themselves to controlling the proper arrangement of the cargo on the motor vehicles from safe positions and refrain from participating in the maneuvers.

**10 - REGULATIONS FOR PERFORMING THE WORK**

Remaining valid the obligation of the contractor to respect all prevention and safety laws while performing all the activities to be completed at the worksite, we would like to draw to the attention of the contractor certain general rules of conduct:

**a) TEMPORARY STRUCTURES**

Temporary structures must be built with good material and workmanship, proportioned and suitable for their purpose; they must be kept efficient for the entire duration of the work.

Before reusing the elements of any type of scaffolding, these must checked to eliminate elements no longer considered suitable. For jobs executed at a height of over 2 m, adequate scaffolding or planking must be adopted or suitable temporary constructions must be built. In any event precautions must be taken to prevent persons or things from falling.

The assembly and disassembly of the temporary constructions must be carried out under the direct oversight of a foreman assigned to this task.

**b) RAILINGS**

The scaffolding, service or work planks, walkways, must have all their open sides fitted with sturdy railings built in conformity with the regulations in force.

**c) PROTECTION OF OPENINGS**

The openings left in the floors or work platforms must be surrounded by normal railings and toe-stop boards or covered with planking that is solidly fastened to or as sturdy as the treading surface of the service scaffolding.

If openings are used for the passage of materials or persons, one side of the railing must be fitted with a mobile nonremovable barrier that must be opened only for the time needed to pass through and only if the suitable precautions are adopted for the workers.

**d) STORAGE MATERIAL**

The material must not obstruct areas of transit and/or work. It must be arranged or stacked in a stable and safe manner in the areas assigned as needed or in a way that does not create obstruction or dangers.

**e) TRANSIT AREAS INVOLVED**

If the work activity obstructs, even partially, the roadways and passageways with its equipment and/or materials indoors or outdoors, it is necessary to establish the appropriate limitations of the areas involved and use signage/signaling to draw attention to them for both daytime and nighttime activities.

**f) WORKING IN RAISED POSITIONS**

**Access**

Access to raised positions must be easy and safe by providing walkways/stairways and other suitable means.

**Delimitation of area below the work area**

It is necessary to provide suitable protections under the work area to protect against falling material of any type and make sure it is indicated by appropriate signage/signaling.

**Safety belts**

When it is not possible to provide protection scaffolding and/or railings while working near eaves and cornices, on rooftops, extendable scissor scaffolds or similar equipment, on walls being demolished and similar structures that expose workers to the risk of falling from a high place or into holes, the workers appointed to those jobs must use safety belts with shoulder straps/harnesses attached to retaining ropes. The retaining ropes and must be secured directly, or by means of a sliding ring along an appropriately tensioned cable, to the stable parts of the fixed or temporary structures.

The ropes and all the elements making up the belt must have sections that withstand the weight of a falling worker. The length of the restraining rope must limit falls to no more than 1.50 m.

**Works on roofs**

It is prohibited to transit or work on roofs made of fiber cement slabs, skylights or other structures that are not sufficiently strong without having previously adopted the appropriate measures to prevent breakage/failure.

**g) WELDING, CUTTING AND HEATING METALS**

The equipment for the electric welding or similar operations must have an omnipolar switch on the primary circuit of the electrical shunt.

An anti-flame nonreturn valve must be inserted in the shunt of acetylene gas and other combustible gases for supplying the welding torch.

A C02 extinguisher weighing 3 kg must be placed on each cylinder-carrying truck.

The cylinders, whether empty or full, must be secured against dangers of falling, must have a valve protection cap and must be kept away from or protected against sources of heat.

It is prohibited to conduct welding or cutting operations with a torch or electrically in the

following conditions:

a) On closed containers or pipes;

b) On open containers or pipes that contain substances and/or products that under the effect of heat might explode or create other dangerous reactions;

c) On containers or pipes, even open ones, containing substances and/or products that form explosive mixtures while evaporating or gasifying due to heat or humidity.

It is also prohibited to perform welding operations inside rooms, in containers or pits that are not effectively ventilated.

When the aforesaid dangerous conditions can be eliminated by opening the closed containers, removing the hazardous substances and/or products and their residues, or by using inert gases or other means, the welding or cutting operations can be performed even on the containers or pipes indicated under letters a), b), and c), as long as the safety measures are laid down by an expert and carried out under his direct supervision.

During electric welding or similar operations inside metal containers, while observing the above-mentioned regulations it is also necessary to provide insulating means/equipment and use guns that are completely protected to make workers safe from accidental contact with live parts.

These operations must be performed under the continuous supervision of an expert assisting the worker from outside the containers.

**h) WORKS INSIDE WELLS, TUNNELS, TANKS AND SIMILAR CONTAINERS**

When work is being performed inside sewers, underground passages, wells, tanks, vats, etc. all necessary precautions must be adopted to prevent the development of asphyxiating and/or toxic gases, fire or explosion hazards. Moreover, before entering the aforementioned places, suitable measures must be taken against the potential danger the presence of asphyxiating or toxic gases or vapors, such as: providing efficient ventilation and complete drainage, use safety belts with shoulder straps and retaining ropes, and provide external supervision (from outside the container) of workers inside the container.

**i) SIMPLE PORTABLE STAIRWAYS**

Portable stairways must be in good condition and have anti-slipping devices on the feet of the risers.

Moreover, a suitable length must be selected for the work to be carried out, set at the proper inclination and used properly.

**l) MOBILE RAISABLE WORK PLATFORMS**

The mobile raisable work platforms must comply with applicable harmonized technical standards.

**m) NAIL GUNS**

Only guns having the necessary safety requirements can be used. They must be in good working condition and the relative safety regulations must be scrupulously observed while using them.

It is always prohibited to use nail guns in areas where other work activity is in progress or in rooms where there is the danger of explosion or fire.

The workers assigned to use this kind of tool must be selected carefully and trained appropriately.

**n) USING HAZARDOUS OR HARMFUL SUBSTANCES**

Containers used for transporting flammable, corrosive or toxic liquids or materials or substances that are harmful in any way must have:

a) Suitable closures to prevent contents from leaking out;

b) Accessories or devices to make filling and emptying operations easy and safe;

c) Handling accessories, handles, rings, grips to make it easy and safe to use them for their particular purpose;

d) A protective wrapping/casing suitable for the nature of the content.

The containers, whether empty or full, must be kept in special places; empty containers must be kept separate from full ones and must not be reutilized for containing other substances until they have been thoroughly reclaimed.

Said containers must bear a label as required by the law for the purpose of making known the nature and the hazards of their contents.

The waste product of substances and/or products that are flammable, explosive, corrosive, toxic, infective or in any way harmful must be collected during the work by means of the appropriate equipment and placed in storage until they are removed by the contractor to places where they will not cause any danger.

**o) PRECAUTIONS AGAINST FIRE AND EXPLOSION HAZARDS**

It is prohibited to smoke or use naked flames in the rooms, areas or places near the machinery, plants and equipment posing a danger of fire or explosion due to the charac

teristics of the substances and/or products put or used inside them.

For all welding and cutting operations that entail potential dangers of fire or explosion, the company must request the presence of the Fire Department or the company’s in-house fire squad.

When doing work in places where there may be a danger of fire or explosion (scraping or cleaning inside painting booths and suction ducts, etc.), anti-spark equipment and portable lamps or other electrical anti-explosion devices suitable for work in the presence of potentially explosive atmospheres must be used.

**p) SUPPLYING PERSONAL PROTECTION EQUIPMENTS**

The contractor is required to provide its employees with personal protection equipments (PPE) suitable for the risks inherent to the work and operations to be performed – if the technical preparations have proven to be inadequate – and make sure this PPE is used properly by the employees.

The contractor must also make sure its employees do not use personal clothing and accessories at the workplace that, considering the operations being performed and the characteristics of the plants, would be dangerous to their safety.

**12 - COMPLIANCE WITH TRAFFIC, HEALTH AND SAFETY SIGNAGE/SIGNALING**

The contractor's employees must scrupulously respect danger warning signs that state obligations and prohibitions and obey the rules of conduct indicated on said signs.

**13 - END OF WORK**

Upon completion of the job, the contractor must make sure all areas involved are totally cleaned and freed from materials and obstacles that might obstruct normal work activities or cause danger to employees.

This applies especially to overhead stations, areas of transit, electrical systems, etc. Moreover the pre-existing safety conditions must be restored if they have been altered for work purposes.

**14 - REPORTING ACCIDENTS AND URGENT RESCUES**

In the case of an accident involving its own employees, the contractor must fulfill its obligations according to the laws in force on these matters by promptly informing the RSPP (Protection and Prevention Service Supervisor) designated to the worksite.

**15 - FUNCTIONAL SUPPLEMENTS TO ACTIVITIES AS PER ISO 14001 CERTIFICATION**

The client’s plant has implemented an Environmental Management System according to UNI EN ISO standard 14001:2004 in conformity to the Environmental Policy of the Company available to the supplier.

**a) ENVIRONMENTAL RESPECT**

In conformity to the Company’s Environmental Policy, the contractor is required to observe the following minimum obligations aimed at ensuring the respect of the environment:

* Any environmental anomaly or emergency must be reported to the plant personnel;
* Effluent (emissions, water drainage, waste, etc.) must be managed in conformity with the laws in force that govern each specific field of application. To eliminate the effluent the contractor must not use and/or connect its pipes to the plants and/or facilities owned by the client. For example, the contractor must not drain effluent into the company's sewage system;
* If for its own work activities it must use liquid substances labeled as hazardous or that produce hazardous liquid waste, the appropriate measures must be adopted to prevent pollution and/or accidental/uncontrolled spillage;
* They required precautions must be taken to prevent the squandering of natural resources (e.g., securely close toilet flushers after use).
* **Waste Management:**
	+ If the contractor produces waste for the purposes of performing its work activity, it must not abandon said waste and provide for a collection operation, temporary storage and subsequent elimination in conformity with the provisions of law in force on these matters;
	+ Waste deriving from unpacking equipment/machinery purchased by the client company must be gathered in containers prepared and appropriately marked by the Client;
	+ Further information will be provided by the employees in charge of the plant.
1. \* To be completed by the Purchasing Department [↑](#footnote-ref-2)