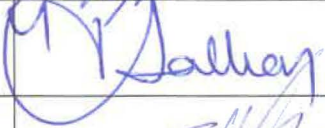


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T.S. 250.411

TECHNICAL SPECIFICATION FOR SUPPLYING OF 60 kN and 120 kN BRAKE TRIANGLES

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1. SUBJECT AND SCOPE

This technical specification covers the minimum general and technical specifications, control, delivery, warranty and other issues related to the brake triangles used in production and revision of wagons in TÜRASAS.

2. DEMANDS AND SPECIFICATIONS

The most up-to-date version of UIC 833 will be referenced for all issues related to brake triangles.

120 kN of Brake Triangles will be manufactured according to UIC 833 and 10 4006 460 or B210-09.05.00.00 numbered technical drawings regarding the purchase request. On the technical drawing 10 4006 460; assembly part of the No.5 (five) part without threading or without any machining process will be mounted by means of hot crushing (forging) by threading to parts 1 (one) and 2 (two).

On the technical drawing B210-09.05.00.00; assembly part of the No.1 (one) part without threading or without any machining process will be mounted by means of hot crushing (forging) by threading to parts 3 (three) and 4 (four).

60 kN of Brake Triangles will be manufactured according to 000.07.036.020 numbered technical drawing and UIC 833. On the technical drawing 000.07.036.020; assembly part of the No.5 (five) and 6 (six) parts without threading or without any machining process will be mounted by means of hot crushing (forging) by threading to parts 1 (one) and 2 (two). Preparation, manufacture, marking, heat treatment of brake triangles and components shall be carried out according to UIC 833.

3. INSPECTIONS AND EXPERIMENTS MADE BY MANUFACTURER

The manufacturer shall submit the 3.2 certificate according to EN10204 with the offered party by performing the tests specified in 4.3.2 of the UIC 833. All test, experiments and measurement reports within the scope of the 3.2 certificate according to EN 10204 will also be approved by an accredited organization according to ISO 17065.

In addition, the hot crushing (forging) method will be controlled 100% where the heated parts are assembled at the appropriate temperature for the process. The control sheets prepared as a result of the inspections shall be submitted to the Administration with delivery of the product.

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4. INSPECTIONS AND EXPERIMENTS MADE BY ADMINISTRATION:

In the examinations and tests to be carried out by the Administration, the approval and acceptance tests specified in UIC 833 will be referred. The Brake Triangles presented in line with the expressions placed in UIC 833 shall be subject to crack control by the Administration. Manufacturers that will give product for the first time will be exempt from approval tests in case of documented that the company was an approved supplier of a railway vehicle manufacturer and/or operator previously according to UIC 833.

Administration shall have the right of taking a sample and/or samples and perform destructive tests and / or non- destructive tests on the samples if Administration deems necessary. The contractor shall give new componets used at destructive tests to TÜRASAS free of charge.

5. PRESENTATION, PACKAGE, TYPE AND LOCATION OF DELIVERY

Presentation of Brake Triangles will be made according to UIC 833. The Supplier will issue the certifications of the controls to Administration referred to in 4.3.1.1 of the UIC 833 during the presentation.

Müşelles connection points (trunnion, bushing, etc.) will be lubricated against corrosion in a way that will not be affected by external environmental conditions, and will be protected (plastic protection cap, plug, etc.) in a way that will not be affected by mechanical impacts.

The components to be submitted to the Acceptance Department shall be delivered in quality and thick wooden, petroleum products, etc made cases resisting the minor damages during loading and unloading to prevent any damage from dust, rain, snow, sun rays, wind, etc. and to be protected any harm during carrying in every weather condition. Four boxes can be stored over and over. Durable string tape shall be wrapped to prevent the spreading the cases.

There will be pallet under the crates for moving with forklift. Weight of the crates with material shall not exceed the weight of 400-500 kg. When selecting the crate material, it shall be cosidered that 4 pcs crates will be put over and over. The name of the contractor, the name of the material, order and drawing number, number of pieces inside the box, the charge and serial number of the parts, manufacturing date information (Not to be affected by climate conditions) shall be specified over the crates. A list containing this information will be delivered together with waybill and invoice.

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The components delivered to Acceptance Department stocked into the cases upon they are wrapped with bubble pack to prevent from from climate and envirolment conditions such as rain, wild, snow and will not be damaged during the stocking, carrying, loading and unloading. The componets shall not touch each others.

In case of unavailability and/or missing of packing and/or acceptance documents of products proffered to acceptance committee; this situation will be recorded by minutes and then these products will be returned to company without performing acceptance process.

The delivery place of the parts packed according to the technical specification is TÜRASAŞ Eskişehir Regional Directorate or TÜRASAŞ Sivas Regional Directorate, depending on the demand.

6. PROTOTYPE

The suppliers who will give the product for the first time will definitely give 2 prototype products. After acceptance of prototypes, mass production will be started. Even if the product was previously given, if there is any change in the Project and/or manufacturing method of the product, the prototype will be presented again.

7. WARRANTY

The manufacturer company will guarantee the materials for the period of 2 years starting from the deadline against the manufacturing defects and unseen defects during the delivery process. The company shall deliver to TÜRASAŞ the new ones to replace the defective parts under warranty within the date of notification no later than 30 business days.

8. OTHER ISSUES:

- All other matters not specified in the technical specification such as quantity increase, acceptance type and dates, insurance, guarantee, etc. are decided by administrative specification.

ANNEX-1: Technical Drawing 1Fwg000.07.036.020 (1 Page)

ANNEX-2: List 1Fwg000.07.036.020 (2 Pages)

ANNEX-3: Technical Drawing 10 4006 460 (1 Page)

ANNEX-4: List 1Fwg000.07.036.022 (2 Pages)

ANNEX-5: Technical Drawing B210-09.05.00.00 (1 Page)