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FINAL REPORT - TRAINING IN ITALY OF KOREAN TECHNICIANS

BERTUZZI

With reference to the Unido Contract no. 90/038 - Amendment no. 1 dated 04.10.1990, Bertuzzi SpA har received the visit of a Delegation from DPR of Korea, composed by Mr Li Dok No (Technician), Mr Kim In Su (Technician) and Mr O Jun Son (English Interpreter), from 17.12.1990 to 27.12.1990.

During their stay in Italy, we have carried out the following programme of work:

On Monday, 17th December '90, the Delegation has been received in our offices in Brugherio (Milan). With the three Korean technicians, we have fixed the working programme of the week.

We have shown them the Bertuzzi's organisation with a visit in our factory, during which we have shown some of machines, including all the equipments of their interest.

We have discussed about all technical problems and we have also clarified all the doubts on the use of the machines composing the apples clear juice production plant supplied them.

We have also visited our sister's company "Italwanson" in Milan for the first explanations on the possible reasons of the serpentine's corrosion of the boiler supplied by us with the above mentioned plant.

On Tuersday, 18th December '90, we have visited the "I.V.T.P.A." Centre (Experimental Institut for the Technological Valorization of the Agricultural Products) in Milan, where there is a complete pilot processing plant supplied by Bertuzzi. With this plant we have carried out the complete processing for the production of apples clear juice.

During this test, we have done all the technological operations, which we find in the industrial plant, simulating a processing starting with 100 kg of apples. We have gone on with the sorting, washing and chopping operations, followed by a pressing with a pilot pack press. The obtained juice has been pre-heated at 50°, treated enzymatically and clarified with gelatine and bentonite. In this phase we have discussed with the Korean technicians about all the problems regarding this technological step, the different parameters to use and to modify according to the type of fruits and the grade of ripening (time, temperatures, quantity of enzymes, gelatine and

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bentonite). Then we have carried out the filtration by a vacuum rotating filter, using kieselguhr, and the obtanied juice has been then polished by a cartons pressing filter. Also for these operations we have discussed about the possible variants and the charactestics of the filtration coadjuvants to be used for getting a high quality of the finished product.

On Wednesday, 19th December '90, we have gone in the afternoon by "Italwanson" in Milan to finish all the technical discussions about the boiler and we have agreed that the corrosion phenomena, which have been verified on the external serpertine of the boiler, are probably (because without samples in our hands it is very difficult to establish) due to a non-perfect management of the boiler: feeding of the water which is not sufficiently heated, non-evacuation of the water at the end-production, uncorrect coadjuvants of deoxygenation, etc.

On Thursday, 20th December '90, we have visited the "Zipperle" Company in Merano, one of the biggest companies in Italy producing clear juice. The three Korean technicians have seen all the complete plant, starting from the arrival in the factory of the fresh apples on trucks to the stockage of the clear juice in drums. We have also discussed with the production manager, comparing also the different systems of production. They have also seen some parts of the plant, which could be of possible enlargement for their existing line (boiler for the wastes burning, processing of grape juice, etc).

On Friday, 21st December '90, we have finished the technical and technological discussions regarding the plant, clarifying all the points and doubts.

We have supplied to the Korean technicians the technical and technological descriptions, regarding all the chemical materials and the enzymes of their interest to be used for their plant.

We have given them also our proforma invoice with technical description, regarding vacuum pans and cooking kettles, for the production of marmelades.

The Delegation has been completely satisfied of the carried out work and we have consequently done the enclosed "Agreement".

RTUZZI SDA UCHERIO MALY1

Brugherio, 9th January 1990 BG/ga

AGREENENT

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Today, on December 21st, 1990, after discussions between Alberto Bertuzzi SpA of Brugherio (Italy) and Korea Rakwon Trading Corporation of Pyongyang (Dpr of Korea), the two parties agree as follows:

- 1) Bertuzzi SpA has received the visit of a Delegation from DPR of Korea, composed by Mr Li Dok No (Technician), Mr Kim In Su (Technician) and Mr O Jun Son (English Interpreter), from 17.12.1990 to 27.12.1990.
- 2) During their stay, Bertuzzi SpA has accompanied the Delegation to visit some of the most important italian factories of apples processing and fruits juice production plants. They have visited also the "I.V.T.P.A." Centre in Milan, which is a research and experimental institute by the university of Milan, where they have made tests and they have produced apples and pears clear juice samples with good results.
- 3) During the meetings, the people composing the Delegation have analysed with Bertuzzi's people all the problems, concerning steam boiler, cases palletizer, etc. and they have cleared all pending and technical problems regarding these equipments.
- 4) They have also requested to Bertuzzi SpA all the technical and technological explanations regarding the apples and pears processing plant supplied in 1988/1989.
- 4) As requested by the Delegation, Bertuzzi SpA has supplied to the Korean people no. 3 copies of following new offers:
 proforma invoice no. 6322/P, regarding the vacuum pan mod. 800/1;
 proforma invoice no. 6323/P, regarding the cooking kettle mod. 150/250 A-R.
- 5) Bertuzzi SpA has given to the Delegation copy of the telex (Bertuzzi's ref: FL020969) dated 13.12.90, quoting the chemical material (Pectizym, Bentonite, Gelasil, Kieselguhr, filtering papers) requested directly by Rakwon Trad. Corp. before the arrival in Italy of these people.