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**Contract No. 98/160**  
**UNIDO Project No. MP/TUR/97/167**

## **Final Progress Report**

**Dated 24<sup>th</sup> April 2001**

### **Persons present during Final Commissioning:**

**Mr Metin Gultepe, Isbir (Counterpart)**  
**Mr Bill Doherty, Beamech (Counterpart)**

### **Summary**

**The following report confirms the completion of the above Contract and confirms the equipment has been fully installed and commissioned in accordance within the T.O.R. and the Technical Assistance Protocol for the CO<sub>2</sub> Process. The Acceptance Note was signed by the Counterpart and the Customer.**

**Final Progress Report**  
**Contract No. 98/160**

This report confirms that all the equipment covered under the Contract referred to above has been fully supplied and installed in accordance with the T.O.R.

It also confirms that the equipment has been fully commissioned in accordance with the T.O.R. and the Technical Assistance Protocol for the CO-2™ Process.

The equipment manufactured foams in accordance with the Acceptance Note (attached) as follows:

- 1) Grade (a) 15kg/m<sup>3</sup> density
- 2) Grade (b) 18kg/m<sup>3</sup> density
- 3) Grade (c) 21kg/m<sup>3</sup> density

(see copies of the Acceptance Note duly signed)

## **Summary of Trials made at Isbir**

### 1) Grade 15kg/m<sup>3</sup>

Thursday 19<sup>th</sup> April 2001 trial 5 was carried out manufacturing 15kg/m<sup>3</sup> density foam using Standard Polyol. Good run, controlled start and stop, foam appeared good.

Following day Friday 20<sup>th</sup> April 2001 the Acceptance Note for the 15kg/m<sup>3</sup> foam was signed off.

### 2) Grade 18kg/m<sup>3</sup>

On Friday 20<sup>th</sup> April 2001 it was agreed between UNIDO/Counterpart/Contractor that this grade would be signed off. This took place on 20<sup>th</sup> April 2001.

### 3) Grade 21kg/m<sup>3</sup>

On Friday 20<sup>th</sup> April 2001 it was agreed between UNIDO/Counterpart/Contractor that this grade would be signed off. This took place on 20<sup>th</sup> April 2001.

It was also agreed that further work would be undertaken by the Counterpart and the Contractor on the 18kg/m<sup>3</sup> and 21kg/m<sup>3</sup> density foams during this visit by the Contractor.

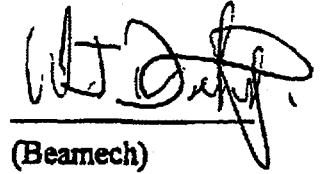
(See also daily log prepared by the Contractor – attached).

**ACCEPTANCE NOTE**

	Density	Date
1. Grade (a)	15 kg/m <sup>3</sup>	

**İSİR TERMO SET**  
PLASTİK SANAYİ A.Ş.  
İstanbul Yolu 17. Km. 06790  
P.K. 19 Etilmesgut / ANKARA  
Tel: (0-312) 280 86 50 / PBX  
Fax: (0-312) 280 86 56  
Doğanbey V.D. 481 007 1142  
(Licensee)

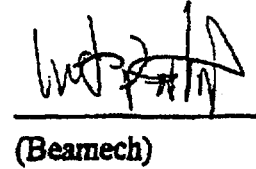
20.4.01

  
(Beamech)

2. Grade (b)	18 kg/m <sup>3</sup>	
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PLASTİK SANAYİ A.Ş.  
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P.K. 19 Etilmesgut / ANKARA  
Tel: (0-312) 280 86 50 / PBX  
Fax: (0-312) 280 86 56  
Doğanbey V.D. 481 007 1142  
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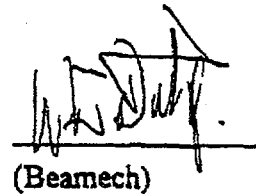
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(Beamech)

3. Grade (c)	21 kg/m <sup>3</sup>	
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Tel: (0-312) 280 86 50 / PBX  
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(Licensee)

21.4.01

  
(Beamech)

## PROGRESS REPORT ISBIR TURKEY

18.4.01 ARRIVED ON SITE 4.30 PM

1. ISBIR NOW HAVE 6 TON STANDARD POLYOL ON SITE.
2. ON ARRIVAL AT THE FACTORY I WAS INFORMED THAT ISBIR HAD A PROBLEM WITH THE SIDE PAPERS TEARING. UNWIND CAPSTAN HAD BEEN REMOVED AND I WAS TOLD THAT NEW PARTS WERE REQUIRED TO FIX THIS PROBLEM.
3. POLYOL FILTER HAD BEEN STRIPPED AND CLEANED IN MY ABSENCE.
4. FOAMING FILTER CLEANED

19.4.01

1. I WAS INFORMED BY ISBIR THAT MACHINE WOULD BE FIXED BY 2 PM.
2. CARRIED OUT TRIAL 5. 15 DENSITY STANDARD POLYOL.
3. RUN WENT WELL, CONTROLLED START / STOP. FOAM LOOKS GOOD.

20.4.01

1. HAVING CARRIED OUT TESTS ON TRIAL 5 FOAM I ASKED ISBIR IF THEY WERE HAPPY WITH FOAM FROM TRIAL AND WOULD THEY BE PREPARED TO SIGN OFF THIS DENSITY. THE REPLY WAS POSITIVE AND THE 15 DENSITY WAS SIGNED OFF BY MR GULTEPPE (COMPANY DIRECTOR) AND MYSELF.
2. I WAS THEN ASKED TO CONTACT BEAMECH FOR FORMULATION FOR 18 DENSITY POLYMERIC.
3. LATER THAT MORNING I WAS CONTACTED BY MR GULTEPPE TO GO TO HIS OFFICE. THE OUTCOME OF THIS MEETING WAS THAT HE HAD CONTACTED UNIDO AND HAD MADE A GENTLEMAN'S AGREEMENT TO SIGN OFF THE REMAINING TWO GRADES AFTER HAVING GOOD RESULTS WITH 15 DENSITY AND THAT I WOULD STAY AND CARRY ON WITH TRIALS OF 18 AND 21 DENSITY.
4. MR GULTEPPE AND MYSELF SIGNED OFF REMAINING TWO DENSITY'S.
5. SET UP FOR TRIAL 6 POLYMERIC POLYOL.
6. POLYOL TEST AT 20 KG/MIN SINTER PRESSURE 5 BAR, 19.5C POLYOL. DECIDED TO RAISE TEMP OF POLYOL TO 20.5C TO BRING SINTER PRESSURE DOWN IN DOING THIS THE SINTER PRESSURE WENT DOWN TO 4.3 BAR.
7. CARRIED OUT TRIAL SINTER PRESSURE 6.5 BAR, FILTER 11 BAR PRESSURE AT SINTER, SHOULD HAVE BEEN 4.7 BAR USING 3 PPH CO2. FOAM WENT TO HOVER TOP OF BLOCK GOOD WITH NO BLOW HOLES. IN A ATTEMPT TO BRING SINTER PRESSURE DOWN I INCREASED CO2 FROM 3.3 KG/MIN TO 3.6 THEN 3.8 WITH NO EFFECT.
8. ON LOOKING AT BLOCK FOAM LOOKED GOOD. ISBIR TO CUT BLOCK NEXT DAY TO CARRY OUT TESTS.
9. I WAS INFORMED THAT NO TRIALS WOULD BE CARRIED OUT THE NEXT DAY DUE TO ISBIR FOAMING.

10. I WAS INFORMED BY ISBIR THAT MONDAY WAS A NATIONAL HOLIDAY AND THE FACTORY WOULD BE CLOSED.

21.4.01

1. ISBIR MADE TWO ATTEMPTS TO FOAM EACH ATTEMPT ABORTED PROBLEM FOUND TO BE AIR FLOWMETER GLASS CRACKED.
2. GROUP DIRECTOR AT FACTORY FOR MEETING ISBIR MANAGERS NOT ALLOWED TO LEAVE FACTORY UNTIL OUTCOME OF MEETING WAS KNOWN.
3. BLOCK FROM TRIAL 6 NOT CUT UP DUE TO PROBLEMS ISBIR WERE HAVING WITH FOAM MACHINE.