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Subject: Final Report, to contract 02 / 011 our reference A 0100-1305
UNIDO Purchase Order No. 16000026
UNIDO Project No. MP/IRA/01/140

COMMISSIONING AND FINAL REPORT
PHASING OUT CFC-11 IN THE MANUFACTURING OF RIGID PU FOAM
THROUGH THE USE OF 141b BLOWING AGENT
Avaj Sarma

Prepared by:

i.V.
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Manager Commercial Department
(in absence of Mr. Croiset)
1. **INTRODUCTION**

The equipment was shipped end of 2002 to Iran and after customs clearance it was brought to Avaj Sarma, app. 1 hour from the capital city Theran. Due to the war in Iraq and subsequent travel restrictions the the installation was delayed until June 2003.

No changes have been applied to the original installation plan.

2. **INSTALLATION**

All the resources for the machine where already prepared by the customer and the installation proceeded without any problems. The machine has been placed next to the foaming fixtures so that with the boom and balancer all the fixtures could be filled with foam.

The time required for the installation by our mechanical and electrical engineer was one week.

3. **DRY RUN**

After the installation of the mechanical and electrical connections our Process engineer togethet with the customer has performed the dry run start up and commissioning.

The dry run is performed with all the raw materials loaded whereby the pumps are tested for:

- Leakage
- Pressure output and stability
- Calibration of the pumps
Electrical and software test
Mixhead output calibration

No problems incurred during the dry run testing for the machine.

4. START-UP and COMMISSIONING

The commissioning followed after the dry run testing and good foam was produced immediately. Together with the customer the foam weights have been established as due to the use of a high pressure machine there are changes with respect to the used low pressure machine.

5. TRAINING

After the installation and commissioning the customer was trained in among other the following:

- Machine operation
- Determination of foam weights
- Setting of the machine

6. EXISTING EQUIPMENT DISMANTLING

The existing machines has been removed, destruction of the mixing head and other parts will be done by the local Unido representation together with the customer.

7. RECOMMENDATIONS FOR FUTURE PROJECTS

Customs clearance could take less time in order to speed up the project, notwithstanding the delays due to the Iraq war.
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<thead>
<tr>
<th>Montageauftrags-Nr.</th>
<th>Montage bei der Firma</th>
<th>Reisender field engineer</th>
<th>Montage ausgeführt</th>
<th>Maschinentyp machine type</th>
<th>Art der Arbeit type of work carried out</th>
</tr>
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<tbody>
<tr>
<td>A7240-1305 002</td>
<td>A. Verma</td>
<td>W. Wega</td>
<td>vom 16.06. bis</td>
<td>Baseline</td>
<td>Commissioning of the Baseline</td>
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<td></td>
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<td>2003</td>
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Die unter diesem Auftrag bestellten Arbeiten wurden fachgerecht durchgeführt. Installierte Anlagen/Maschinen sind getestet und betriebsbereit übergeben worden. Die Funktionen der Anlage wurden dem Auftraggeber anhand eines Funktionslaufes übermittelt.

The work specified under the above order No has been completed properly. The installed plants/machines were tested and handed over ready for use. The customer was informed of the plant functions by means of a "dry run".

Folgende Arbeiten müssen noch ausgeführt werden:*)
The following work is still required:*)

**Mr. Botter will bring many new bottles for the pumps - this weekend from Hennecke**

*The baseline is now ready for Production*

**F 7240 - 067 017**