



**TOGETHER**  
*for a sustainable future*

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22900

24/7/03



*for Mrs. Sarma  
in the morning*

A **Bayer** Company

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Sankt Augustin  
2003-07-15



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 RIGD PU FOAM  
THROUGH THE USE OF 141b BLOWING AGENT  
Avaj Sarma**

Prepared by:

i.V.

Jan Vanmarcke

Manager Commercial Department

(in absence of Mr. Croiset)



1. Introduction
2. Installation
3. Dry run
4. Start-up and commissioning
5. Existing equipment dismantling
6. Recommendations for future projects

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 together 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

Hennecke GmbH

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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**Übergabeprotokoll**  
Acceptance report

HA

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Montageauftrags-Nr. assembly order no.	A 7240-1305 002	
Montage bei der Firma assembly at	Avaj Sarma	
Reisender field engineer	W. Nequa	
Montage ausgeführt assembly carried out	vom from	bis until
Maschinentyp machine type	16.06.	2003
Art der Arbeit type of work carried out	Baseline	Maschinen-Nr. machine no.
	Commissioning of the Baseline	

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. Bakhtas will bring many new  
\* bottles for the pumps - this weekend  
from Hennecke  
The baseline is now ready for  
Production

\* E 7241-067 011

Datum: 2.07.03  
(Date)

Auftraggeber: \_\_\_\_\_  
(Customer)

Hennecke: 

\*) Nichtzutreffendes streichen  
\*) Delete if not applicable