

# Report of Installation on Heavy Engineering Lathe in Bursa, Turkey, March 2005 Savings of >20%, Payback of <1 Year

Dev Mak San is a small heavy engineering company based in Bursa. They primarily turn large precision steel drums for use within the local weaving and fabric industries.

The application to which the EnviroStart was fitted was a 37kW two speed motor driving the lathe shaft through a gear train. Starting load can be very high though running load is generally small.

Requirements of the installation were two fold, to limit inrush current at start and to reduce running energy consumed.

Pre-installation measurements showed that the unit was running at around 35/38A with starting peaks in the region of 150A.



**Dev Mak San Offices in Bursa**

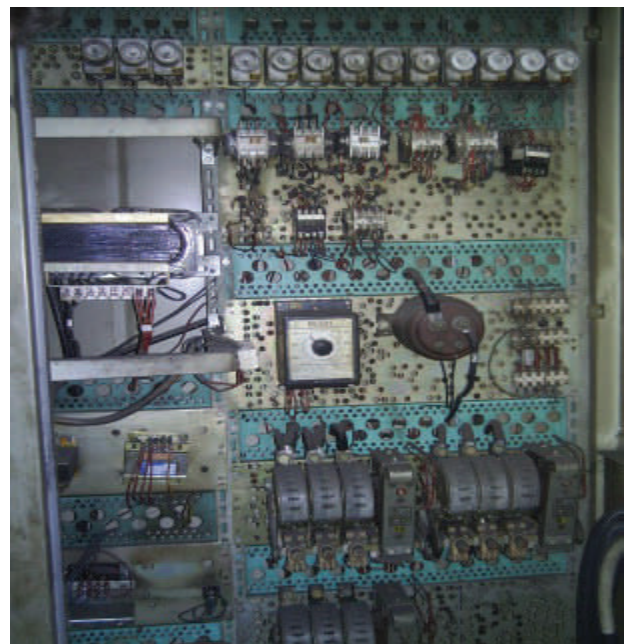


**The Lathe Showing the Motor and the Turned Steel Drum**

The installation took the existing Star Delta contactors out of circuit and placed the EnviroStart immediately below the line contactor. Default settings were used however the current limit was set to around 30%.

The implemented start reduced starting current to around 90A and brought the motor steadily to full speed in around 15s.

**The Motor Control Panel Showing the Existing Star Delta Contactors**



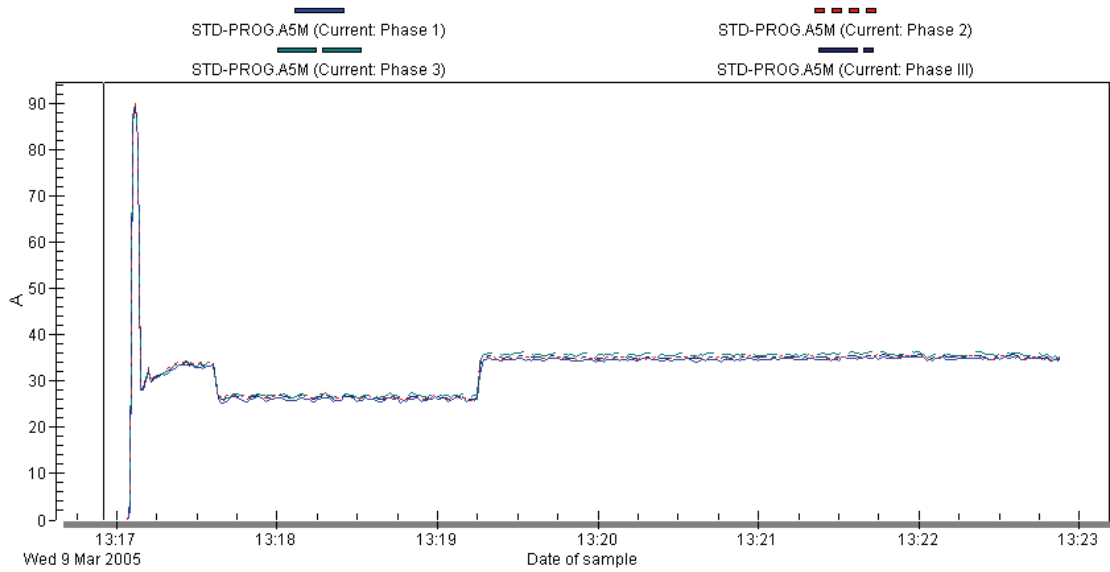
The testing of the system through a mornings normal lathe operating indicated that the details shown overleaf were representative. The use of the EnviroStart in this application reduced the running current from 37A to 24A yielding a kW power saving of in excess of 20% which based on their energy costs gave a payback of less than one year.

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## Savings of >20%, Payback < 1 year

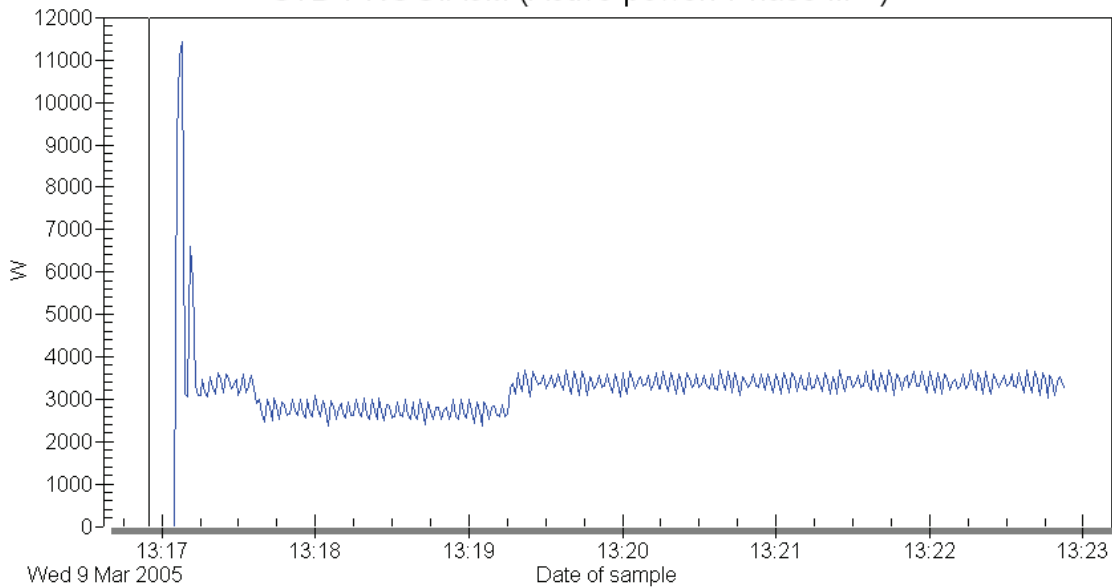


### MULTIGRAPHIC



Act: 09/03/2005 13:16:55 From: 09/03/2005 13:16:55 To: 09/03/2005 13:22:53  
 Act: 0.000 (A) Maximum: 90.126 (A) Minimum: 0.000 (A)

### STD-PROG.A5M (Active power: Phase III +)



Act: 09/03/2005 13:16:55 From: 09/03/2005 13:16:55 To: 09/03/2005 13:22:53  
 Act: 0 (W) Maximum: 11443 (W) Minimum: 0 (W)



Report compiled by  
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 EMS (European) Ltd 25th March 2005**