

TechJet **BMW/Rolls-Royce Company**

Background

TechJet, a BMW / Rolls-Royce company specializes in the design and manufacturing methods of jet engine blades for the aerospace industry. Located in a hi-tech industrial zone in northern Israel, the plant works three shifts, 6.5 day a week.

The first pilot was installed in 2005 and included 60 units of SuperHID 320W ballast and 320W lamp preset to 240W. After running the pilot and careful measurement of energy consumption the customer decided to deploy the Metrolight system in the factory.

The figures in the table display the results of the pilot.

Summary of Results

	Magnetic	SuperHID
Number of lamps	60	60
Lamp wattage / setup	400W	400W/260W
Ballast type	Magnetic	SuperHID-400MH
Light output FC (lx)	FC 27 (300 lx)	FC 42 (450 lx)
Price per KWH	\$0.092	\$0.092
Annual power consumption KWH	203,294	109,808
Annual cost (US\$)	\$18,703	\$10,102
10 years maintenance cost ⁽¹⁾ (US\$)	\$12,960	\$6,910
Total 10 years cost (US\$)	\$199,990	\$107,930
Total 10 years saving		\$92,060

Notes:

(1) Relamping every 2 years with magnetic ballast and 5 years with SuperHID