

RALSPEED

MOTOR CONTROL SYSTEMS

**ENERGY
SAVING
'COUNTING THE COST'**

WHAT IS AN AC DRIVE ... ?

AN AC DRIVE OR VARIABLE SPEED DRIVE (VSD) IS A DEVICE THAT CAN CONTROL THE SPEED OF AN ELECTRIC MOTOR. MOST CONVENTIONAL MOTORS RUN AT FULL SPEED ONLY, BUT A VSD EQUIPPED UNIT MEANS IT CAN RUN AT A VARIABLE RATE. THIS ALLOWS A MOTOR TO DRIVE A FAN OR A PUMP AT A SPEED APPROPRIATE TO THE REQUIREMENTS OF THE PROCESS.



WHY USE AN AC DRIVE ... ?

BECAUSE ENERGY AND MOTOR SPEED ARE EXPONENTIALLY RELATED, EVEN A RELATIVELY SMALL REDUCTION IN SPEED CAN RESULT IN A SIGNIFICANT ENERGY SAVING. FITTING AN AC DRIVE TO A MOTOR IS AN ATTRACTIVE COST-SAVING PROJECT FOR MANY BUSINESSES, AS IT CAN PROVIDE QUICK RESULTS AND A RELATIVELY SHORT PAYBACK PERIOD.



A 20% SPEED REDUCTION HERE



A 50% COST SAVING HERE

HOW CAN RALSPEED HELP ... ?

MOTOR DRIVEN SYSTEMS ARE MAJOR ENERGY USERS. A MOTOR RUNNING AT A TYPICAL COMMERCIAL OR INDUSTRIAL SITE FOR 4,000 HOURS A YEAR HAS AN ANNUAL ELECTRICITY COST OF ABOUT 10 TIMES ITS CAPITAL COST. MOTORS CONSUME AN ESTIMATED TWO-THIRDS OF ELECTRICAL ENERGY USED BY INDUSTRY, SO EVEN MODEST EFFICIENCY GAINS CAN DELIVER SUBSTANTIAL SAVINGS.

FITTING AN AC DRIVE WILL ENABLE YOU TO CONTROL THE MOTOR SPEED IN ORDER TO MATCH THE REQUIREMENTS OF THE APPLICATION, A **20%** SPEED REDUCTION CAN RESULT IN A POWER REDUCTION CLOSE TO **50%**. FURTHERMORE, A DRIVE IS RELATIVELY SIMPLE TO INSTALL OR RETROFIT.



TRY BEFORE YOU BUY:
RALSPEED CARRY AN EXTENSIVE STOCK OF DRIVES FOR GENERAL HIRE PURPOSES.

WE ALSO OFFER THESE UNITS ON A:

"2 WEEK FREE TRIAL BASIS"

FOR ENERGY SAVING EVALUATION PURPOSES. THIS MEANS THE ACTUAL ENERGY AND COST SAVINGS CAN BE PROVEN BEFORE THE CAPITAL FOR A VARIABLE SPEED DRIVE IS RAISED.



**KEY FACT — A 20% SPEED REDUCTION
CAN RESULT IN A POWER REDUCTION OF CLOSE TO 50%**

BEING MORE COST EFFICIENT MAKES SOUND ECONOMIC SENSE BECAUSE USING LESS ENERGY LOWERS OPERATING COSTS. FROM AN ENVIRONMENTAL PERSPECTIVE, ITS AN EFFECTIVE WAY FOR BUSINESSES TO CUT CARBON EMISSIONS AND, IN TURN, COMBAT CLIMATE CHANGE.

HOW THE GOVERNMENT WILL HELP YOU ?

ENHANCED CAPITAL ALLOWANCES:

THE ECA SCHEME PROVIDES BUSINESS WITH 100% FIRST YEAR TAX RELIEF ON THEIR QUALIFYING EXPENDITURE. THE ENERGY TECHNOLOGY LIST (ETL) SPECIFIES THE ENERGY SAVING TECHNOLOGIES THAT ARE INCLUDED IN THE ECA SCHEME.

THE SCHEME ALLOWS BUSINESSES TO WRITE OFF THE WHOLE COST OF EQUIPMENT AGAINST TAXABLE PROFITS IN THE YEAR OF PURCHASE. THIS CAN PROVIDE A CASH FLOW BOOST AND AN INCENTIVE TO INVEST IN ENERGY SAVING EQUIPMENT WHICH NORMALLY CARRIES A PRICE PREMIUM WHEN COMPARED TO NON-ENERGY SAVING ALTERNATIVES.

THE CARBON TRUST:

THE CARBON TRUST IS A PRIVATE COMPANY SET UP BY THE GOVERNMENT IN RESPONSE TO THE THREAT OF CLIMATE CHANGE. IT OFFERS ADVICE ON REDUCING CARBON EMISSIONS AND HAS BEEN SET UP TO HELP BUSINESSES FUND ENERGY SAVING PROJECTS BY MEANS OF INTEREST FREE LOANS OF WHICH PAYMENT CAN BE OFF-SET BY SAVINGS ON YOUR ENERGY BILL.

THESE ENERGY SAVING LOANS ARE A COST EFFECTIVE WAY TO REPLACE OR UPGRADE YOUR EXISTING EQUIPMENT WITH A MORE ENERGY EFFICIENT ALTERNATIVE.

SMALL OR MEDIUM SIZED ENTERPRISES (SME's) IN ENGLAND AND SCOTLAND, OR ALL BUSINESSES IN WALES* THAT HAVE BEEN TRADING FOR AT LEAST 12 MONTHS, COULD BORROW FROM £5,000 TO £100,000. IT IS UNSECURED, INTEREST FREE AND RE-PAYABLE OVER A PERIOD OF UP TO 4 YEARS. THERE ARE NO ARRANGEMENT FEES AND APPLYING IS STRAIGHT FORWARD.

*SUBJECT TO ELIGIBILITY. REGIONAL VARIATIONS APPLY.



THE NEXT STEP:

RALSPEED CAN ASSIST YOU EVERY STEP OF THE WAY:

- * ENERGY SAVING CALCULATION
- * FREE DRIVES AUDIT AND SITE SURVEY
- * CARBON TRUST LOAN APPLICATIONS
- * MOTOR MANAGEMENT GUIDANCE
- * FULL TURNKEY SOLUTIONS
- * AFTER SALES SUPPORT AND SERVICE



ENERGY SAVING CALCULATIONS:

TO OBTAIN A FREE ENERGY SAVING CALCULATION PLEASE PROVIDE THE FOLLOWING DATA:

- * MOTOR POWER * RUN HOURS/DAYS/WEEKS/YEARS * PRICE PER KW (ON-PEAK/OFF-PEAK ETC) *

..... AND RALSPEED WILL DO THE REST !

KEY FACT – A MOTOR RUNNING 11 HOURS A DAY AT A TYPICAL SITE COSTS TEN TIMES MORE IN ELECTRICITY THAN ITS CAPITAL COSTS.

RALSPEED LTD

A1 HURSTWOOD COURT, MERCER WAY, SHADSWORTH BUS. PARK, BLACKBURN, BB1 2QU

TEL: 01254 582 345

FAX: 01254 668 414

EMAIL: sales@ralspeed.com