



**The on-line Magazine for the customers of TMD Technologies Limited
(Thorn Microwave Devices Ltd)
Issue No.16 Spring 2000**

MESSAGE FROM THE MD

The last six months have been some of the most exciting times in TMD's history.

I am delighted to say that we have an excellent management team working together to consolidate the major investments we have made to our infrastructure and to manage the predicted growth in the business that we are now experiencing.

We have made significant improvements to our production efficiency and materials flow by re-organisation of the manufacturing areas and the introduction of on-line stocking. Also, we have achieved the first of many new tube developments using the new SDRC design package, which has dramatically increased the efficiency of the overall process.

In the area of IT we passed the Y2K milestone with flying colours; as part of this exercise, major upgrades to hardware and software have been achieved and the IT team has been strengthened by the addition of a new IT Manager. A company Intranet has been established and TMD continues to refine and develop its website which has generated a large degree of interest worldwide.

Our strong reputation in the market place has resulted in a steady increase in amplifier and power supply business in Europe and the USA (including two major new contracts - see inside) and we have huge-scale opportunities for new business in the Far East for both tubes and power supplies. The Processing Services business continues to grow and is diversifying into some interesting new areas (see opposite).

Last but not least, as part of our commitment to excellence we have developed a new, dedicated Customer Care programme; we hope that this will make dealing with TMD an even more enjoyable experience!

Peter J. Butcher
Managing Director

TMD Welcomes You to...
Subcon 2000
...Stand E21

Since the last Subcon Exhibition, TMD has seen significant expansion in its capability to offer special processing facilities and services to all sectors of industry.

Impressed by our precision microwave engineering background, customers have recognised that we have the unique capability to provide quality solutions to meet the most demanding requirements. Also, our ability to offer many complementary services under one roof is seen as a great advantage. The automotive industry, in particular, is showing a great deal of interest in our facilities for the cleaning of car components (see inside).

On show this year will be a selection of TMD's microwave electron guns, cathodes, filaments, grids and cavity structures, as well as ceramic-to-metal assemblies, precision machined components, and plating and specialised coatings.

We welcome you to Stand E21 to discuss your requirements.

NEW CONTRACTS

New Contract from Raytheon

TMD was recently awarded a substantial contract by Raytheon to build to print part of the company's advanced towed decoy system.

The Raytheon towed decoy has been approved for full scale production following successful operational trials. TMD will be building the PSU and decoy part of the system.

The towed decoy acts as a missile magnet to lure enemy missiles away from the intended target. The system comprises a launch controller that contains the decoy control/monitor circuitry and power supply; a launcher that holds the decoy magazine and which can be customised to fit any candidate aircraft; and a towed decoy, packaged in a sealed canister that also contains the payout reel. Requiring no threat-specific software, the system communicates operational health and status to its host aircraft via a standard data bus.

Sales Director Graham Brown commented: "This is a key programme for us, and we look forward to expanding our relationship with Raytheon Systems".

New Contract from USAF

TMD has won a major contract under the US DoD Foreign Comparative Testing (FCT) programme.

The following appeared in a recent Military Procurement International magazine: 'Wideband Klystron for E-3 AWACS: The US Air Force has a requirement to improve E-3 AWACS power amplifier reliability. The AWACS aircraft currently uses a klystron power amplifier for its main search radar that has a low rate of Mean Time Between Failures (MTBF) and is costly to repair.

This FCT project will evaluate a wideband klystron power amplifier manufactured by Thorn Microwave Devices (UK) which promises to provide greater reliability and much lower operating and maintenance costs'.

This contract gives a great boost to TMD's position as a world leader in klystron technology and its advanced techniques in developing dispenser cathodes for electron guns.

NEW HIGH POWER TWT

The new PT7488 from TMD is the first of a new generation of X Band ring loop/ring bar travelling wave tubes designed to run at a mean power of 400 W. The higher power - compared to TMD's standard X Band TWTs - has been achieved by further optimising the existing design, incorporating new construction techniques and utilising special materials with improved thermal properties.

Moreover, extensive use has been made of TMD's recent investment in software modelling capabilities. Modelling was undertaken on Vector Fields, Cosmos and

SDRC software, ensuring that the design meets all requirements with the minimum number of prototypes being necessary.

TMD has already secured its first contract for this new TWT, which is expected to replace the existing design in new systems and upgrades.
Processing Services Capability Expanded

TMD has expanded its capability to offer special processing facilities and services to all sectors of industry - particularly in the automotive field.

The company's advanced, fully equipped cleaning facility is playing an increasingly important role in the cleaning of car components. A growing number of car manufacturers are placing orders with TMD for extremely thorough, high quality cleaning of components. "This preventative measure is saving our customers time and money", Guy Howard, Sales Manager Product Services commented. "Minimising particulate contamination prior to assembly not only improves reliability but also reduces costly downtime on production lines".

Cleaning processes developed by TMD to meet the needs of the automotive industry include wet blasting, glass bead blasting, plastic media blasting, ultrasonic and detergent cleaning.

TMD's full service capability covers design, development and production. The company is involved in a wide range of other industries, including microwave and defence, scientific, medical, telecommunications, high energy physics, cryogenics, ultra high vacuum, aerospace, and marine.

Looking After Our Customers

As from April 1st this year, TMD is launching new Customer Care procedures aimed at further improving the efficiency and effectiveness of our response to customer enquiries. We hope that not only will this new initiative make our customers' lives easier, but will give more opportunities for our sales managers to visit them for discussions face to face.

A dedicated Customer Care telephone line will be staffed continually during normal working hours from 9.00 to 17.00, and there will be a dedicated e-mail facility. The aim is for customers to wait no longer than four rings for a response, and for the most urgent enquiries to be addressed within only three hours of the call being made or the e-mail being sent.

The Customer Care team will comprise the office based members of the Sales Department, led by Customer Care Manager Joanne Burton. Joanne has been working on customer service related issues for the past year and has already made significant improvements.

We hope that customers will benefit from this new initiative, and would appreciate any feedback and suggestions for further improvement.

Customer Care:

tel: +44 (0)20 8581 5077

e-mail: wecare@tmd.co.uk

TMD on Show

European Microwave '99, Munich

The European Microwave Exhibition in Munich last October was the first major European show that TMD had attended - and it was a great success.

TMD's sales team welcomed to its stand visitors from over 14 different overseas countries, as far apart as the USA and Canada to India and Japan. The resultant enquiries and positive follow-ups have led to more successful conclusions than ever before experienced by the company at an exhibition.

Attracting special interest amongst the full range of products on show were new developments in rugged EW high voltage power supplies and a new COMINT receiver.

TMD looks forward to seeing you all again at European Microwave in Paris in October!

Southern Manufacturing 2000, Thorpe Park

In February, TMD exhibited at the Southern Manufacturing Exhibition for the first time - a reflection of its expanding Processing Services activity.

There was much interest in the services offered by TMD, and many enquiries have already led to follow-up meetings. The technology areas covered by visitors to the stand were extremely diverse, ranging from the medical, optical, electro-optical, and thermal imaging fields to glue application systems and animal tagging equipment.

Although there were many machining companies exhibiting, particular interest was shown in TMD's own specialised machining capability, which includes one of the very few dry machine shops in the UK.