

# Sixth Annual General Meeting

## The Indian Institute Of Welding Presidential Address

By W. BURT

I welcome you to the Sixth Annual General Meeting of The Indian Institute of Welding.

Since I spoke to you last year, a major event in the country's political situation has been the birth of another friendly nation—Bangladesh. We have also been favoured with a peaceful General Election which has resulted in a strong and stable government in the country.

Many of the problems which faced us last year are still in existence. Steel shortages are continuing to be manifest and are being tackled in a realistic and pragmatic manner with the Government. There has been a general easing of the acute shortage faced last year.

The monsoon which dominates the country's food economy, has unfortunately failed in some parts of the country, especially in Andhra, Maharashtra, Mysore and Gujarat. Consequently, food grains will have to be imported and this will constitute a further drain on the country's foreign exchange.

### A Review of the Institute's Year

In the period 1st April 1971 to 31st March 1972, there was an increase of 106 members of all classes. Since then, there has been a further increase in mem-

bership. With the increase in membership, the Institute has now passed into the second phase of development—that of the creation of branches throughout the country. This year has seen the developments towards branches at Bombay, Madras and Calcutta. The Institute will undoubtedly give birth to further branches in the next 12 months. By the creation of a network of branches throughout the country, the work of the Institute can proceed in an ordered and personal manner—ordered because the science and technology of welding can be more easily disseminated; personal because of the involving of members in a local group of similarly interested engineers, technologists and scientists. This year a colloquium was held in Delhi jointly with the Indian Standards Institution on the contentious and interesting subject of weldability tests for high strength structural steels. Rationalisation of this test would be an important step forward for the country in standardisation and the simplification of production. A working commission has been formed and it is deemed that their report will be forthcoming shortly. I would like to put on record my appreciation of the co-operation and assistance given by members of the Indian Standards Institution, particularly the Director General, Shri S. K. Sen.

Local activities have, however, continued in Bombay, Trichy and Madras and I would congratulate these branches on the wide diversity of subjects and high standard of speeches.

We have continued our policy of co-operation with sister institutions and in Calcutta have held two joint technical sessions with the Indian Institute of Metals and the Indian Copper Information Centre.

### **Welding Journal**

With the growth of the Institute, your Council found it necessary to increase the frequency of publication of the Welding Journal. The Journal will now appear four times a year instead of three. I would ask all members to remember that the Institute's magazine is the foremost authority on welding and welding technology published in the country. I would like to thank our corporate members who have assisted in mitigating the costs of publishing by their patronage of the magazine through advertising. I am sure that they will continue to encourage the publication of the journal by their further support and so enable us to ensure that the high calibre of the journal is maintained.

### **Council and Committees**

During the year, our energetic Vice-President, Shri B. S. Krishnamachar, Chairman of the Welding Science Committee, was assigned to the Standards Institution in Ecuador. Our loss of the services of such an eminent person as Mr. Krishnamachar has been the gain of the Standards Institution in Ecuador. We look forward to Mr. Krishnamachar joining us on his return from his assignment.

With Mr. Krishnamachar's departure for Ecuador, we were fortunate in being able to nominate one of our founder members, Mr. I. T. Mirchandani, to the position of Vice-President.

Mr. R. Ghosh, our hardworking Treasurer, has also taken over Chairmanship of the Welding Science Committee. I am sure he will maintain the high standards set by his preceding Chairman on this Committee.

Similarly, we have been fortunate in receiving the patronage, assistance and attention of senior personages in industry associated with welding. Without such men of calibre, the Institute's growth would become stunted and its branches wither.

During the year, your Council, in order to encourage the growth of the Institute in all parts of India, undertook to meet on a regular basis in Calcutta, Delhi, Madras and Bombay. I am glad to say that this statesman-like decision has been successful. In meeting

in other areas throughout India, your Council has endeavoured to establish clearly its impartial all-India character. In doing so, the Council has also been able to meet members and committee members of other regions and experience first hand the enthusiasm which is buoyant in the Institute.

### **International Institute of Welding**

During the year, your Institute continued to be represented at the International Institute of Welding Annual Assembly at Toronto, Canada. This year, I had the privilege of leading a delegation consisting of our Vice-President, Mr. I. T. Mirchandani and our eminent member, Mr. S. V. Nadkarni. Twentyeight nations were represented at the assembly and Mr. I. T. Mirchandani and myself, in addition to attending the meetings of the commissions, represented our Institute at the two meetings of the Governing Council of the International Institute.

As I have said on previous occasions, it is a really great experience to attend such an assembly where men from most nations of the world deal with every conceivable aspect of welding science and technology. Unfortunately, our Institute has not yet developed its resources for receiving, cataloguing and disseminating the voluminous information emanating from the International Institute of Welding. Our Vice-President, Mr I. T. Mirchandani, has now taken this matter under his wing and I am sure, we will see the progress desired.

### **Branches**

The Trichy branch, the first branch of the Institute, continued its lively activities. Mr. V. Krishnamurthy, Chairman of this branch and General Manager of BHEL, Trichy, has now taken up an appointment as Chairman, Bharat Heavy Electricals Ltd. We are happy, and congratulate, Mr. Krishnamurthy on his new position. We are fortunate to have Mr. P. V. K. Achan, the present General Manager of BHEL as Chairman of this branch.

The Bombay Branch of the Institute which was the second to form was another singular achievement of this year. We must thank Mr. I. T. Mirchandani, our Vice-President, for his significant efforts for this. We are also very fortunate that the Bombay Branch committee has been formed under the Chairmanship of Mr. V. Surya Rao, Director, Power Project Engineering Division, Bombay.

Your General Purposes Committee which deals with a wide range of the Institute's activities, continues to function efficiently under the Chairmanship of our senior Vice-President, Mr. R. J. Shahaney. We are most indebted to the members of this Committee for the time they devote to the Institute's business.

### **Steel Shortage**

Steel shortage continues to plague industry but the Government, I am pleased to say, has tackled the problem vigorously with the maximum resources at its disposal. In periods of shortage, not all can be satisfied and we must learn to bear with the situation knowing that maximum efforts are being directed to remove this blight from industry. This does not mean to say that industry is satisfied with all that has occurred. The electrode industry, for example, is facing a serious shortage.

For the electrode industry, to meet its commitments, it is estimated that 40,000 tonnes of rimming quality steel are required. It is estimated that even allowing for the receipt of 8,000 tonnes of imported billets in April/May 1973, there will be a deficit of 12,000 tonnes which will have to be made up by imports. This shortage of electrode steel could have a serious repercussion on the electrode industry and affect the completion of many important, vital and strategic projects at present being constructed in the country. It will also materially affect general engineering which depends heavily on welding as a means to complete its product. I am glad to say that Government has recognised the position and is taking all possible steps to avoid a calamitous situation.

### **Power Generation**

The country is experiencing a severe shortage of electrical power. This shortage particularly affects those members of industry who rely heavily on welding to manufacture their product. In the eastern part of the country the reduced generation has resulted from a fall in reservoir levels in Hirakud, Machkund and DVC systems. It is now acknowledged that hydel power generation is much too vulnerable to the vagaries of the monsoon and the accent has shifted to thermal power generation. It is, however, expected that a 6 million MW deficit will be a shortage against the Fourth Plan target of 23 million MW installed capacity. The Fifth Plan will endeavour to mitigate these shortcomings and provide a surplus if possible for the future but the building of a power station is a long and highly technical achievement. The comple-

tion of a power plant is still bedevilled by the prevalent shortages of steel and other priority items facing the industrial section of the economy. Positive measures must be taken to ensure that timely and proper maintenance of existing plants is achieved, adequate power is necessary for the development of industry and the welding industry in particular.

### **Argon Gas**

Last year, I emphasised that the shortfall in argon gas badly affected industries using particularly sophisticated processes of welding which employed argon gas. During the year, argon gas became so short that it was in some sectors of the country only available to units dealing with priority work of national importance. The position has been recognised by the Government and a task force has been set up to study industrial gases and make recommendations for deviation. The task force has now made its report and I am glad to say that immediate action is being taken but there is no room for complacency as the country's demand for sophisticated welding processes is increasing daily and import must be allowed where necessary.

### **Welding Research Centre**

The above Centre which your Institute has constantly pursued with the Government is at last coming to fruition. As President of your Institute, I and your Vice-President, Mr. R. J. Shahaney, have had a number of meetings with committees and senior Government personnel. It has now been decided that this Welding Research Centre is to be established at Trichy, Tamil Nadu. It is of the utmost importance that it is recognised this welding research centre should not be a centre of pure scientific research but a centre where practical problems in welding which industry faces, can be investigated and remedied. There are ample pure research institutes in the country. What is needed is a pragmatic institute.

### **Welding Development in India**

Productivity is the key to our industrial prosperity, and industry still awaits the arrival in quantity of automatic and semi-automatic welding equipment with their associated accessories. Such welding equipment is already being manufactured in the country but not in sufficient quantities to provide a dramatic increase in welding productivity. It is essential that manufacturers of this equipment must be encouraged to increase their production of these items.

Simultaneously, it is necessary to develop in quality manufacture of non-destructive testing equipment such as ultrasonics and dye-penetrants. The sophisticated demands now being made on the welding industry in the form of welding steel and high carbon steel and associated alloys need such testing equipment. Where indigenous manufacture is unable to meet specific requirements for such testing equipment, applications for import should be speedily processed and not made subject to delays which, in some cases, are over two years.

Membership of the Institute must be guarded against and your Council has had to make many difficult decisions to ensure that high standards are maintained in accordance with the technical and scientific requirements of our Articles of Association. In every Institution there are members who show their disinterest in the activities of the Institute by failing to pay their fees. The Council has given instructions that such defaulters have to be eliminated from the roll.

I would like to express my gratitude and appreciation to members of the Institute who have so unstintingly given their time and counsel to the successful functioning of the General Purposes, Finance, Welding Science Committees and the Membership, Library & Publications and Meetings Sub-Committees. Without the hard work which these members have so unselfishly given, the Institute's progress would falter. I would like to thank the members of the Council who have given us their time, advice and ability without thought to their personal requirements. I could not close without a word of appreciation to our Treasurer, Mr. R. Ghosh and our Secretary, Mr. B. Kumar who have dealt with many problems in these important fields with such unerring ability.

Our way ahead is adequately signposted. It is upto us to show a maturity and understanding to each other in order that the Institute can grow and flourish as only the sincere and objective efforts of every member of the Institute can ensure that these wishes are accomplished.