

Studying auto production systems

Path to better working life?

South Africa's industrial relations have more often been adversarial than co-determinist. **Kally Forrest** explores an auto work production systems project in the National Union of Metalworkers of South Africa which aims to break this pattern and to pilot whether improving production efficiency and quality can benefit both management and workers and create jobs in the industry.

‘**T**hey expect shop stewards to take part in setting targets and then they start disciplining and dismissing them if they don't meet those targets. Shop stewards must engage even if they don't have the engineering experience. Workers are confused by these new methods. Say, for example, shop stewards ask management if they can knock off early to watch a Chiefs/Pirates soccer game and when the company agrees the workforce is happy. But then the company still insists that they reach their targets. Workers work very hard and they are always tired,’ explained Numsa's international officer Thokoza Motau.

Workers in the tyre and auto industries began to complain that the union was not protecting them from this work assault. However part of the problem, Motau suggests, is that union members are no longer engaging properly in union activities because of their work loads. ‘At BMW, for example’, continues Motau there are flexible working hours. At any time workers can get an sms (text message)

telling them to come in and work. And if they don't come in they get disciplined. Shop stewards have to cancel union general meetings because of production demands.’

An extraordinarily high absentee level was also noticeable at BMW. Says Bafana Ndebele, Numsa's national organising & campaigns coordinator, ‘Every Monday 80% of the workforce were absent so the company started disciplining them. Management said workers were ‘babeles’ (hung over) but it was to do with over working. Workers are exhausted. They work continuous shifts seven days a week. There is no 7am to 5pm work day any more.’

This work pattern is made worse by job insecurity. Ndebele continues, ‘An auto company may have 5 000 workers on its books but in fact maybe only 2 000 of these are core workers. If say, there is a big contract all 5 000 will be working for five years, but when this contract ends 3 000 will be laid off with no benefits being paid and no severance packages at the end of a long work contract. It is a major saving for companies.’

Ndebele believes that workers have a good point. The union does not have a strategy to deal with these new production work methods. ‘The company takes shop stewards on study trips overseas to observe and study new work methods. In 2008 VW (Volkswagen) took about 200 shop stewards to Germany for on-the-job training for four months. The union only hears about this when they return so shop stewards have no way of assessing these production methods and get fooled.’

The union on the shop floor is also weakened by the high turnover of shop stewards. ‘Every four years 75% of shop stewards are voted out. Workers want their positions because shop stewards have many benefits. They have unlimited time off and access to a company car. We are teaching members to control the use of these cars and to stop the use of company cars for township activities over weekends unless it is for union business.’

NUMSA PROJECT AND CONTENT

It is in the light of this that Numsa has embarked on a project on work production systems in auto and tyre.

The four-year project started in 2009 with one of its major partners being the German union IG Metall. IG Metall has access to engineers who work for the union and ensure that workers are not adversely affected by production methods. In South Africa access to such specialists is not possible.

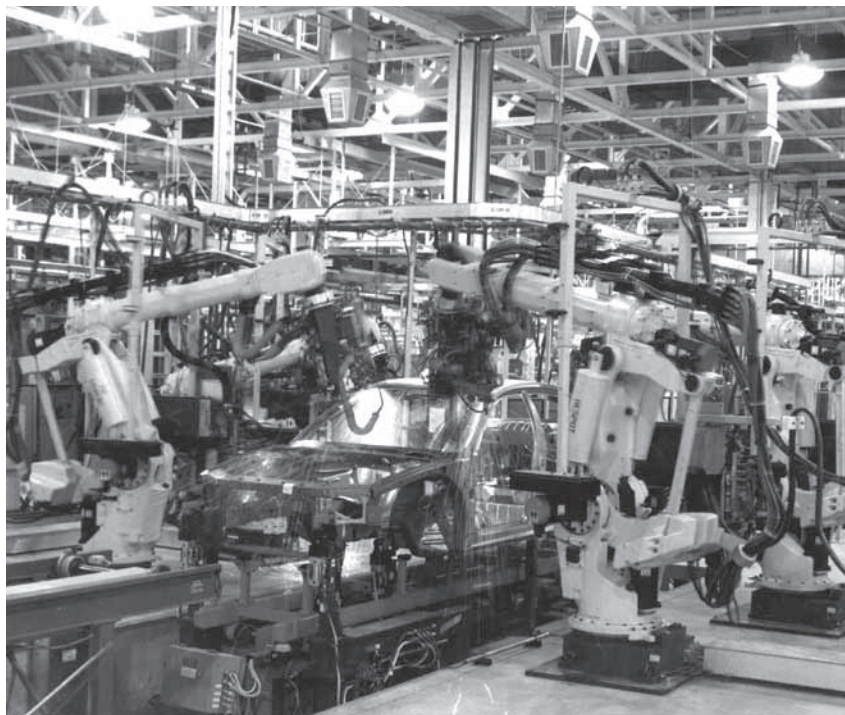
The aim of the project is to deepen the understanding of shop stewards and organisers in auto, tyre and auto components of modern work and production systems and to formulate a clear union response to management systems. Its goal is an efficient, productive workplace but also one that promotes workers' well being.

Bosch shop steward Keith Bhola explains, 'We are not against working more efficiently. We want to be productive so that when the parent company in Germany gets new contracts it will give its South African subsidiary the chance to manufacture these parts. Bosch makes components such as alternators, starter motors, raking systems, electrical control units and small motors. If we get these contracts this creates new jobs and also gives more job security.'

During the period of the project IG Metall has loaned a union official and time management expert, Konrad Siegel (see *SALB 33.2*) to train shop stewards. The training programme is well underway and has different components.

Shop stewards firstly focus on time study methods where the intention is to reduce production time. They become familiar with Method Time Management (MTM) which is a system of performance and motion measurement which produces a catalogue recording how long a productive activity takes to perform. It is used by auto producers worldwide although there are no international standards and performance measurement and production line systems vary from city to city and country to country.

This guide has standards to eliminate wasteful work processes



in various forms. This could be time waste or the removal of an unnecessary operator where two activities could in fact be performed by one operator in the same time. The extra worker could then be redeployed in a more necessary task.

Or it could be to eliminate time waste though a simple innovation which could reduce a machine operation from say, taking 22 seconds to 17 seconds so that it works in tandem with other machines and so improves production efficiency. Or if a worker is bending to pick up a part from the floor, time can be reduced by putting the part on the table in front of the worker.

Shop stewards also learnt about the concept of job loading whereby the amount of time that a worker takes in a given time is assessed. If the worker finishes the task in a shorter time, s/he is considered under loaded and the time will be adjusted.

South African auto, tyre and components factories are then audited by the head office and customers (OEMs) both locally and internationally (55% of South African auto products are exported) for time efficiencies and quality.

Shop stewards also learnt about the 'economics' of production. Many auto plants have introduced robots which can more easily and quickly do work at awkward angles. Workers were removed and replaced by robots. For example, in the main frame of a car there is a lot of awkward and strenuous welding underneath the car frame.

Shop stewards also studied the Toyota production system which looks more generally at the way work is organised using broad concepts like inventory, supply chains and quality systems such as *pokayoke* to ensure there are no mistakes. So for example, if a part is not in the right position it will not align with a welder's tool. The part has to be positioned very precisely so the welder can get it right at first attempt and thus save time and waste in the form of scrap parts.

They also learnt about 5S which deals with the optimum cleanliness of the plant and parts. Dirty parts can result in machines breaking down.

The project includes visits to Germany for shop stewards and organisers to see other work production methods in action.



BENEFITS AND DISADVANTAGES

Are these systems that promote productivity gains to the benefit or detriment of workers? In an environment where companies are furiously competing against each other to produce better quality in less time the pressures on workers and their quality of work life could be seriously at risk. Yet it seems there are both benefits and dangers.

In 1994 under a previous national auto organiser, Les Kettledas, Numsa negotiated an agreement which included checks and balances on the production line speed. Managements under this agreement were obliged to negotiate on-line speed.

Between 1994 and 2000 the union actively used the agreement but over time this fell away. Some shop stewards were co-opted into management and this combined with a high turnover of shop stewards meant the detail of this agreement was lost. The union believes that shop stewards by learning about new production systems will again focus on negotiating such issues.

Part of Numsa's work production project includes the setting up of an internal project steering committee to monitor how new production

systems affect workers. The committee should include full-time shop stewards but the union has been slow in setting it up. After the municipal elections Numsa intends going on a campaign to encourage factories to maintain good shop stewards who have undergone training and can take forward their experience in a continuous way. 'IG Metall, in fact many people, have been complaining about high shop steward turnover and the constant loss of experience, learning and skills,' observed Bafana.

Under previous production systems workers suffered spinal problems from the weight of picking up parts or lost or injured fingers owing to machine failure where pneumatic tools fell and crushed their fingers. But under the new work production systems increased efficiencies eliminate machine failure, and in making parts more accessible workers no longer have to pick up heavy loads. Thus in many health and safety respects the new systems are mutually beneficial to workers and management.

The union is also looking at how it can optimise health and safety standards in the light of these new

production systems. 'We want to piggy back on this training and combine it with strengthening workers' rights and health and safety,' says Ndebele.

Bhola described how a union educator conducted a 'body mapping' exercise. In group, shop stewards worked on a man-size cut out. They identified where they felt pain or strain on their bodies during their work activities and put a sticker on that part of the body. They then identified how the productive process could change to prevent this pain and how management could very cheaply prevent body stress.

Shop stewards also worked on plans of their factories using a similar mapping technique to identify areas in the factory that created problems for workers. They then prioritised issues into short, medium and long term objectives that they should discuss with management.

'This was very useful for shop stewards,' remarked Ndebele, 'and now we also want to bring in more organisers. We want to negotiate with office bearers that this becomes a full-time project. We want to get organisers away from a cycle of declaring disputes and going to the CCMA into becoming more proactive. Ditsela (labour college) is going to write up curriculum guidelines for these courses for organisers and shop stewards to use.'

At Bosch four shop stewards were identified to take part in the productivity training. Bhola believes they can now engage in an informed way on the national bargaining council around the line speed and if the speed is too fast for workers. He also believes that they can partner with management at Bosch which is a company that cares about safety. The company recently brought German engineers into the plant to assess if it was overloading employees because in its view 'tomorrow they won't come to work if you overload them so it is better not to injure and lose your skilled workers.'

However there are other

companies who have introduced new production work systems but pay lip service to workers' rights, health and safety and the idea of co-determination.

Bridgestone/Firestone is currently in a national dispute with the union because it refuses to implement an agreement on a formula on increases to workers on the top of each grade which other companies have accepted on the New Tyre Bargaining Council. When workers came out on strike, the company locked them out. (At the time of writing workers had been locked out for a month.)

Also there are companies which compromise their workers' health because they don't want extra expenses. Workers for example who work in the paint shop in small booths are exposed to dangerous solvent fumes which damage their chests and eyes. They are often given cheap paper masks which are ineffective in preventing the inhalation of fumes because the more effective masks are expensive and need maintenance. As a result production efficiency is affected because workers have to keep exiting the booths to get fresh air.

CONCLUSION

At Bosch, Bhola believes that co-determination between workers and management is beginning to work.

'When we started colleagues did not understand work restructuring and how to calculate the line speed and so on. But after the training we made progress. If an engineer increased the line speed we could question this and explain exactly how it strained workers and in some cases we solved problems.

'It has empowered me as a person. I can go to the machine planner and ask questions. I can argue with company experts. Once this resulted in one operator being removed and the quantity produced did not change. And at a recent workshop we heard how VW shop stewards had solved problems.'

Numsa has an agreement with employers that if an operator is removed from the line, s/he will be redeployed elsewhere in the factory. However, ultimately this will probably mean a reduction in the workforce as the company will not be able to continually redeploy people.

The union has taken some of the issues that have arisen in the project's workshops and formulated demands around a productivity agreement that it took to national auto negotiations in 2010. Some plants have appointed full-time health and safety officers but the union wants to negotiate a generic, framework agreement this year so that their demands can be implemented across all companies.

Bhola feels optimistic about working with management. 'I'm

objective not principled and I know what I want to win. It is not a problem working with management as long as workers get what they want or I get something for workers, as long as they benefit.'

But in a low trust situation as at Bridgestone is it possible to co-determine work productive systems? Ndebele comments, 'Co-determination? We are still fighting to make many workers full-time and permanent. This is a pilot project which will help us make up our minds about co-determination. We'll find out what it's worth.' ¹⁸

The Numsa project on work production systems is a joint project including IG Metall, Institute for Work Society & Development, Ditsela and Friedrich Ebert Stiftung (FES).

